



JULY 2016  
FLSA: NON-EXEMPT

## WATER SYSTEM OPERATOR I/II

### **DEFINITION**

Under immediate (I) or general (II) supervision, performs a variety of work in the construction, modification, maintenance, and repair of City water distribution main and lateral pipeline systems, including complex residential and commercial water meters, valve cans, meter boxes and water distribution valves; uses and operates a variety of manual and power tools and light to heavy power driven equipment; and performs related work as required.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives immediate (I) or general (II) supervision from Water System Supervisor or assigned supervisor. Exercises no supervision over staff. May provide technical and functional direction to contractors and temporary staff.

### **CLASS CHARACTERISTICS**

#### **Water System Operator I**

This is the entry-level class in the Water System Operator classification series. This class is responsible for providing support for assigned water operations and programs. Initially under close supervision, incumbents with basic maintenance experience learn City infrastructure, systems and facilities, use of tools and equipment, and a wide variety of practices and procedures. Positions at this level usually perform most of the duties required of the positions at the II level, but are not expected to function at the same skill level and usually exercise less independent discretion and judgment in matters related to work procedures and methods. Work is usually supervised while in progress and fits an established structure or pattern. Exceptions or changes in procedures are explained in detail as they arise. As experience is gained, assignments become more varied and are performed with greater independence.

#### **Water System Operator II**

This is the journey-level class in the Water System Operator classification series responsible for performing the full range of technical duties required to ensure that City infrastructure, systems, and facilities to which assigned are maintained in a safe and effective working condition and provide the highest level of safety for public use. Responsibilities include inspecting and attending to assigned areas in a timely manner, and performing a wide variety of tasks in the maintenance and repair of assigned facilities and systems. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit. This class is distinguished from Senior Water System Operator in that the latter is responsible for technical and functional supervision of lower-level maintenance staff and for performing the most complex duties assigned to the series.

Positions in the Water System Operator class series are flexibly staffed and positions at the II level are normally filled by advancement from the I level; progression to the II level is subject to management approval and is dependent on the incumbent (i) performing the full range of duties assigned to the II level, and (ii) acquiring the knowledge, skill, and experience necessary to meet the minimum qualifications for the II level of the series.

**EXAMPLES OF TYPICAL JOB 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.

Positions assigned to the entry (I) level of the series may perform some tasks in a learning capacity

- Performs construction, maintenance, and repair activities of City water utilities systems and facilities to ensure safe and efficient access for the public, including residential and commercial water meters, valve cans, meter boxes and water distribution valves.
- Performs water valve maintenance, including various types of lines and valves, locating and raising valves that are not exposed, operating automated machines to exercise valves on an annual basis, and updating records following the installation of new valves.
- Flushes water mains to ensure water quality meets California State Water Resources Board Standards.
- Repairs concrete after water distribution system maintenance, including sidewalk panels and temporary street patches.
- Uses valve-turning equipment to isolate and shut down pre-designated water lines for routine maintenance and in emergency situations; ensures proper shutdown of services by utilizing sounding equipment and flow rates; provides explanations to the public during shutdowns.
- Receives and responds to service calls and customer complaints regarding issues such as water leaks, water bill disputes and questions, and water quality; investigates customer issues and complaints; resolves or refers issues to supervisor.
- Participates in the citywide inspection program, including inspecting assigned City infrastructure for safety issues, structural integrity, and possible future work projects and programs, and appropriately marking areas that need to be repaired.
- Performs water meter maintenance, including installing new meters, testing and repairing meters of various sizes, repairing leaks and replacing meters as necessary; installs service lines for newly developed properties and accounts for the installation of meters for new homes; performs shutdowns of services, as required.
- May locate underground water lines as part of Underground Service Alert (USA) to inform contractors, agencies and City employees doing construction, excavation or digging work.
- Monitors contractors working with and around underground services to ensure the work is appropriately performed to code and does not damage, cover, or bury existing infrastructure such as meters and valves; addresses discrepancies as necessary.
- Operates and maintains specialized vehicles and a variety of light, medium, and heavy equipment related to the construction, maintenance, and repair of water utilities systems and facilities.
- Operates a variety of hand and power tools and equipment related to work assignment as instructed.
- Observes safe work methods and makes appropriate use of related safety equipment as required.
- Maintains public facilities, shop and garage areas, storage sites, and other work areas in a clean and orderly condition, including securing equipment at the close of the workday.
- Installs street barricades and cones and controls traffic around work sites to ensure safe conditions for the general public and City workers.
- Conducts backflow testing, and repairs backflows as needed.
- Provides needed information, training, and demonstrations concerning how to perform certain work tasks to new employees in the same or similar class of positions.
- Receives and responds to inquiries, concerns and complaints regarding areas of responsibility.
- Inspects and oversees the work of contractors.

- Maintains accurate logs and records of work performed and materials and equipment used.
- Attends training, meetings, workshops, etc., as required to enhance job knowledge and skills.
- Performs other duties as assigned.

### **QUALIFICATIONS**

Some knowledge, skills and abilities may be performed by positions at the entry (I) level in a learning capacity:

#### **Knowledge of**

- Principles, practices, tools, and materials as they relate to the maintenance and repair of infrastructure, facilities, systems, and appurtenances similar to those in a municipal environment.
- Maintenance principles, practices, tools, and materials for maintaining and repairing water distribution main and lateral pipeline systems, including residential and commercial water meters, valve cans, meter boxes and water distribution valves.
- Traffic control procedures and traffic sign regulations.
- The operation and minor maintenance of a variety of hand and power tools, vehicles, and light to heavy power equipment.
- Operational characteristics of specialized water utilities maintenance and repair equipment.
- Occupational hazards and safety equipment and practices related to the work, including the handling of hazardous chemicals.
- Applicable Federal, State and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Principles and procedures of record-keeping and reporting.
- Occupational hazards and safety equipment and practices related to the work.
- Basic mathematics.
- Safe driving rules and practices.
- Basic computer equipment and applications related to the work, e.g., email, internet search, etc.
- Basic English, reading comprehension and communication skills.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors and City staff.

#### **Ability to**

- Perform construction, modification, maintenance, and repair work on potable water distribution main and lateral pipeline systems, including residential and commercial water meters, valve cans, meter boxes and water distribution valves.
- Troubleshoot maintenance problems and determine materials and supplies required for repair.
- Make accurate arithmetic calculations.
- Safely and effectively use and operate hand tools, mechanical equipment, power tools, and light to heavy equipment required for the work.
- Perform routine equipment maintenance.
- Perform water utilities maintenance and repair with accuracy, and speed.
- Operate specialized water utilities maintenance and repair equipment.
- Set up and operate traffic area construction zones, including cones, barricades and flagging.
- Locate underground utilities by use of blue prints and electronic locating equipment in accordance with Underground Service Alert (USA) regulations.
- Conduct backflow testing on City devices.

- Read, interpret, and apply technical information from manuals, drawings, specifications, layouts, blueprints and schematics.
- Follow department policies and procedures related to assigned duties.
- Maintain accurate logs and basic written records of work performed.
- 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.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.
- Use tact, initiative, prudence, and independent judgment within general policy and procedural, guidelines.

### **EDUCATION AND EXPERIENCE**

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

- Equivalent to the completion of the twelfth (12th) grade.
- Water Systems Operator I: One (1) year of experience in construction, maintenance, and/or repair of water utilities and/or related facilities, systems and appurtenances, including the use of hand and power tools.
- Water Systems Operator II: Two (2) years of increasingly responsible experience in construction, maintenance, and/or repair of water utilities and/or related facilities, systems and appurtenances or one (1) year of experience equivalent to Water Systems Operator I at the City Menlo Park.

### **LICENSES AND CERTIFICATIONS**

#### **Water Systems Operator I**

- Possession of, or ability to obtain, a valid California driver's license by time of appointment.
- Possession of, or ability to obtain, a valid Grade I Water Distribution Operator Certificate issued by the California State Water Resources Control Board (SWRCB) within one (1) year of employment.

#### **Water Systems Operator II**

- Possession of a valid California Class B driver's license with the appropriate endorsements may be required.
- Possession of a valid Grade II Water Distribution Operator Certificate issued by the SWCRB.
- Possession of, or ability to obtain, a valid Backflow Device Tester Certificate issued by the American Water Works Association (AWWA) or an equivalent association.
- Possession of, or ability to obtain, a valid Grade II Water Treatment Operator Certificate issued by the SWRCB may be required if treating water

### **PHYSICAL DEMANDS**

Must possess mobility to work in the field; strength, stamina, and mobility to perform medium to heavy physical work, to work in confined spaces and around machines, to climb and descend ladders, to operate varied hand and power tools and construction equipment, and to operate a motor vehicle and visit various City sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone or radio. The job involves fieldwork requiring 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 weighing up to 80 pounds, or heavier weights with the use of proper equipment.

**ENVIRONMENTAL ELEMENTS**

Employees work in the field 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**

Required to be on-call and to work various shifts or emergencies on evenings, weekends, and/or holidays.