



FEBRUARY 2022  
FLSA: NON-EXEMPT

## WATER SYSTEMS OPERATOR I/II

### **DEFINITION**

Under direct (I) or general (II) supervision, performs a variety of semi-skilled and skilled work in the operation and maintenance of the District's water production, treatment, storage, and distribution equipment and facilities; collects water quality samples from the distribution system; and performs related work as required.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives direct (I) or general (II) supervision from the Water Operations Manager. Exercises no supervision of staff.

### **CLASS CHARACTERISTICS**

Water Systems Operator I: This is the entry-level class in the Water Systems Operator series. Initially under close supervision, incumbents with basic water utility experience learn the correct operation and maintenance of District production and distribution systems and facilities, use of tools and equipment, and a wide variety of practices and procedures. As experience is gained, assignments become more varied and are performed with greater independence. 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 Systems Operator II: This is the journey-level class in the Water Systems Operator series that performs the full range of duties required to ensure that District water production and distribution systems and facilities 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 operation, inspection, and maintenance 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 the Water Systems Operator III in that the latter is responsible for performing the most complex duties assigned to the series and for developing and maintaining the District's water quality programs.

Positions in the Water Systems 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, licenses, certificates, 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 assigned treatment plant rounds inspecting, monitoring, and documenting plant operations; makes necessary adjustments in computer system; inspects, adjusts and records meter reads, and chemical usage; inspects and records sample results of well sites, reservoirs, booster pumps, blending stations, treatment facility, hydro turbine electric generation site, chemical metering equipment and wholesale water metering station.
- Maintains chlorine equipment such as pumps, injectors, and analyzers for the District; orders and receives delivery of chlorine shipments; transfers chlorine into drums.
- Operates and maintains water production, storage, treatment, and distribution facilities by regulating water flow throughout the system using control valves, pumping stations, and manual, electronic and computer-controlled systems such as Supervisory Control and Data Acquisition (SCADA).
- Maintains and operates disinfection equipment and makes chemical adjustments as necessary.
- Collects liquid samples and coordinates a variety of routine water quality laboratory tests; coordinates analysis of water samples taken for nitrates, turbidity, chlorine residual and other contaminants.
- Flushes water lines and keeps system area clean.
- Performs chlorination treatment of potable water; takes samples of water and performs chemical tests of chlorine residual and a variety of other tests to ensure water quality meets required standards.
- Regulates water flow into or out of the water distribution system or reservoir when necessary to ensure an adequate supply of water in reservoirs and systems.
- Checks operation of automatic pump and valve regulating equipment and adjusts or repairs as needed.
- Performs preventive maintenance on pumps, motors, and other equipment; checks and adds oil, greases bearings.
- Makes repairs or inspects contract repair work associated with repairs of pipelines, pumps, tanks, reservoirs, and related equipment.
- Notifies supervisor of the need for repair or additional maintenance as found during routine inspection and cleaning activities; and prepares work orders or notes service requirements.
- Operates and maintains specialized vehicles and a variety of equipment related to the operation, maintenance, and control of water production systems and facilities.
- Observes safe work methods and makes appropriate use of related safety equipment as required.
- Maintains public facilities, storage sites, and other work areas in a clean and orderly condition, including securing equipment at the close of the workday.
- Maintains accurate logs and records of work performed and materials and equipment used.
- Performs related duties as assigned.

**QUALIFICATIONS**

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

**Knowledge of:**

- Principles, practices, tools, equipment and supplies required to maintain, operate, and control water treatment systems, reservoirs, and related infrastructure, facilities, systems, and appurtenances similar to those in the District's environment.
- Principles, practices, and techniques of handling and processing water samples.
- Principles, practices, methods, and techniques of water flushing.
- Operational and maintenance practices of electrical motors, pumps, and circuitry.
- Occupational hazards and safety equipment and practices related to the work, including the handling of hazardous chemicals and confined space entry.
- Basic mechanical, electrical and hydraulic principles.
- Applicable Federal, State, and local laws, codes, and regulations.
- Traffic control procedures and traffic sign regulations.
- Basic mathematics.
- Safe driving rules and practices.
- Computer software related to the work, including the operation of the water telemetry system and its devices.
- English usage, spelling, vocabulary, grammar, and punctuation.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors and District staff.

**Ability to:**

- Perform basic modification, maintenance, and repair work on water production systems, reservoirs, and related infrastructure, facilities, systems, and appurtenances similar to those in the District's environment.
- Troubleshoot maintenance problems and determine materials and supplies required for repair.
- Understand and follow oral and written instructions.
- Make accurate arithmetic calculations.
- Perform routine equipment maintenance.
- Maintain accurate logs, records, and basic written records of work performed.
- Interpret and apply the policies, procedures, laws, codes, and regulations pertaining to assigned programs and functions.
- Read, interpret, and apply technical information from manuals, drawings, and specifications.
- 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 judgment within well-defined policy and procedural guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

**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*

Water Systems Operator I/II: A high school diploma or satisfactory equivalent.

Water Systems Operator I: No experience required.

Water Systems Operator II: Two (2) years of experience in the operation, maintenance, and/or repair of water utilities and/or related facilities, systems, and appurtenances, or one (1) year of experience equivalent to the Water Systems Operator I at the District.

**Licenses and Certifications:**

Water Systems Operator I:

- Possession of a valid California Driver's License and a satisfactory driving record.
- Must obtain a Grade I Water Treatment Operator Certificate issued by the State Water Resources Control Board within 12 months of hire.
- Must obtain a Grade I Water Distribution Operator Certificate issued by State Water Resources Control Board within 12 months of hire.

Water Systems Operator II:

- Possess and maintain a valid Grade II Water Treatment Operator Certificate issued by the State Water Resources Control Board.
- Possess and maintain a valid Grade II Water Distribution Operator Certificate issued by State Water Resources Control Board.

**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, around machines and to climb and descend ladders, and operate varied hand and power tools and construction equipment; to operate a motor vehicle and visit various District 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 of long distances 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 50 pounds and heavier weights with the use of proper equipment.

**ENVIRONMENTAL ELEMENTS**

Employees work in the field and are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, 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 be on-call and to work various shifts or emergencies on evenings, weekends, and/or holidays.