



## Treatment Plant System Operator IV

### **DEFINITION**

Under general supervision, operates, evaluates, inspects and maintains a water treatment plants and control system facilities on an assigned shift; and performs other related work as required.

### **DISTINGUISHING CHARACTERISTICS**

Treatment Plant System Operator IV is the advanced journey-level classification in the Treatment Plant Operator series. Individuals in this classification use a computer-based supervisory control and data acquisition system to efficiently operate and generally maintain the water supply facilities, water treatment plants on an assigned shift without immediate supervision. Incumbents must demonstrate the ability to independently operate all of the District's water treatment facilities and provide operational guidance to other operators. Work requires independent judgement, initiative and action within established operational parameters. Incumbents perform the more difficult duties and assignments. The Treatment Plant System Operator IV may have lead responsibilities over other operators while operating a shift.

### **EXAMPLES OF DUTIES**

Typical duties may include but are not limited to the following:

- The shift operator will have responsibility over plant operations and may assign work to other operators at the facility. The shift operator will take the lead role in evaluating and optimizing plant processes, developing standard operating procedures and authoring technical reports; compiles technical information and data, evaluate it and take or recommend actions to improve water treatment operations and water quality within established guidelines.
- Relief operators work varying shifts at all facilities and may work shifts of 8, 10 or 12 hours in duration, day or night depending on the scheduling needs. Relief operators generally assume responsibility for the plant operations when the shift operators are on vacation or out sick. When relief operators are not on shift they assist the shift operator by performing the operational duties as assigned
- Operates pumps and valves to regulate the flow of water through treatment facilities; determines the rate from appropriate meters, gauges, trends and visual inspection, and coordinates the rate with demand, storage, and production from other facilities;
- Performs such records and report functions as collecting, maintaining, analyzing, and interpreting computer-generated data on a log of plant operations, test results, maintenance work performed, and unusual operating conditions; makes periodic inspections and prepares reports as required;
- May drive a motor vehicle to a number of pumping stations and water distribution and treatment facilities; operates District communication equipment;
- observes pumping equipment and reports any failures or operating difficulties;
- observes condition of pumping station building, fences, reservoirs, tanks, grounds, and other facilities, and reports any maintenance needs;

- Takes samples of water at established times, makes standardized quality control tests;
- Operates a computer-controlled console to regulate the supply facilities or water treatment plants;
- monitors water quality at control console and adjusts chemical feed rates and other plant equipment accordingly;
- Establishes, implements, and adjusts computer scheduling programs to efficiently operate the water supply/treatment facilities;
- Directs, coordinates, and communicates water supply/treatment operational changes, outages, shutdowns, limitations and information with District staff;
- monitors pressure and flow data, routine field activities, and plants and facilities security;
- Responds to alarms, equipment failures, security violations, and takes necessary actions to maintain a reliable water supply;
- Maintains the plant and operating equipment and facilities in a clean and orderly condition, including hosing filters and basins;
- Performs routine plant maintenance, and may make minor equipment repairs or adjustments;
- Shuts down portions of a plant system as necessary;
- Works with hazardous chemicals in laboratory and bulk volumes;
- Orders and maintains bulk chemical supplies;
- Conducts tours, and trains new employees;
- Receives materials delivered and ensures that they are properly recorded, examined and stored;
- Operates computerized instrumentation and equipment related to water supply/treatment facilities;

#### **QUALIFICATIONS FOR EMPLOYMENT**

Knowledge of:

- Operation, maintenance and cleaning of water treatment facilities;
- current and developing water treatment and regulations;
- principles, methods, materials and equipment used in the safe, efficient treating, testing and production of water for domestic purposes;
- chemistry and mathematics as used in the operation of a water treatment facility;
- storing and handling of hazardous chemicals;
- standardized water quality tests;
- mechanical, electrical and hydraulic principles;
- uses and principles of computerized electronic equipment in the collection, storage and interpretation of operational data related to water treatment and water supply;
- computer inventory control for water treatment chemicals, fuel and supplies;
- routine operating report generation;
- principles and practices of servicing, repairing and calibrating water plant equipment;
- current technological developments in water treatment, and water quality.

Ability to:

- Demonstrate the ability to independently operate all of the District's water treatment facilities and provide their operational guidance to other less experienced operators;
- operate a programmable controller;
- analyze and evaluate the water treatment process, including unusual, inefficient or dangerous operating conditions, and exercise independent judgment within established guidelines to make corrective changes as needed;

- read and interpret plant piping, metering gauges, recording equipment and distribution diagrams;
- perform standardized water quality tests and adjust equipment accordingly;
- operate and maintain water treatment facility equipment;
- maintain and prepare operational water quality records, reports, and charts;
- work cooperatively with others;
- understand and follow written and oral instructions;
- observe and accurately record operating conditions and make verbal or written reports;
- operate and routinely service computerized instrumentation and plant operational equipment;
- depending upon job assignment, drive a vehicle; and
- travel to alternative work locations and offsite meetings.

Training and Experience: Any combination equivalent to experience and education that could likely provide the required knowledge and abilities would be qualifying. A typical way to obtain the knowledge and abilities would be:

- Completion of the twelfth grade or its equivalent; and two years of experience in the operation of a water treatment plant;
- possession of a valid Grade T4 or T5 Water Treatment Plant Operator's Certificate earned through the California Water Resources Control Board, Division of Drinking Water.

#### **OTHER REQUIREMENTS**

- Per California Government Code, Title 1, Division 4, Chapter 8, Section 3100 "all public employees are hereby declared to be disaster service workers subject to such disaster service activities as may be assigned to them by their superiors or by law."
- Work on an "on call" basis for emergency situations;
- Must be willing to work any day and any shift within a 24-hour period as assigned, including holidays, weekends and overtime as needed.

#### **LICENSES AND/OR CERTIFICATIONS**

- Possession of or the ability to obtain an appropriate California driver's license issued by the State Department of Motor Vehicles and satisfactory driving record.
- Possession of a valid Grade T4 or T5 Water Treatment Plant Operator's Certificate earned through the California Water Resources Control Board, Division of Drinking Water.

#### **PHYSICAL DEMANDS AND WORKING CONDITIONS**

During the course of performing job duties the employee will need the mobility to work in a standard office setting, operate equipment, which may include office and/or field equipment, or specialized instruments or tools requiring repetitive arm/hand movement and/or the coordinated movement of more than one limb simultaneously; enter and retrieve data from personal computers and terminals via keyboards which is often performed while sitting for extended periods of time. The employee frequently stands, walks, bends at neck and waists, twists at neck and waist, uses simple and power grasping with both hands, uses fine manipulation of both hands and fingers, and may require use of the arms above the shoulder, climb or balance; stoop, kneel or crouch. While working in the field the employee may walk on uneven or un-level ground surfaces such as hills, slopes, ditches or trenches, on or in tanks, and may work at heights up to ten to twelve feet climbing ladders or stairs. The employee is occasionally required to lift and carry short distances objects such

as reams of copier paper, office supplies, files, books, printed materials and other packages or equipment weighing up to 70 pounds. This position requires that the employee demonstrate adequate hearing and speech to converse in person and over the telephone, and vision to read printed materials, distinguish color, and use a computer screen.

In order to drive, individuals must be physically capable of operating the vehicles and equipment safely.

The noise level in the work environment is quiet to moderate noise. The employee is exposed to outdoor temperature, humidity, wetness and dust. The position may require the ability to work overtime and weekends as needed.

### **ADDITIONAL PHYSICAL DEMANDS**

- Full Faced Cartridge Respirators may be required to be worn while performing normal job duties, Employee must be capable of obtaining and maintaining a proper face seal for District supplied respiratory equipment.
- Must pass annual respirator physical.
- Exposure to potentially hazardous materials, laboratory and bulk chemicals, solvents, microbiological pathogen, odors and fumes.

*To be successful in this job, an individual must be able to satisfactorily perform each of the listed duties. These duties are representative of the knowledge, skill and/or ability required for the position. Reasonable accommodations may be made to enable individuals with disabilities to perform the duties and functions of the position. Requests for reasonable accommodation should be directed to the Human Resources Manager.*

Established: March 2003  
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Approved by: Human Resources Manager