

PADRE DAM MUNICIPAL WATER DISTRICT CLASS SPECIFICATION

CLASS TITLE: Systems Operator/Technician

DEPARTMENT: Operations & Water Quality	ACCOUNTABLE TO: Distribution Manager/Distribution Maintenance Manager	FLSA STATUS: Non-Exempt
SALARY RANGE:	18, 19, 21, 23	

CLASS SUMMARY: Incumbents may be responsible for monitoring, maintaining and operating the potable water distribution and storage systems in order to ensure customers receive adequate water volume, pressure and purity. In addition, incumbents may be responsible for performing skilled repairs and preventive maintenance on pump equipment and systems such as pumps, motors, surge arresters, chlorinators, mechanical piping valves and air compressors. Duties include: monitoring the operation of the water distribution system and the SCADA (Supervisory Control and Data Acquisition) system; monitoring water quality parameters; monitoring and adjusting flows from reservoirs, intakes and turnouts; making adjustments to and switching valves; monitoring and regulating valves, pumping facilities, chlorination and other facilities; operating automated and telemetry controls; validating unusual readings by contacting field staff; monitoring sewage lift stations, sewage collection systems; performing preventive maintenance and minor repairs on equipment; preparing and maintaining required documents and paperwork; effectively complying with the District's "Time of Use Policy" as it pertains to energy costs; troubleshooting and repairing pump equipment and related systems; performing operational tests on motors, turbine and centrifugal pumps and various valves; evaluating the condition of related and auxiliary equipment; performing minor electrical work; inspecting work done by contractors; and, purchasing equipment and supplies; providing input for yearly budget considerations; responding to after-hours system emergencies; and such other duties as may be assigned.

DISTINGUISHING CHARACTERISTICS: This is a broadband position in a three level distribution series. The position has an emphasis on either the systems operation, pump maintenance or valve maintenance discipline. The Systems Operator/Technician is distinguished from the Distribution/Distribution Maintenance Manager in that the Operator does not have supervisory responsibilities.

DUTY NO.	ESSENTIAL DUTIES: (These duties are a representative sample; position assignments may vary.)
1.	Operates the water distribution system and recycled water distribution system by anticipating flow demands, calculating pumping and intake flow rates and daily operational changes and investigating alarms or abnormal conditions. Keeps records and information by logging required data, performing software maintenance and communicating necessary information to the next shift.
2.	Performs skilled repairs and preventive maintenance on pump equipment and related systems and appurtenances. Repairs and maintains pump equipment, motors, pressure reducing stations, monitors long term performance of pumps and motors. Performs minor electrical work. Performs valve maintenance and operation/fire hydrant maintenance.
3.	Monitors water quality parameters of both potable and recycled water systems to include cycling of reservoirs, detention time, chlorine feed rates, chloramination stations, residuals, system flushing, and water sampling as required by the California Department of Health.
4.	Responds to water main breaks in emergency situations; assesses, plans and conducts emergency shut downs of transmission and distribution pipelines.
5.	Performs maintenance on various valves in the distribution system by exercising the valves. Assesses valves that have been exercised to determine make, type, size and condition of valves. Makes recommendations for repair or replacement of valves based on the conditions. Sets up

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	extensive traffic control for exercising valves.
6.	Performs operational tests on motors, valves and pump stations to determine the condition of equipment and, based on test data, makes recommendations.
7.	Inspects work done by maintenance contractors ensuring it is complete according to specifications. Advises contractors on the proper set-up and installation of equipment being installed.
8.	Monitors and operates sewage lift stations, their control systems and related software, to manipulate wet well levels and pump flows to reestablish normal operating parameters after a failure. Uses trending charts to help determine causes and find solutions to failures.
9.	Calibrates, operates, and maintains chlorite generating and injection equipment, ammonia injection pumps used for dosing water mains. Uses mathematical formulas to compute proper dosages for injections of chlorite and ammonia.
10.	Plans, coordinates, constructs/installs small and large pumps, valves, and appurtenances.
11.	Performs preventive maintenance and minor repairs on water distribution and wastewater collection equipment.
12.	Reviews drawings/plans received from engineering and recommends changes or additions to projects. Checks drawings to ensure that all aspects are covered.
13.	Purchases equipment and related materials and supplies. Maintains detailed maintenance records, using computer software such as Excel, Word, WordPerfect, etc.
14.	Responds to after-hours system emergencies.
15.	Performs other duties of a similar nature or level.

<p>Knowledge (position requirements at entry) (depending on area of assignment):</p> <ul style="list-style-type: none"> • Semi-complex computer controlled water distribution systems; • Hydraulics; • Water quality issues; • Applicable rules and regulations; • Safety regulations; • Valves and metering apparatus; • Pumps and related systems; • Automatic control valves and solenoids; • Chlorine and chlorine safety.
<p>Skills (position requirements at entry) (depending on area of assignment):</p> <ul style="list-style-type: none"> • Monitoring water distribution and collection operations; • Adjusting valves and flows; • Monitoring equipment operation; • Using precision measuring and hand and power tools; • Reading and working from maps, blueprints, schematics, technical manuals, and rough sketches;

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- Maintaining and troubleshooting problems with pumps, motors and related systems
- Using computers and related software applications;
- Communication, interpersonal skills as applied to interaction with coworkers, supervisor, the general public, etc. sufficient to exchange or convey information and to receive work direction.

Training and Experience (position requirements at entry) (depending on area of assignment):

- High School Diploma or General Equivalency Diploma (G.E.D.); and,
- One year of related basic repair and maintenance experience; OR
- Two years experience in installing and repairing pumps, motors and related systems OR,
- An equivalent combination of education and experience sufficient to successfully perform the essential duties of the job such as those listed above.

Licensing Requirements (position requirements at entry) (depending on area of assignment):

- Valid California Driver's License;
- Water Distribution Operator Grade D-2 or D-3 certificate from the State of California, Dept. of Health Services
- Plant Maintenance Mechanical Technologist Grade II certificate from the California Water Environment Association;
- Water Treatment Operator Grade T-1 certificate from the State of California, Dept. of Health Services is desirable.

Physical Requirements:

Positions in this class typically require: climbing, stooping, kneeling, crouching, reaching, walking, fingering, talking, hearing, seeing and repetitive motions.

Incumbents may be subjected to moving mechanical parts, electrical currents, vibrations, fumes, odors, dusts, gases, poor ventilation, chemicals, infectious substances, oils, inadequate lighting, work space restrictions, intense noises and travel and must be able to wear a Self-Contained Breathing Apparatus (SCBA) and Level A suit..

Heavy Work: Exerting up to 100 pounds of force occasionally, and/or up to 50 pounds of force frequently, and/or up to 20 pounds of forces constantly to move objects.

Classification History:

Date: 4/98; 9/00; 1/02; 09/03; 1/05; 9/06