

## **WATER SYSTEM OPERATOR**

### **DEFINITION**

Under direct or general supervision, performs a variety of tasks associated with the production, treatment, and distribution of potable water; takes periodic samples and performs standardized tests to ensure proper operation within established guidelines; assists with preventive maintenance and makes repairs to plant facilities and equipment; and performs related work as required.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives direct or general supervision from the Water System Supervisor. No direct supervision is exercised. May exercise technical and functional direction over assigned staff.

### **CLASS CHARACTERISTICS**

This is the first experienced level class in the water system operations series. Under direct supervision, incumbents operate and maintain water treatment and distribution equipment and appurtenances according to City practices and procedures, as well as State and Federal regulations. As experience is gained, assignments become more varied and are performed with greater independence.

### **EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative Only)**

Management reserves the right to add, modify, change or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

- Monitors water operations equipment and processes to ensure compliance with environmental and public health standards, including monitoring and making adjustments as needed to optimize efficiency, making chemical dosage changes, changing pumping rates, and monitoring all equipment daily.
- Reviews and analyzes operational information and test results and revises equipment settings as appropriate; notifies supervisor of unusual situations and makes inspections or corrects system problems as instructed.
- Inspects water wells, and other treatment and distribution equipment and facilities on a regularly-scheduled basis; reads and records readings of pumps, chemical feed, and other treatment and pumping equipment.
- Interprets and may perform laboratory and process tests to optimize plant performance, checks the results, and makes appropriate changes.
- Operates and assists in preventive maintenance on a variety of water equipment, such as electric motors, engines, gas and electric powered pumps, air compressors, emergency systems, power generation systems, pressure and flow regulators, analyzers, filters and chemical feed systems.
- In association with other maintenance personnel, maintains and repairs leaks on main lines and lateral lines to the meters; taps into mains for new water service; installs and changes meters.
- Records pump station flow meters and charts.

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- Lubricates pumps, motors, and other machinery and equipment.
- Reads residential and business water meters on an established schedule using a hand-held computer recorder; provides the results to finance for billing purposes.
- Makes minor adjustments on service equipment; maintains tools and equipment in working order.
- May operate heavy equipment such as dump trucks etc., depending on City needs.
- Maintains accurate records, including calculating the daily use of energy and chemicals, and completing required monthly reports.
- Maintains accurate records of gauge and meter readings, chemical test results, and work performed.
- Maintains facilities, grounds, and equipment in a clean and orderly condition.
- Uses a variety of hand and power tools and testing equipment.
- Observes safe work methods and makes appropriate use of related safety equipment as required.
- Responds to complaints and answers questions from public or escalates to supervisor, as necessary.
- Responds to emergency situations as necessary.
- Performs related duties as assigned.

### **QUALIFICATIONS**

#### **Knowledge of:**

- Principles, practices, equipment, materials, and tools used in water treatment and distribution operations, cleaning, and preventive maintenance.
- The operation and preventive maintenance of piping systems, including pipes, valves, and related appurtenances.
- Standard chemical and physical tests of water and related materials.
- Applicable Federal, State, and local laws, ordinances, regulations, and guidelines relevant to assigned duties.
- Basic equipment troubleshooting principles and practices.
- Basic record keeping practices.
- Basic mechanical, electrical, and hydraulic principles.
- Shop mathematics.
- Safe work methods and safety practices pertaining to the work, including the handling and storage of hazardous chemicals.
- Basic computer software related to work.
- English usage, spelling, vocabulary, grammar, and punctuation.
- Techniques for providing a high level of customer service to public and City staff, in person and over the telephone.

#### **Ability to:**

- Operate, maintain, and repair a variety of water treatment and distribution facilities and equipment.
- Recognize and correct or report unusual, inefficient, or dangerous operating conditions.
- Read a variety of gauges, charts, and meters, record data accurately and make appropriate adjustments.
- Conduct standard chemical and physical tests of water and related materials.
- Use and maintain the tools and equipment of the work skillfully and safely.
- Handle hazardous chemicals in a safe manner.
- Make accurate arithmetic calculations.
- Safely and effectively use and operate hand tools, mechanical equipment, power tools, and equipment required for the work.

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- Perform routine equipment maintenance.
- Maintain both manual and automated logs, records, reports, and charts.
- Follow department policies and procedures related to assigned duties.
- Understand and follow oral and written instructions.
- Organize own work, set priorities, and meet critical time deadlines.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish and maintain effective working relationships with those contacted in the course of the work.

### *Education and Experience:*

*Any combination of training and experience which would provide the required knowledge, skills and abilities is qualifying. A typical way to obtain the required qualifications would be:*

Water System Operator: Equivalent to the completion of the twelfth (12<sup>th</sup>) grade. One (1) year of experience of water treatment and/or distribution operations work equivalent to that of a Water System Operator I or equivalent at the City of Soledad.

### **License:**

- Valid California class C driver's license with satisfactory driving record.

### Water System Operator I:

- Grade I Water **Distribution** Operator Certificate as issued by the California State Department of Public Health.

## **PHYSICAL DEMANDS**

Must possess mobility to work in standard water operations facilities; strength, stamina and mobility to perform light to medium physical work, to work in confined spaces, around machines and to climb and descend ladders, and operate varied hand and power tools and equipment; vision to read printed materials and a computer screen; color vision to read gauges and identify appurtenances; and hearing and speech to communicate in person and over the telephone or radio. The job involves frequent walking in operational areas to identify problems or hazards. Finger dexterity is needed to access, enter and retrieve data using a computer keyboard or calculator and to operate above-mentioned tools and equipment. Positions in this classification bend, stoop, kneel, reach and climb to perform work and inspect work sites. Employees must possess the ability to lift, carry, push, and pull materials and objects necessary to perform job functions.

## **ENVIRONMENTAL ELEMENTS**

Employees work primarily indoors and are exposed to loud noise levels, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives, and contractors in interpreting and enforcing departmental policies and procedures.

## **WORKING CONDITIONS**

May be required to work on evenings, weekends and holidays. Participates in after-hours emergency response and on-call and callback assignments.