



JULY 2019  
FLSA STATUS: NON-EXEMPT

## WATER TREATMENT PLANT OPERATOR II/III

### **DEFINITION**

Under general supervision, performs a variety of work in the operation, control, and maintenance of the City's water production systems to ensure the uninterrupted supply of safe and potable water for public consumption; collects samples for laboratory testing; maintains, repairs and calibrates equipment used in the water treatment plant; and performs related work as required.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision from the Water Services Manager. Positions at the Water Treatment Plant Operator II and III level may provide technical and functional direction to lower level staff.

### **CLASS CHARACTERISTICS**

Water Treatment Plant Operator II: This is the shift operator class in the Water Treatment Plant Operator series performing the full range of duties required to ensure that the water treatment facilities and systems operate effectively and are maintained in a safe and effective working condition. The shift operator is in direct charge of the operation of the water treatment system for a specified period. Responsibilities include accurately monitoring and controlling water treatment equipment, inspecting and attending to issues in a timely manner, and performing a wide variety of tasks in the preventative maintenance and repair of assigned facilities and systems. This class is distinguished from the Water Treatment Plant Operator III in that the latter can fill in as the Chief Operator and can be assigned overall responsibility of the water system, in the absence of the Water Services Manager.

Positions at the Water Treatment Plant Operator II level are normally filled by advancement from Water Treatment Plant Operator I level; progression to the Water Treatment Plant Operator II level is dependent on (i) the incumbent obtaining the required certification and meeting the minimum qualifications for the classification; (ii) satisfactory work performance; (iii) management affirmation that the work performed is consistent with expectations for the classification, and (iv) management approval for progression to the Water Treatment Plant Operator II level.

Water Treatment Plant Operator III: This is the class in the Water Treatment Plant Operator series qualified to perform (in the absence of the Water System Manager) the full range of duties, including overall responsibility, required to ensure that the water treatment facilities and systems operate effectively and are maintained in a safe and effective working condition. Responsibilities include accurately monitoring and controlling water treatment equipment, inspecting and attending to issues in a timely manner, and performing a wide variety of tasks in the preventative maintenance and repair of assigned facilities and systems. This class is distinguished from the Water Services Manager in that the latter is responsible for managing the water division staff and operations.

Positions at the Water Treatment Plant Operator III level are normally filled by advancement from Water Treatment Plant Operator II level; progression to the Water Treatment Plant Operator III level is dependent on (i) the incumbent obtaining the required certification and meeting the minimum qualifications for the classification; (ii) satisfactory work performance; (iii) management affirmation that the work performed is consistent with expectations for the classification, and (iv) management approval for progression to the Water Treatment Plant Operator III level.

**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.*

- Monitors and controls the operation of water treatment and distribution systems incorporating chemical feeding equipment and utilizing the telemetry system, filtration equipment, pump stations, pressure zones through pressure reducing valves, pipelines, and storage tanks.
- Makes daily rounds of the system; analyzes operational data to determine necessary adjustments to meet demand; reacts to alarms; records activities in logs as necessary.
- Performs daily tasks such as backwashing filters, adding chlorine, and adding polymer; takes temperatures; cleans filters and screens; and changes chart recorders.
- Collects water samples and forwards to laboratory testing organization.
- Checks, calibrates and tests a variety of equipment on an established periodic basis; enters information into a check list.
- Checks operation of automatic pump and valve regulating equipment and adjusts or repairs as needed.
- Observes variations in operating conditions by interpreting meter, gauge, and graph readings and tests results to determine pressure requirements.
- Performs preventive maintenance on pumps, motors, and other equipment in the water treatment plant and remote sites; maintenance areas include electrical, mechanical and welding repairs on equipment; may work in confined spaces.
- Responds to Underground Service Alert (USA) requests from property owners or contractors; locates and marks underground utilities.
- Completes repairs or 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.
- Performs a variety of facilities and grounds maintenance duties including construction of small buildings, shelving, and work stations; builds concrete forms, and pours and finishes concrete; paints buildings, equipment and pipes; uses mowers and weed-eaters to maintain grounds.
- Operates and maintains specialized vehicles and a variety of equipment related to the operation, maintenance, and control of water treatment 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 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**

**Knowledge of:**

- Maintenance principles, practices, tools, and materials for maintaining and repairing water production systems, storage tanks, and pump stations, encompassing skill sets needed for electrical, mechanical and welding work.
- Principles, practices, tools, equipment, and supplies required to maintain, operate, and control water treatment and distribution systems, and pump stations.
- Methods and techniques of conducting diagnostic testing on pumps, motors, valves, electronic equipment and circuitry.
- Methods and techniques of calibrating equipment and appurtenances used in water treatment plants.
- Mechanical, electrical, and hydraulic principles.
- Methods and techniques of collecting water samples for testing purposes.
- Computer software related to the work, including the operation of the water telemetry system (SCADA) and related devices/components such as programmable logic controllers.
- The operation and minor maintenance of a variety of hand and power tools, vehicles, and light to heavy power equipment.
- Occupational hazards and safety equipment and practices related to the work, including the handling of hazardous chemicals and confined space entry.
- Applicable Federal, State, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Mathematical principles.
- Safe driving rules and practices.
- Complex record keeping principles and practices.
- Modern office practices, methods, and computer equipment which may include, but is not limited to, mobile technology and electronic devices, and software related to the work.
- 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 City staff.

**Ability to:**

- Operate and maintain systems and equipment used in the treatment of clean and safe water.
- Diagnose and resolve system and equipment operational problems.
- Employ accurate sample collection techniques to ensure proper testing of water.
- Observe, interpret and apply information obtained through various systems and instruments to make adjustments to processes or materials.
- Repair and maintain equipment used in water treatment and production facilities and stations.
- 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.
- Interpret and apply the policies, procedures, laws, codes, and regulations pertaining to assigned programs and functions.
- Locate underground utilities by use of blue prints and electronic locating equipment in accordance with Underground Service Alert (USA) regulations.
- Follow department policies and procedures related to assigned duties.
- Maintain accurate logs, records, and basic written records of work performed.
- Understand and follow oral and written instructions.
- Organize own work, set priorities, and meet critical time deadlines.

- Use tact, initiative, prudence, and independent judgment within general policy guidelines.
- 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.

**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 Treatment Plant Operator II/III: Equivalent to the completion of the twelfth (12<sup>th</sup>) grade, one (1) year experience in the appropriate certification and the following requirements:

Operator Grade education and qualifying experience requirements are governed by the California State Water Resources Control Board and the Office of Operator Certification. There are multiple paths to each certification and a current table can be found on the SWRCB's website.

Licenses and Certifications:

Water Treatment Plant Operator II/III:

- Possession of, or ability to obtain, a valid California Driver's License by date of appointment.

Water Treatment Plant Operator II:

- Possess and maintain a valid Grade II Water Treatment Operator Certificate and Grade I Water Distribution Operator Certificate issued by the State of California.

Water Treatment Plant Operator III:

- Possess and maintain a valid Grade III Water Treatment Operator Certificate and Grade I Water Distribution Operator Certificate issued by the State of California.

**PHYSICAL DEMANDS**

Must possess mobility to work in the field; strength, stamina, and mobility to perform medium to heavy physical work, to work 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 or equipment. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 50 pounds, and occasionally weighing more, with assistance from other staff and/or the use of proper equipment.

**ENVIRONMENTAL ELEMENTS**

Field employees may be exposed to hazardous conditions including elevated noise levels; electrical hazards; hot and cold temperatures; inclement weather conditions; road hazards including driving and working in or around roadway traffic; working with or around hazardous physical substances; odors;

fumes; insects and animals. Additionally, employees may be required to participate in confined space activities as an entrant, attendant, rescuer or supervisor, after receiving appropriate confined space training. Employees may interact with frustrated or irritated individuals in interpreting and enforcing department policies and procedures.