

**RANCHO CALIFORNIA WATER DISTRICT  
POSITION DESCRIPTION**

**DATE:** July 1, 2019

**POSITION TITLE:** **WATER TREATMENT OPERATOR**

**I/II/SENIOR GRADE LEVEL:** E10 / E14 / E16

**SUPERVISOR TITLE:** Water Quality Supervisor

**FLSA STATUS:** [ ] Exempt [X] Non-Exempt

**BARGAINING UNIT:** [X] RCWDEA [ ] RCWD MPCEA

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**DEFINITION**

Under immediate progressing to general supervision, to perform a variety of water quality duties including the sampling, testing and treatment of the District's water supply

**CLASS CHARACTERISTICS**

**Water Treatment Operator I**

This is the entry-level position in the Water Treatment Operator class series. Positions assigned to this level perform limited or routine sampling, treatment, and maintenance duties under close supervision. Because employees in classifications at this level may be in a training capacity, such position does not require significant previous work experience in the applicable field. This job classification is represented by the Rancho California Water District Employees Association (RCWDEA) bargaining unit

**Water Treatment Operator II**

This is the journey level position in the Water Treatment Operator class series. Positions assigned to this level perform a full range of sampling, treatment, and maintenance duties under general supervision. Because employees in classifications at this level are expected to be fully trained and competent, such position typically requires significant previous work experience in the appropriate field. This job classification is represented by the Rancho California Water District Employees Association (RCWDEA) bargaining unit

**Senior Water Treatment Operator**

This is an advanced journey level position in the Water Treatment Operator class series. Positions assigned to this level independently perform highly complex tasks to Implement, maintain, and comply with water treatment and water quality regulations.

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Because employees in classifications at this level are expected to be fully trained and competent, such positions typically require significant previous work experience in the appropriate field. This job classification is represented by the Rancho California Water District Employees Association (RCWDEA) bargaining unit

**EXAMPLE OF DUTIES** (Duties may include but are not limited to the following):

- ✎ Perform weekly distribution system bacteriological sampling, measuring chlorine residual levels, and site-specific sampling for chemical constituents. Delivery of samples to the laboratory
- ✎ Conduct distribution system water quality monitoring for nitrification, fluoride, nitrate and arsenic analysis
- ✎ Conduct routine source water monitoring in accordance with state and federal requirements
- ✎ Deliver and install 150 lb. chlorine cylinders to field sites and the setting and adjustment chlorinator flow rates for distribution system chlorination
- ✎ Maintain chlorination equipment including, but not limited to, control gas feeders, automatic switchover modules, pressure ejectors, solenoids, onsite sodium hypochlorite generation systems, dosing pumps and injectors
- ✎ Operate and maintain treatment facilities including chlorination, chlorination, arsenic, fluoride, manganese and nitrate treatment
- ✎ Perform Emergency Hazardous Materials Response to District facilities; implement the District's emergency response plan; respond to releases or potential releases for the purpose of stopping the release of a hazardous substance; function within an assigned role in the Incident Command System; use proper specialized chemical personal protective equipment, including a level "A" suit with SCBA
- ✎ Conduct investigations into the causes and sources of water quality complaints or problems. Communicate the status of these problems to the water quality supervisor
- ✎ Flush fire hydrants when required, to help alleviate distribution water quality problems
- ✎ Keep complete, neat, and accurate records of all phases of water quality operation and maintenance
- ✎ Perform routine maintenance and calibration of turbid meters, chlorine, pH, ammonia, and mono chloramine residual analyzers
- ✎ All levels available to be on-call
- ✎ Perform related duties as assigned

**QUALIFICATIONS**

**Water Treatment Operator I**

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**Knowledge of:**

- ✎ Basic waterworks mathematics
- ✎ Proper water sampling techniques
- ✎ Basic laboratory and/or test kit procedures
- ✎ Basic customer service techniques
- ✎ Chlorine Emergency Responder techniques
- ✎ Proper work safety standards

**Ability to:**

- ✎ Operate and maintain chlorination equipment
- ✎ Perform mathematics related to the water quality field.
- ✎ Operate a variety of hand and power tools
- ✎ Read, understand and apply complex materials and maintain records
- ✎ Work effectively with others
- ✎ Follow written and oral instructions
- ✎ Wear self-contained breathing apparatus (SCBA) and respond to chlorine alarms in full hazmat gear when necessary

**SELECTION GUIDELINES**

The appropriate knowledge, skills, and abilities can be achieved through a variety of combinations of experience and training. A typical example is

**Experience:** One (1) year of experience with a public water utility with an emphasis in water treatment and/or distribution

**Training:** Any combination of formal or informal training and education that provides the ability to read and write at a level required by the assigned duties

**Licenses and Certificates:**

- ✎ Grade D1 Water Distribution Certificate – SWRCB required
- ✎ Grade T1 Water Treatment Certificate – SWRCB required
- ✎ Hazardous Materials Technician Certificate-OSHA 1910.120, obtained within 6 months from hire date
- ✎ California class C driver's license with Hazardous Material Endorsement, obtained within 6 months from hire date

In addition to the qualifications for a ***Water Treatment Operator I:***

**Water Treatment Operator II**

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**Knowledge of:**

- ✎ Title 22 regulations, surface water regulations, and State Water Resources Control Board (SWRCB) operating conditions for the District
- ✎ Title 17 Cross Connection regulations
- ✎ Hazard and risk assessment techniques
- ✎ Specific chemical and toxicological terminology and behavior
- ✎ State Water Resources Control Board (SWRCB) and American Water Works Association (AWWA) disinfection procedures for wells, pipelines, and water tanks
- ✎ Chlorine analyzer and turbid meter operation
- ✎ Proper methods of storing and handling chlorine and/or other hazardous gases and chemicals
- ✎ Proper understanding of OSG functions, dosing, and maintenance and repair
- ✎ Manganese treatment, removal and disposal
- ✎ SCADA operation
- ✎ All chlorination/chlorination equipment operation including flow-paced systems
- ✎ Distribution system operation and wells and pump operation including all valve operation

**Ability to:**

- ✎ Operate, calibrate, standardize and service the following instruments; Turbidity, pH, Dissolved Oxygen, Colorimeter, and Conductivity Bridge
- ✎ Operate Windows system and laptop computers using such computer software as Excel, Word, and other specialized software
- ✎ Access SCADA system and utilize data
- ✎ Calculate chlorine concentration and breakpoint as result of chlorine/chloramines mixing
- ✎ Diagnose problems and provide effective solutions that involve chlorine equipment troubleshooting as well as determining how to increase chlorine residuals in isolated areas of the District. May require recommending flow changes, chlorinating reservoirs, operating certain wells or pump stations, etc.
- ✎ Operate chlorine leak detection equipment
- ✎ Inspect work on capital projects; advise on proper set-up and installation of water quality equipment
- ✎ Calibrate, operate, maintain, and troubleshoot chlorine analyzers and turbidity meter
- ✎ Operate, maintain, repair, and determine the proper dosing rate related to the OSG systems
- ✎ Operate, maintain, repair, and determine the proper dosing rate related to the chlorination systems

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- ✎ Maintain District weather stations, i.e., program data logger and troubleshoot equipment
  - ✎ Maintain detailed maintenance records
  - ✎ Coordinates with other sections within the District to ensure water quality standards
  - ✎ Knowledge of both hand and power tool selection and safe usage

### **SELECTION GUIDELINES**

The appropriate knowledge skills and abilities can be achieved through a variety of combinations of experience and training. A typical example is:

**Experience:** Two (2) or more years of experience in water treatment or a similar position with a public utility and or two (2) years of experience as a Water Treatment Operator I

**Training:** Any combination of formal or informal training and education that provides the ability to read and write at a level required by the assigned duties

#### **Licenses and Certificates:**

- ✎ Hazardous Materials Technician Certificate-OSHA 1910.120, obtained within 6 months from hire date
- ✎ Grade D2 Water Distribution Certificate – SWRCB, required
- ✎ Grade T2 Water Treatment Certificate – SWRCB, required
- ✎ California Class C driver's license with hazardous materials endorsement, required or obtain within 6 months of hire

In addition to the qualifications for a ***Water Treatment Operator II:***

#### **Senior Water Treatment Operator**

**EXAMPLE OF DUTIES** (may include but are not limited to the following):

- ✎ Analyzes reports and develops programs to maintain full compliance with applicable water quality laws and regulations
- ✎ Proficient in all regulatory aspects associated with water quality to include EPA, SWRCB, OSHA, State RWQCB and DOT regulations
- ✎ Maintains District databases that may include but not limited to: source water quality database, water quality compliant database
- ✎ Researches technical documents and conducts water quality studies





- ✎ Assist in the preparation of reports for compliance purposes that may include SWRCB Monthly Report, Consumer Confidence Report, and Public Health Goal Report, Fluoride and Arsenic compliance report, SWRCB Annual System Report, Regional Water Quality Control Board Quarterly Report, DTSC Bi-annual Report, and Hazardous Materials Business Plan
- ✎ Interprets and implements DOT and environmental compliance regulations
- ✎ Coordinates with other sections with the District to ensure water quality standards

**Knowledge and Understanding of:**

- ✎ Title 22 regulations, surface water regulations
- ✎ Title 17 Cross Connection regulations
- ✎ EPA regulations for domestic and recycled water
- ✎ OSHA confined space, fall restraint and respirator regulations
- ✎ State RWQCB NPDES requirements
- ✎ DOT requirements for the transportation of hazardous materials
- ✎ SWRCB and AWWA disinfection procedures for wells, pipelines, and water tanks
- ✎ Chlorine analyzer and turbid meter operation
- ✎ Proper methods of storing and handling chlorine and/or other hazardous gases and chemicals
- ✎ SCADA operation
- ✎ All chlorination/chlorination equipment operation including flow-paced systems
- ✎ Manganese treatment, removal and disposal
- ✎ Distribution system operation and wells and pump operation including all valve operation
- ✎ OSHA Confined Space, Fall, SCBA and Hazwoper requirements

**Ability to:**

- ✎ Operate, calibrate, standardize and service the following instruments; Turbidity, pH, Dissolved Oxygen, Colorimeter, and Conductivity Bridge
- ✎ Operate Windows system and laptop computers using such computer software as Excel, Word, and other specialized software
- ✎ Access SCADA system and utilize data
- ✎ Calculate chlorine concentration and breakpoint as result of chlorine/chloramines mixing
- ✎ Diagnose problems and provide effective solutions that involve chlorine equipment troubleshooting as well as determining how to increase chlorine residuals in isolated areas of the District. May require recommending flow changes, chlorinating reservoirs, operating certain wells or pump stations, etc.
- ✎ Operate chlorine leak detection equipment

-  Inspect work on capital projects; advise on proper set-up and installation of water quality equipment
-  Calibrate, operate, maintain, and troubleshoot chlorine, ammonia and mono chloramine, fluoride analyzers and turbidity meter
-  Maintain District weather stations, i.e., program data logger and troubleshoot equipment
-  Maintain detailed maintenance records

### **SELECTION GUIDELINES**

The appropriate knowledge, skills, and abilities can be achieved through a variety of combinations of experience and training. A typical example is:

**Experience** Three (3) or more years of experience in water treatment or a similar position with a public utility and or three (3) years of experience as a Water Treatment Operator II





**Training:** Any combination of formal or informal training and education that provides the ability to read and write at a level required by the assigned duties. AA degree in water utility science or Water Technology Certificate is desirable

### **Licenses and Certificates:**

-  Hazardous Materials Technician Certificate-OSHA 1910.120, obtained within 6 months from hire date
-  Grade D3 Water Distribution Certificate – SWRCB, required
-  Grade T3 Water Treatment Certificate – SWRCB, required
-  California Class C Driver's License with hazardous materials endorsement, required or obtain within 6 months of hire

### **PHYSICAL REQUIREMENTS/WORKING CONDITIONS** (I / II / Senior levels)

The essential functions of this position will require the employee to perform the following physical requirements:

-  Operates a District vehicle to travel between job sites and remote facilities
-  Must be able to carry, push, pull, reach and lift equipment and parts up to 50 lbs and heavier weights with the use of proper assistance
-  Stoop, kneel, crouch, crawl and climb during regular duties
-  Communicates verbally with District management, co-workers, and the public in face-to-face, one-on-one, and group meetings

- ✎ Use office equipment such as computers, copier, and fax machines
- ✎ Regularly uses a telephone or radio for communication
- ✎ Stand and walk for extended periods
- ✎ Ability to speak and hear both in person, by telephone, and radio
- ✎ Vision within normal ranges including color vision with or without correction.
- ✎ Medical clearance to wear respiratory protective equipment
- ✎ Regular attendance

The essential functions of this position will require the employee to be exposed to the following working conditions:

- ✎ 50%-100% of work time spent outside a building exposed to the sun
- ✎ Inclement weather
- ✎ Hot and cold temperatures
- ✎ Hazardous materials
- ✎ Electrical hazards
- ✎ Heights
- ✎ Confined spaces
- ✎ Potentially dangerous tools and equipment
- ✎ Traffic hazards
- ✎ Trenching and excavations
- ✎ Wildlife

**OTHER REQUIREMENTS**

- ✎ Willingness to work nights, weekends and overtime, as necessary

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|------------------------------|-------|
| _____                        | _____ |
| Employee Signature           | Date  |
| _____                        | _____ |
| Supervisor/Manager Signature | Date  |