

## **WATER SYSTEMS MAINTENANCE WORKER III**

### **DEFINITION**

Under direction, plans, leads, and reviews the work of staff performing a variety of unskilled, semi-skilled and skilled duties involved in the construction, installation, maintenance, repair, inspection, testing upgrading and servicing of water distribution systems and other appurtenances common to a waterworks systems; participates in performing the most complex work of the assigned functions; and performs related duties as assigned.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision from assigned supervisory or management personnel. Exercises technical and functional direction over and provides training to lower-level staff.

### **CLASS CHARACTERISTICS**

This is the advanced-level lead classification in the Water Systems Maintenance Worker class series. Incumbents work under direction and exercise a high level of discretion and independent judgment in performing the full range of routine to complex preventive and predictive maintenance and construction activities involved in the construction, installation, maintenance, repair, inspection, testing, upgrading and servicing of water distribution systems and other appurtenances. Incumbents also provide lead direction and supervision to designated water systems maintenance and construction staff.

### **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 typical functions of the job.*

- Verifies the work of assigned employees for accuracy, proper work methods, techniques, and compliance with applicable standards and specifications; ensures adherence to safe work practices and procedures; communicates any possible inefficiencies to immediate supervisor.
- Performs a variety of preventive and predictive duties, and/or leads, assists and participates in the work of a water systems utility crew engaged in a wide variety of routine to complex duties involved in the installation, maintenance, construction, repair, inspection, testing, upgrading and servicing of the water distribution system.
- Performs inspection and repair work in confined spaces, such as vaults, tanks, and reservoirs.
- Oversees or participates in traffic control activities, including safety devices, signs, and barricades; ensures safety of public and work crew.
- Observes and trains designated staff in safe work methods and uses appropriate safety equipment; secures worksites from safety hazards as necessary; attends safety meetings.
- Operates, maintains, and trains designated staff on a variety of equipment and power tools used in domestic, reclaimed, and agricultural water systems maintenance and construction work, including but not limited to, vehicles, forklifts, loaders, generators, compressors, pressure washers, pneumatic, electric, rigging, hydraulic, and gasoline powered construction equipment, as assigned.
- Provides staff oversight and performs routine to complex maintenance work in and around water meter boxes, fire hydrants, and other appurtenances as needed; performs minor repairs and weed control at District facilities.

- Completes and oversees staff in conducting site inspections and equipment monitoring associated with the water systems maintenance operations; reports unsafe conditions observed in the field and provides recommendations for resolving unsafe conditions.
- Maintains accurate, up to date records on all maintenance, repair and service activities conducted or planned; maintains inventory of replacement parts and equipment, as assigned.
- Provides maintenance assistance, leads, and coordinates work assignments across functional areas, such as those involved in facilities and water systems maintenance and repair, construction/reconstruction, plant, and dam maintenance operations, as assigned.
- Operates a variety of standard office equipment and technologies, including specialized software.
- Responds to emergency call out situations and perform standby duty for emergency response on weekends and holidays, as assigned.
- Estimates time, materials, and equipment required for jobs assigned; requisitions materials as required; keeps inventory of replacement parts; prepares and maintains records and written reports, as required.
- Assists supervisor in department budget preparation; assists in developing or revising standard operating procedures (SOPs).
- Provides work direction, training, oversight, and guidance, to assigned employees in their areas of works; assists in assigned employee evaluations.
- Performs related duties as assigned.

**When Assigned to Construction Maintenance:**

- Leads staff and performs street teardowns and repairs, performs trenching, and installation/removal and repair of large water pipes and other appurtenances.
- Provides staff oversight and participates in various activities associated with the cutting, fitting, laying, installation, and repairing of domestic, reclaimed, and agricultural water pipelines, service lines, pumping equipment, and open canals.
- Leads staff and performs a variety of routine to complex water facilities maintenance work, including main line repair; service line installation, replacement, and repair; pipe cutting; line tapping; cleaning and flushing of pipelines; repairs, replaces, and installs mainline control valves, air vac/air release valves; installs and repairs pressure reducing valves and vaults; and installation and repair of meters, valves, hydrants, and other appurtenant domestic, reclaimed, and agricultural water facilities.
- Oversees staff and performs road repairs.
- Performs related duties as assigned.

**When Assigned to Preventive Maintenance:**

- Participates in and provides staff training and oversight in exercising and maintenance of distribution system valves using manual and motorized tools; inspects, maintains, repairs, installs, and positions distribution system valves; draws maps marking and indicating size of valve; vacuums valve cans to ensure can is clean of debris; assists with preparation of reports related to distribution system, maintenance and repair, including hydrants and valves.
- Leads staff and participates in operating, exercising, and monitoring the functioning of valves and other equipment to regulate the flow of water through the distribution system; inspects valves and similar equipment on site and performs scheduled exercising as required to maintain proper working order; maintains logs.
- Performs a variety of routine to complex maintenance on fire hydrants and air-vacs; performs fire flows; paints and maintains fire hydrants and air-vacs; flushes designated water lines removes graffiti; performs minor repairs and weed control around fire hydrants, air-vacs, and other water facilities as required; performs minor road repairs and pavement patching.

- Leads, oversees staff, and assists with the coordination and implementation of water system shutdowns and highlining operations; coordinates and assists with the performance of both systematic and isolated water distribution system flushing; pulls chlorine residuals to ensure proper chlorine dosage in waterline; collects Bac-T samples and sends to lab.
- Participates in and oversees staff in locating, identifying, and marking various District facilities as required to comply with Underground Service Alert requests, utilizing a computerized information system and various line location devices.
- Performs various activities associated with the cutting, fitting, laying, installation, and repairing of domestic, reclaimed, wastewater, and agricultural water pipelines, service lines, pumping equipment, and open canals.
- Performs a variety of water facilities maintenance work including main line repair; service line installation, replacement, and repair; pipe cutting; line tapping; cleaning and flushing of pipelines.
- Performs related duties as assigned.

**When Assigned to Field Services:**

- Provides staff oversight and performs a variety of water facilities maintenance work including replace/install AM stops, customer valves, meter boxes, meters, AMR materials; installs/moves/removes hydrant meters, field/bench tests customer meters.
- Repairs/replaces customer service piping as needed during repairs on PVC, copper, brass, and galvanized materials.
- Responds to customer questions, concerns and requests related to meter readings, service shut-off/start-up, account and billing issues and related inquiries; serve as agency liaison to the District's customer service branch.
- Oversees staff in and performs meter reading duties; upload and download meter reading routes; performs meter reading duties utilizing the AMR/AMI systems as well as manual reading as assigned; enters readings into computerized handheld devices.
- Provides oversight to staff performing re-reads for verification of usage; performs delinquent turn-off and on service orders; performs move in and move out readings; leaving illegal use fines and pulling meters; performs high usage rechecks and meets with customers.
- Oversees staff in and assists with landscape irrigation surveys for commercial accounts and for existing agricultural accounts.
- Performs any related duties as required.

**QUALIFICATIONS**

**Knowledge of:**

- Operational characteristics of water systems.
- Principles of providing functional direction and training.
- Operations, methods, materials, practices, equipment, and tools required for construction, maintenance, installation, service and repair of water and water distributions systems in assigned specialization area,
- Basic mathematical principles.
- Occupational hazards and standard safety practices for general and specialization functions.
- Proper procedures used in the maintenance, repair and operation of safety gear, hand and power tools.
- Practices and procedures of traffic control.
- Applicable federal, state, and local laws, codes, and ordinances relevant to the area(s) of responsibility.
- Techniques for providing a high level of customer service by effectively dealing with the public,

vendors, contractors and District staff.

- The structure and content of the English language to effectively perform the work.
- Modern equipment and communication tools used for business functions and program, project and task coordination and recordkeeping, including computers and software programs relevant to work performed.

**Ability to:**

- Lead, organize, train, and review the work of assigned staff.
- Independently perform the most difficult range duties involved in the construction, installation, maintenance, repair, inspection, exercising and servicing of the water distribution systems and other appurtenances common to a waterworks system.
- Read, interpret, and work from blueprints, plans, schematics, and diagrams.
- Read, understand, and interpret technical maintenance.
- Operate a variety of maintenance equipment and tools including light power-driven equipment and hand tools required to perform specialized assignment functions in a safe and effective manner.
- Operate a variety of standard vehicles, trucks, and heavy equipment required to perform the duties in assigned area of specialization in a safe and effective manner.
- Perform heavy manual labor.
- Interpret, explain, and enforce department policies and procedures.
- Locate, identify, and mark various District facilities.
- Understand the different types of meters (e.g. turbine, compound, positive displacement, magnetic) and their intended purposes.
- Maintain accurate records.
- Understand and carry out oral and written instructions.
- Organize work, set priorities, meet critical deadlines and follow-up on assignments.
- Use tact, initiative, prudence and independent judgment within general policy and procedural guidelines.
- Effectively use computer systems, software applications relevant to work performed and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally 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:*

**Education:**

Equivalent to completion of the twelfth (12<sup>th</sup>) grade supplemented by additional coursework or training in water supply principles, water distribution systems, and/or wastewater systems.

**Experience:**

- Three (3) years of work experience in general operations, maintenance, installation, and repair of water utility systems, two (2) years which must have included experience in one of the identified areas of specialization.

### **Licenses and Certifications:**

- Possession of the appropriate California Class C or Class A driver's license with tank and air brake endorsements, depending upon assignment, to be maintained throughout employment.
- Possession of a valid Water Distribution Operator Grade III (D3) Certificate issued by the California State Water Resources Control Board.
- Possession of a valid Water Treatment Operator Grade I (T1) Certificate issued by the California State Water Resources Control Board.

### **PHYSICAL DEMANDS AND WORKING ENVIRONMENT**

*The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.*

#### **ENVIRONMENT**

Outdoor field environment; travel from site to site; exposure to noise, dust, grease, smoke, fumes, noxious odors, gases, vibrations, and all types of weather and temperature conditions; exposure to hazardous traffic conditions; work in or around water; work and/or walk on various types of surfaces including slippery or uneven surfaces and rough terrain; incumbents may be required to work extended hours including evenings and weekends.

#### **PHYSICAL**

- Level Three
- NIDA
- Pulmonary

Incumbents require sufficient mobility to work in a field environment; walk, stand, and sit for prolonged periods of time; frequently stoop, bend, kneel, crouch, crawl, climb, reach, and twist; push, pull, lift, and/or carry moderate to heavy amounts of weights; operate assigned equipment and vehicles; ability to verbally communicate to exchange information.

#### **VISION**

See in the normal visual range with or without correction; vision sufficient to read printed documents and to operate assigned equipment.

#### **HEARING**

Hear in the normal audio range with or without correction.

### **ADDITIONAL REQUIREMENTS**

Must be able to respond within a forty-five (45) minute time period to the District's Corporate Yard while on standby duty; must be able to communicate by telephone for the duration of the on-call shift.