



CITY OF CALEXICO

CLASS TITLE: CHIEF WATER PLANT OPERATOR-TREATMENT

MONTHLY: \$6,364 - \$7,735

RANGE: S-39

BASIC FUNCTION:

Under the direction of the Public Works Manager, organize, direct and participate in a variety of technical work in the monitoring, testing, calibrating, repair and adjusting of water quality equipment within the City water system; monitor and adjust chemical dosages to assure adequate and safe drinking water; train and evaluate the performance of assigned staff.

REPRESENTATIVE DUTIES:

ESSENTIAL DUTIES:

Organize, direct and participate in a variety of technical work in the monitoring, testing, calibrating, repair and adjusting of water quality equipment within the City water system; assist in assuring City compliance with established standards, laws, rules, regulations and requirements applicable to water distribution and treatment systems.

Lead and participate in monitoring, utilizing and adjusting water treatment facilities and systems to assure compliance with water quality standards and appropriate levels of the water system; utilize a computer to monitor plant performance; collect, analyze, interpret and respond to computer-generated data; conduct jar tests; take daily and weekly water samples; deliver samples for lab testing.

Adjust and maintain related chlorination systems; compute and monitor chemical dosages to be added; replace cylinders; switch chlorinators and check analyzers; unload, store, transfer and mix chemicals; make chemical feed adjustments as directed; monitor raw water influent.

Train and evaluate the performance of assigned staff; interview employees and recommend hires, transfers, reassignment, termination and disciplinary actions; assign employee duties and review work for accuracy, completeness and compliance with established guidelines and procedures.

Maintain plant equipment in proper working condition; check and maintain complex electronic and mechanical equipment; troubleshoot malfunctions and alarms; repair and replace electrical and mechanical components as necessary; calibrate equipment and backwater filters; check and replace chlorine cylinders, switches and analyzers as needed.

Monitor the backwashing process of filters; remove and place filter beds in accordance with water flow

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changes; monitor, assess and make adjustments in response to water flow, turbidity, pressure, chemical usage, residuals, temperature and other plant operating conditions.

Operate and maintain related specialized equipment, including transfer pumps, distribution pumps, generators, air compressors, booster pumps, supply pumps, turbidimeters, testers, electrical motors, lab equipment, and various hand and power tools; drive a vehicle to conduct work.

Monitor inventory levels of water treatment parts, supplies and equipment; order, receive and maintain adequate inventory levels of water treatment parts, supplies and equipment.

Prepare and maintain related records, including lab analysis reports, CT calculations, daily readings, monthly surface water treatment regulations, chemical dosages and others as required; input data into computerized data system.

Observe operating equipment to identify possible problems, equipment failures and operating difficulties; perform preventive maintenance on systems.

Communicate with City personnel, outside agencies and the public to exchange information and resolve issues or concerns.

Handle hazardous materials in accordance with established guidelines and procedures.

Maintain plant and other assigned areas in a clean, safe, secure and sanitary condition; apply paint to plant facilities and equipment as needed.

Respond to emergency situations as assigned.

Assist with budget preparation and development as directed.

OTHER DUTIES:

Perform grounds maintenance duties as assigned; operate related mowers and gardening tools.

Conduct plant tours for schools and customers.

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Organization and direction of operations and activities involved in the monitoring, testing, calibrating, repair and adjusting of water quality equipment within the City water system.

Operation of water treatment, storage and pumping facilities.

Sampling and water testing techniques.

Laws and regulations applicable to City water systems.

State and federal standards, rules, regulations and requirements applicable to water distribution and treatment systems.

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Chemical analysis of water quality, including chlorine use and the use of a variety of test kits and equipment.

Surface water treatment regulations.

Principles of electricity, electronics, hydraulics, chemistry and math.

City of Calexico water transmission and distribution system.

Use of equipment, tools, chemicals and meters used to test water quality.

Operation, maintenance, and repair of various pumps and meters.

Principles and practices of supervision and training.

Technical aspects of field of specialty.

Operation and maintenance of valves, flow meters, hydraulic equipment and uses for these apparatus.

Record-keeping techniques.

Interpersonal skills using tact, patience and courtesy.

ABILITY TO:

Organize, direct and participate in a variety of technical work in the monitoring, testing, calibrating, repair and adjusting of water quality equipment within the City water system.

Perform skilled work in the monitoring, testing and adjusting of City water quality.

Monitor, utilize and adjust water treatment facilities and systems to assure compliance with water quality standards and appropriate levels of the water system.

Train and evaluate the performance of assigned personnel.

Monitor and adjust chemical dosages to assure adequate and safe drinking water.

Perform water analysis and related procedures.

Maintain current knowledge of technological advances in the field.

Analyze situations accurately and adopt an effective course of action.

Check and maintain complex electronic and mechanical equipment.

Plan and organize work.

Meet schedules and time lines.

Maintain records related to assigned activities.

Work independently with little direction.

Establish and maintain cooperative and effective working relationships with others.

Observe health and safety regulations.

Work courteously and tactfully with customers and employees.

EDUCATION AND EXPERIENCE:

Requirements: Graduation from high school supplemented by 24 units of college-level course work in math and chemistry and three years of increasingly responsible maintenance of water treatment plant and distribution systems.

LICENSES AND OTHER REQUIREMENTS:

State of California Water Treatment Plant Operator grade V certification.

Valid Class IV Water Distribution Operator certification.

Valid California driver's license.

WORKING CONDITIONS:

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ENVIRONMENT:

Water Treatment Plant environment.
Driving a vehicle to conduct work.
Regular exposure to fumes and odors.
Adverse and extreme weather conditions.

PHYSICAL DEMANDS:

Climbing ladders and steps to storage tanks.
Standing and sitting for extended periods of time.
Lifting, carrying, pushing or pulling heavy objects as assigned by the position.
Bending at the waist, kneeling or crouching to take water samples.
Dexterity of hands and fingers to operate hand and power tools.
Reaching overhead, above the shoulders and horizontally.
Hearing and speaking to exchange information.
Seeing to inspect systems and read a variety of materials.
Walking.

HAZARDS:

Working around and with machinery having moving parts.
Working in a cramped or restrictive work chamber.
Working at heights.
Chemical fumes.

