



Assistant Utility System Operator

Summary

Perform duties in the installation, maintenance, and repair of underground water and water distribution systems and related facilities; assists with operating utility treatment and distribution facilities and assumes duties in absence of Utility System Operator; operate tools and equipment in the performance of assigned duties.

Class Characteristics

General supervision is provided by a higher level supervisor or manager; responsibilities may include the indirect supervision of support staff.

This is the experienced level class in the maintenance and repair of water distribution facilities and equipment. Incumbents assists with operating well treatment and water distribution facilities and assumes duties when on-shift operations staff is not available. This class is distinguished from the Utility Service Worker classes by its assignment to the operation and maintenance of production facilities and equipment. This class is distinguished from the Utility System Operator in that the latter is primarily responsible for the operation and maintenance of production facilities and equipment on a regularly scheduled basis.

Essential Duties, Skills, and Demands of the Position

The duties, skills, and demands described here 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 a disability to perform the essential duties, skills, and demands.

Duties:

Perform duties in the installation, maintenance, and repair of underground water distribution systems; assumes duties for the utility treatment and distribution facilities in absence of Utility System Operator.

Install, maintain, repair, and replace underground water distribution systems, including mains, services, valves, meter, hydrants, pressure regulators, and related equipment.

Measure, cut, join and tap steel, cast iron, asbestos cement, copper, and plastic water pipe; weld and fabricate brackets, doors, hinges, and strap restraints; perform various painting duties, including paint preparation, sanding, masking, and taping.

Replace or repair meters as part of a planned maintenance program; repair large commercial meters; install meter boxes, vaults, and residential, industrial, commercial, and hydrant meters.

Assist in installing or repairing water production and transmission facilities and equipment; locate and repair leaks and line breaks; turn water off and on as required for repair work; notify customers as necessary; disinfect and flush system after installation or repair; operate power routing and vacuum machines to clear line blockages.

Inspect and operate wells and reservoirs; perform operational activities, including pulling, resetting, rehabilitating, disinfecting, and testing domestic water wells; perform standby emergency response duties for after hour's distribution system operational emergencies; drain, clean, disinfect, and maintain distribution reservoirs; determine and control proper chemical dosage rates for wellhead disinfections and distribution residual maintenance.

Operate and perform preventive maintenance on pumps, motors, chemical feeders, electrical systems, and similar equipment.

Operate pumps and related flow and pressure control and storage facilities manually or by using a system control and data acquisition system (SCADA), to maintain and/or adjust system flow and pressure requirements; control flows to meet consumer demands, including fire flow demands and minimum pressure requirements.

Use hand and power tools and equipment, including compressors, concrete saws, and pavement breakers.

Maintain operational records as required.

Maintain proper safety precautions and work site in a safe and orderly condition, including handling hazardous chemicals such as chlorine; install shoring and set up traffic control procedures.

Replace and repair concrete and asphalt after repairs are completed.

Perform weed and tree abatement and site cleanup and maintenance as needed.

Operate a variety of light and heavy equipment, including backhoes, tractors, rollers loaders, and trucks under 26,000 gross vehicle weight.

Perform related duties as assigned.

Skills/Abilities:

Perform skilled work in the installation, maintenance, and repair of mains, services, valves, meters, hydrants, and other water system equipment.

Operation and maintenance of water production, treatment facilities, and equipment.

Operate a variety of hand and power tools; drive trucks and operate a variety of heavy construction equipment.

Read and interpret drawings, blueprints, and specifications; understand and follow oral and written directions.

Make mathematic calculations.

Maintain records of work performed.

Operate office equipment including computers and supporting word processing, spreadsheet, and database applications.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of the work.

Physical Demands and Work Environment:

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, or feel; reach with hands and arms; and talk or hear. The employee frequently is required to stand, walk, and sit. The employee is occasionally required to climb or balance; stoop, kneel, crouch, crawl; and smell. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus. The employee must be able to perform heavy physical labor, including having enough strength to lift and carry

tools and materials weighing up to 90 pounds. While performing the duties of this job the employee is occasionally exposed to outside weather conditions, wet and/or humid conditions, moving mechanical parts, fumes or airborne particles, toxic or caustic chemicals, and vibration. The noise level in the work environment may be moderate to loud depending on working conditions.

Qualifications

Knowledge of:

Operations and services of water distribution and wastewater collection and stormwater systems.

Concepts of water distribution mathematics, including water measurements, formulas (area and volume), units and conversion factors, and water pressure.

Concepts for distribution system maintenance, including purpose, configuration, and operation, pipe materials, water storage facilities, meters, hydrants, leak detection and repair, corrosion, flushing and cleaning, water meter testing, maintenance and repair, and maintenance of pumps and electric motors.

Principles and practices of distribution system operation such as water quality, sources of supply, sanitation practice, disinfection safety, and operational principles of pumps and motors.

Proper use of equipment, tools, and materials and methods used in underground water distribution or installation, maintenance, and repair.

Principles, practices, materials, and equipment required to produce and treat a potable water supply.

Safety practices pertaining to field and underground maintenance work.

Sanitation practices as applied to water distribution systems.

Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.

Education and Experience

Any combination equivalent to the education and experience likely to provide the required knowledge and abilities would be qualifying. A typical way to gain such knowledge and abilities would be:

Education:

Equivalent to graduation from high school.

Experience:

Two years of experience in maintaining and repairing underground water systems or related systems and facilities at a level equivalent to Utility Service Worker I with the City of Petaluma. Experience in water treatment facility operations is desirable.

Certifications/Licenses:

Possession of a California Department of Health Services Grade I Water Treatment certificate.

Possession of, or ability to obtain, a California Department of Health Services Grade II Water Distribution certificate prior to advancing to Step 3 of pay range.

Possession of a valid California Class C driver's license.

Possession of a California Water Environment Association Grade I certificate is desirable.

Additional Requirements:

Must be available to work outside normal working hours when necessary.

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Department: Public Works and Utilities

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