#### I. DESCRIPTION OF WORK

Positions in this class are responsible for maintaining and repairing the machines and equipment used to process and distribute water, and they sample, measure and monitor water and waster/water effluent quality. Positions in this class read, interpret, and adjust meters and gauges to make sure that plant equipment and processes are working properly; control chemical-feeding devices; take samples of the water or wastewater; perform chemical and biological laboratory analyses; and adjust the amounts of chemicals, such as chlorine, in the water. Positions in this class may control all of the machinery, perform tests, keep records, handle

### II. ROLE DESCRIPTIONS BY COMPETENCY LEVEL

Contributing	Journey	Advanced
Positions at this level generally monitor pumping equipment and gauges according to a prescribed schedule and perform routine operator maintenance. They make adjustments to valves and pumps to control and aerate water flow and they add material to soften water. Positions perform routine operator maintenance and assist in performing minor operational repairs. They use basic water treatment equipment Positions at this level are responsible for maintaining proper water levels in storage tanks and insuring that in-line water pressures do not exceed safety limits to prevent flooding conditions at terminal points in the systems. Work is spot-checked for compliance with instructions and regulations during progress and through a review of records and reports.	Positions at this level are responsible for performing basic tests and measurements, maintaining acceptable water quality standards, and recording the treatments according to established methods and regulations. Positions make scheduled equipment checks; gauges, meters, electrical motors, pumps, chemical feeders, auxiliary generators, and recording and controlling devices used water treatment processes are numerous and complex. Positions have skill in the use of instruments in adding chemical agents. Positions are knowledgeable of State and Federal reporting requirements.	Positions at this level make regularly scheduled checks in a more complicated filtration plant. Work requires a thorough knowledge of the filtration processes. Positions have skill in measuring and introducing chemicals and compounds into the water system, understand the individual and combined effects of chemicals and compounds that are used in filtration procedures, and perform water treatment tests and measurements that require a working knowledge of various microbiological organisms. Positions at this level know how to treat the incoming water and how to perform basic microbiological tests. Positions have final responsibility for the many reports. May perform lead worker functions.

## **III. COMPETENCIES**

Competency	Definition
Knowledge - Technical	Technical knowledge and skill in a specific technical area(s) and ability to keep up with current developments and trends in areas of expertise. May be acquired through academic, apprenticeship or on-the-job training or a combination of these.
Equipment Operation	Ability to use specific equipment or machines to meet defined quality and quantity standards.
Safety and Health Compliance	Ability to demonstrate an understanding of applicable policies and procedures and maintain conditions that ensure a healthy and safe working environment.
Problem Solving	Ability to identify problems, determine possible solutions, and actively work to resolve the issues.
Leadership	Ability to work as shift or crew leader. Ability to establish expectations and clear direction to meet goals and objectives of on-going work for a group of employees. Ability to motivate and engage employees through effective communication.

Note: Not all competencies apply to every position/employee; evaluate only those that apply. Competency statements are progressive.

## IV. COMPETENCY STATEMENTS BY LEVEL

## **Knowledge – Technical**

Technical knowledge and skill in a specific technical area(s) and ability to keep up with current developments and trends in areas of expertise. May be acquired through academic, apprenticeship or on-the-job training or a combination of these.

Contributing	Journey	Advanced
General knowledge of chemical composition, structure, and properties of substances and of the chemical processes and transformation that they undergo which includes usages of chemicals and their interactions, danger signs, production Knowledge of plant and animal organisms;	Considerable knowledge of chemical composition, structure, and properties of substances and of the chemical processes and transformation that they undergo which includes usages of chemicals and their interactions, danger signs, production techniques, and disposal methods.	Thorough knowledge of chemical composition, structure, and properties of substances and of the chemical processes and transformation that they undergo which includes usages of chemicals and their interactions, danger signs, production techniques, and disposal methods.
their tissues, cells, functions, interdependencies; and interaction Knowledge of state and local laws, ordinances and regulations related to the	Considerable knowledge of plant and animal organisms; their tissues, cells, functions, interdependencies; and interactions with each other and the environment.	Through knowledge of plant and animal organisms; their tissues, cells, functions, interdependencies; and interactions with each other and the environment.
area.	Considerable knowledge of state and local laws, ordinances and regulations related to the area.	Thorough knowledge of state and local laws, ordinances and regulations related to the area.

## **Equipment Operation**

Ability to use specific equipment or machines to meet defined quality and quantity standards.

Contributing	Journey	Advanced
Knowledge and skill in the operation, maintenance and repair of applicable machines, equipment and tools.  Ability to monitor the operation of the equipment by watching gauges, dials, or other indicators to make sure machinery is working properly and performs routine maintenance.	Considerable knowledge and skill in the operation, maintenance and repair of applicable machines, equipment and tools.  Ability to determine maintenance need; ability to perform moderately complex maintenance and repair work.	Thorough knowledge in the operation, maintenance and repair of applicable machines, equipment and tools; thorough knowledge of filtration processes; inspects equipment or materials to identify the cause of errors or other problems or defects.  Skill in measuring and introducing chemicals and compounds into the water system; ability to monitor chemical interactions in filtration system; ability to perform water treatment tests and measurements that require a working knowledge of various microbiological organisms.

## **Safety and Health Compliance**

Ability to demonstrate an understanding of applicable policies and procedures and maintain conditions that ensure a healthy and safe working environment.

Contributing	Journey	Advanced
Ability to identify and inform supervisor of potential safety problems. Ability to warn others of potential hazards.  Ability to follow applicable regulations, codes, policies and procedures. Ability to complete appropriate documentation.  Ability to use appropriate protective equipment following established protocols. Ability to follow appropriate post-emergency procedures.	Ability to inform supervisor of unusual safety concerns and makes recommendations for resolution using applicable codes and regulations.  Ability to demonstrate to employees and others, safe ways to perform job tasks or the use of equipment.  Ability to determine appropriate protective equipment based on established standards.	Ability to apply applicable regulations, codes to enhance work unit processes and procedures. Ability to anticipate departmental safety issues and take proactive steps to maximize safe operations and measure the effectiveness of action.  May require ability to train others in proper and safe use of equipment.  Ability to determine appropriate protective equipment based on established standards. Ability to regularly assess site and shop operations for safety.

# **Problem Solving**

Ability to identify problems, determine possible solutions, and actively work to resolve the issues.

Contributing	Journey	Advanced
Ability to identify and resolve standard/routine problems with systems, electronic devices, equipment, systems through routine inspection and preventive maintenance/testing, after system/equipment failure, or when updating equipment with new technologies.  Ability to operate standard test equipment to troubleshoot and repair devices or systems.	Ability to identify (and may require ability to resolve or make recommendations for) non-standard/more complex problems with devices, and systems through inspection and maintenance, or after system/equipment installation/failure.  Ability to operate specialized test equipment to troubleshoot and repair non-standard electronic devices and systems.	Ability to anticipate and proactively pursue maintenance issues. Ability to recognize adverse water/waste water conditions and makes corrections.  Ability to troubleshoot and evaluate options; ability to choose appropriate action by considering potential outcomes.

## Leadership

Ability to work as shift or crew leader. Ability to establish expectations and clear direction to meet goals and objectives of on-going work for a group of employees. Ability to motivate and engage employees through effective communication.

Contributing	Journey	Advanced
N/A	Ability to supervise shift or crew and/or a separate program function of moderate complexity.  Ability to train others.  Ability to monitor work assignments to ensure completion and compliance on assigned shift.  May require ability to participate in career development of employees and performance evaluation.	Ability to function in a supervisory role for direct reports. May require ability to perform/supervise a separate function of some complexity.  Ability to participate in making work assignments and ensure compliance with standards, career development of employees, and performance evaluation.

### V. MINIMUM TRAINING & EXPERIENCE:

High school diploma or equivalency; or demonstrated possession of the competencies necessary to perform the work. Experience in water/waste water treatment operations preferred. Requires certification(s).

Note: This is a generalized representation of positions in this class and is not intended to identify essential work functions per ADA. Examples of competencies are primarily those of the majority of positions in this class, but may not be applicable to all positions.