

# Water System Operator Roles and Responsibilities: A Best Practices Guide

## Introduction

<i>Purpose</i>	<p>This Guide will help you better understand:</p> <ul style="list-style-type: none"> <li>◆ Your roles and responsibilities in delivering safe drinking water to your system's customers.</li> <li>◆ Additional responsibilities, which can vary depending on your system size, characteristics (e.g., complexity of treatment), managerial structure, and regulatory requirements.</li> </ul> <p>All system operators share several key responsibilities that are critical to meeting your ultimate goal - providing an adequate and safe supply of drinking water.</p>
<i>Target Audience</i>	<p>This Guide is intended for operators and owners of all public water systems serving fewer than 10,000 persons.</p>

## System Operation

*Keep all system components (i.e., source, treatment, storage, and distribution) functioning efficiently and effectively.*

### General Responsibilities

- ◆ Monitor chemical feed and other system components.
- ◆ Monitor effectiveness of treatment.
- ◆ Prepare and maintain records of meter readings, tests, equipment, chemical use, correspondence, and customer complaint log.
- ◆ Develop a maintenance plan for the treatment plant and distribution system.
- ◆ Regularly read meters and gauges, making adjustments as needed.
- ◆ Periodically flush distribution system using hydrants and blow-off valves.
- ◆ Conduct preventive and routine maintenance on facilities and equipment.
- ◆ Periodically assess efficiency of system components (e.g., pumps and valves).
- ◆ Conduct frequent system and security inspections.
- ◆ Update system maps when a significant change to the distribution system has been made.
- ◆ Make all process control/system integrity decisions necessary to maintain the quality and quantity of water delivered to customers.
- ◆ Attend training to meet state primacy agency's continuing education requirements.
- ◆ Create and follow standard operating procedures (SOPs).

### For additional information:

Call the Safe Drinking Water Hotline at 1-800-426-4791, visit the EPA Web site at [www.epa.gov/safewater/](http://www.epa.gov/safewater/), or contact your state drinking water representative.

## Regulatory Compliance

*Comply with all relevant regulations to protect your customers' health.*

### General Responsibilities

- ◆ Develop and maintain a sampling plan, designed to protect the system, that covers all monitoring requirements.
- ◆ Collect or oversee collection of samples.
- ◆ Conduct routine inspections of wells or surface water sources and watersheds to identify potential sources of contamination.
- ◆ Address any problems quickly and ensure that all required follow-up steps are taken (e.g., additional sampling, public notification, sanitary survey or other compliance inspection).
- ◆ File all required reports and maintain records.
- ◆ Resolve any compliance problems, in consultation with regulators, and gather information on upcoming regulations. Increase awareness of tools, reference materials, and other state and federal resources.

## Communication

*Maintain a positive relationship with customers, regulators, and the system decision makers and keep them informed of your efforts to provide high quality drinking water.*

### General Responsibilities

- ◆ Report analytical results to regulators as required.
- ◆ Participate in the development and delivery of Consumer Confidence Reports (CCRs).
- ◆ Maintain, respond to, resolve, and keep a record of customer complaints.
- ◆ Communicate with the owner, manager, or board about technical and financial needs of your system (this includes training for recertification). Records should also be kept of any communication with decision makers.
- ◆ Inform the state of the results of technical improvements and their impact on the system.
- ◆ Inform the owner, manager, or board of any key findings from routine inspections and scheduled maintenance. Provide input for planning and preparing of equipment replacement.
- ◆ Develop and maintain a plan for monitoring system process controls and meet all related goals, in consultation with the system owner, manager, or board.

## System Security

*Protect your system against natural disasters and vandalism.*

### General Responsibilities

- ◆ Develop a plan to protect your facilities in case of an emergency, including updating your policies and procedures manual with security-related information.
- ◆ Inspect critical facilities and components, including door locks and fencing, as part of daily inspections.
- ◆ Store chemicals in locked areas with proper safety equipment.
- ◆ Maintain a list of written contacts for use in an emergency and make sure you know whom to contact in the event of an emergency.
- ◆ Exercise valves on a routine basis and make sure there are enough valves, in appropriate locations, to isolate parts of the system in the event of contamination.
- ◆ Attend security-related training if it is available.
- ◆ Educate other staff on emergency procedures and keep contact information up to date.