



## **Mechanical and Electrical Operations Supervisor**

### **DEFINITION**

Under direction, plans, supervises, and coordinates a mechanical and electrical work unit engaged in the design, maintenance and repair of mechanical and electrical equipment used in the production and distribution of drinking water. Incumbents in this position participate in the more complex work assignments and do related work as required.

### **DISTINGUISHING CHARACTERISTICS**

This classification is a first line supervisor, reporting to the Superintendent of Operations (Mechanical and Electrical Maintenance). This position is characterized by the ability to efficiently coordinate an ongoing maintenance work load. The incumbent must also have the flexibility to rapidly change priorities to analyze and correct emergency situations. Normal daily activities require the use of independent judgement within established guidelines. Incumbents must possess strong oral and written communication skills.

### **EXAMPLES OF DUTIES**

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

- Plans, assigns, supervises, coordinates, and participates in the work of a mechanical and electrical work unit responsible for the repair and maintenance of electrical and mechanical equipment and facilities used in the production and distribution of drinking water and ancillary facilities;
- Maintains, monitors and evaluates transmission and distribution facilities;
- Plans and schedules maintenance work based on demand, workload, skill sets and available parts using District computer applications as primary planning tools;

- Advises Superintendent of Operations of critical and continuing maintenance problems or issues;
- Identifies and recommends training needs, equipment, specifications and standards to help maintain consistent maintenance practices for the District's mechanical and electrical equipment, control systems and corrosion control programs;
- Maintains liaison with other divisions and departments regarding modifications to water treatment and distribution facilities;
- Coordinates work with contractors, public agencies, and other District staff;
- Participates in the preparation of specifications and analysis of bids for construction projects, purchase of material and/or equipment;
- Develops and administers service and material contracts;
- Maintains records and prepares reports on the need to protect and replace facilities;
- Ensures all computerized maintenance plans, data, and information is current and accurate;
- Inspects proposed facility installations, estimates labor, equipment, and material requirements;
- Suggests improved work methods and equipment;
- Troubleshoots and corrects complex motor control malfunctions;
- Plans, prepares, and monitors section budgets;
- Participates in the employee selection process, trains and evaluates the work of subordinates, prepares employee performance evaluations, and makes recommendations as to employee discipline;
- Develops and administers preventive maintenance programs;
- Develops and administers warehouse inventory of maintenance supplies and emergency spare parts;
- Prepares clear and concise records and reports;
- Ensures employee compliance with applicable safety rules and regulations;
- Plans and coordinates work with other supervisors;
- May perform Mechanical and Electrical Maintenance Worker IV duties;

### **QUALIFICATIONS FOR EMPLOYMENT**

Knowledge of:

- Operation of equipment used in water treatment, distribution and transmission systems and related preventive maintenance procedures;
- Technical aspects of the Mechanical and Electrical work units engaged in maintenance of mechanical and electrical equipment typically used at surface water treatment plants and large distribution systems;
- Methods, techniques, materials, tools and equipment used in water system operation and maintenance;
- Principles and practices of supervision, training, and personnel administration;
- Applicable safety programs, NEC, and CAL/OSHA regulations and procedures;
- Proper spelling, grammar, punctuation and writing practices.

Ability to:

- Communicate orally and in writing in a clear, concise and effective manner;
- Read and interpret, and work from maps, plans, and specifications;
- Read and interpret wiring diagrams and PLC ladder logic diagrams;
- Maintain accurate work progress and cost records;
- Analyze work problems and develop effective solutions;
- Effectively supervise, train and evaluate the work of subordinates;
- Prepare clear and concise records, reports and correspondence;
- Establish and maintain effective working relationships with those contacted in the course of work;
- Operate a PC in a networked Window's based environment to prepare reports, utilize the work order system, and spreadsheets;
- Learn to use applicable GIS and District SAP enterprise database interfaces;
- Create and edit maintenance plans, task lists, equipment and functional locations using SAP;
- Use a SCADA System to analyze equipment problems and water anomalies; and
- Drive a vehicle.

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:

- A Bachelor's degree from an accredited college or university with major course work in mechanical engineering, electrical engineering or a related field, and three (3) years of experience in the installation, repair and maintenance of water treatment and distribution system mechanical and electrical equipment, at least two (2) of which must be directing the work of others.

OR

- An Associate's degree from an accredited college or university with major course work in mechanical engineering, electrical engineering or a related field, and four (4) years of experience in the installation, repair and maintenance of water treatment and distribution system mechanical and electrical equipment, at least two (2) of which must be directing the work of others.

OR

Completion of the twelfth grade or its equivalent, and five (5) years of experience in the installation, repair and maintenance of water treatment and distribution system mechanical and electrical equipment, at least two (2) of which must be directing the work of others.

#### **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 and carry a District provided phone during non-business hours.
- Field experience and familiarity with terms, practices, and procedures common to the water industry preferred.

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

- Possession of an appropriate California driver's license issued by the State Department of Motor Vehicles and satisfactory driving record;

- possession of a valid Distribution Operator's Certificate issued by the California State Water Resources Control Board (SWRCB) ; an incumbent must pass a SWRCB Grade 3 Distribution Operator's Examination and obtain a SWRCB Grade 3 Distribution Operator Certificate within 3 years from their date of hire or appointment date.

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

During the course of performing job duties, the employee will need the mobility to 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. 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 must use small mechanical hand tools, handle small parts, hold and operate heavy tools, pull cable and wire and performs manual labor for extended periods such as frequently lifting 10 to 25 pounds and carrying equipment, and occasionally lift 50 to 75 pounds. This position requires that the employee demonstrate adequate hearing and speech to detect warning alarms, converse in person and over the telephone or radio, and vision to read printed materials, see small parts and color coded wiring, and use a computer screen.

The noise level in the work environment is moderate to loud noise. The employee is exposed to moving vehicles and other moving equipment and machinery, excessive noise, extremes in temperature, humidity, wetness and dust, and must work around high, medium and low voltage circuitry using normal and specialized protective equipment. The position may require the ability to work overtime and weekends as needed.

Employees who drive on District business to carry out job-related duties must possess a California driver's license for the class of vehicle driven and meet automobile insurability requirements of the District including review of a recent DMV history. In order to drive, individuals must be physically capable of operating the vehicles and equipment safely.

*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: August 2002

Revised: October 2008, September 2021

Approved by: Human Resources Manager