

JOB DESCRIPTION

Coachella Valley Water District

Date: February 2019

TITLE: Water Quality Operator I

SECTION: Production

DEPARTMENT: Operations

SRN: A-24

REPORTING RELATIONSHIP:

Supervised by: Chief Domestic Water Serviceworker
Water Quality Crew Chief
Senior Domestic Water Serviceworker

Supervises the following positions: Not applicable

DEFINITION: Under general direction, learns to operate and maintain the District's deep well, booster pumps and water disinfection facilities. In addition, this position will be required to work on the District's water distribution system. This position is also expected to perform related work as required with minimum direct supervision.

ESSENTIAL FUNCTIONS:

1. Effectively operate, maintain, and repair District chlorination facilities located at wells, booster stations and other locations in the distribution system. Analyze the causes of malfunctions and repair or replace equipment as needed to put the chlorine system back on line with the proper residuals in the distribution system.
2. Monitors the District's domestic water systems. Starts and stops well and booster pumps; checks packing glands for proper temperature and excessive leakage.
3. Check, titrate, adjust and control proper chemical dosage rates for wellhead disinfection and distribution chlorine residual maintenance.
4. Stand-by response duties for after hour emergencies.
5. Performs and assists with emergency response procedures for one-ton containers. Participates on chlorine emergency leak response team as "first man" for both Domestic and Sanitation departments. Uses Repair Kit B's to contain cylinder leaks.
6. Check reservoirs for levels and damages. Insure operating switches and safety valves are properly set and secure.
7. Keeps accurate records and reports related to the distribution and chlorination procedures.
8. Investigate water quality problems in the distribution system.
9. Operates and maintains District's distribution monitoring sample stations.

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ESSENTIAL FUNCTIONS (CONT.):

10. Inspects District's wells, boosters and reservoirs for proper operation. Analyze and correct distribution system malfunctions.
11. Performs a variety of repairs and maintenance to piping of manifold and disinfection systems. Operates an assortment of tools to accomplish tasks.
12. Strictly adheres to District safety practices, procedures and proper use of personal protective equipment including the self-contained breathing apparatus and half face respirators.
13. .Disinfect and test domestic water wells, reservoirs, pressure tanks and manifold.

MINIMUM QUALIFICATIONS:

License or Certificates: Valid California Operators license issued by the State Department of Motor Vehicles. Department of Motor Vehicles driving record may influence employment or classification.

And

Possession of a Grade D1 Water Distribution Operators Certificate issued by the State Water Resources Control Board. **Or** Possession of a Grade T1 Water Treatment Operators Certificate issued by the State Water Resources Control Board.

And

Must attend and pass the 24-hour Hazwoper training within 12 months of appointment to this position.

Experience:

One-year experience working on a public water distribution system.

Knowledge:

1. Source Water – watershed protection, wells, groundwater, surface water, reservoirs, raw water storage, and clear well storage.
2. Water Disinfection Processes – chlorination, titration, dosage, de-chlorination, and filtration.
3. Operation and Maintenance – chemical feeders, pumps and motors, blowers and compressors, water meters, pressure gauges, electrical generators, safety, and SCADA.
4. Laboratory Procedures – sampling, general lab practices, disinfectant, alkalinity, pH, Turbidity, specific conductance, hardness, fluoride, color, taste and odor, dissolved oxygen, algae count, and bacteriological analyses.
5. Disinfection – water main and well disinfection, disinfection by-products, chlorination, chlorine curve chemistry, storage reservoir disinfection, and types of disinfectants.

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MINIMUM QUALIFICATIONS (CONT.):

6. Distribution System Design and Hydraulics – system layout, storage facilities, cross-connection and backflow devices, service connections, system mapping, assess system demand, flow rates and velocity, head loss, cavitation, water hammer, water pressure and volume, and static and dynamic pressure.
7. Drinking Water Regulations – disinfection by-product rule, lead and copper rule, MCLs, monitoring and sampling requirements, safe drinking water act, total coliform rule, and operator certification regulations.
8. Equipment Operation, Maintenance and Inspection – valves, water meters, hydrants, chlorine feeders, in-line filters, pressure regulators, SCADA, pump types, troubleshooting and repair of pumps and motors, water horsepower, inspection of water mains, piping, storage tanks, equipment installation and repair, and wells.
9. Water Mains and Piping – cleaning and maintenance, excavation, installation, repair, joints and fittings, leak detection, leak repair, pipe selection, and service line installation.

Abilities:

1. Communicate effectively both verbally and in writing.
2. Safely and effectively, use hand and power tools.
3. Perform heavy manual labor as needed.
4. Understand and carry out verbal and written instructions.
5. Work cooperatively with others.
6. Make sound decisions when working independently.
7. Work safely with chlorine using a self-contained breathing apparatus or half face respirator.
8. Follow District safety policies and procedures.

PHYSICAL REQUIREMENTS:

1. Will work weekends, evenings, holidays, overtime and standby when required.
2. Will work in extreme weather conditions including heat and rain. Also will work in areas containing chemicals, dust, fumes, and vapors.
3. Performs pick and shovel work when required.
4. Drives District vehicles to job sites and uses a two-way radio to communicate. Driving: Heavy.
5. May be assigned to various district locations.
6. Brings equipment and materials to job sites including over rough terrain.

See Human Resources for physical assessment form.