

LEAD WATER TREATMENT PLANT OPERATOR

DEFINITION

Under general supervision, operates one or more water treatment plants on an assigned shift; leads and participates in the work of staff responsible for the operation and maintenance of the District's water treatment, water quality, and related technical treatment processes; performs related maintenance-oriented tasks, keeps records and prepares reports; and performs a variety of tasks relative to assigned area of responsibility.

DISTINGUISHING CHARACTERISTICS

The Lead Water Treatment Plant Operator is the advanced journey working level classification in the Water Treatment Plant Operator series. At this level, incumbents perform the more complex and specialized work tasks, while exhibiting initiative, advanced technical skills, broader discretion and independent judgment within established guidelines. This level leads and participates in the work of staff responsible for the operation and maintenance of the District's water treatment, water quality, and related technical treatment processes. At this level, incumbents function as a T3 Shift Operator as defined in applicable state drinking water regulations.

SUPERVISION RECEIVED AND EXERCISED

Direct supervision is received from the Water Treatment Plant Supervisor and/or Water Treatment Manager.

Lead Water Treatment Plant Operator may occasionally provide technical and functional work direction to Water Treatment Operator I/II.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS

Essential and other important responsibilities and duties may include, but are not limited to, the following:

Essential Functions:

1. Actively manages and/or develops projects and/or programs - examples include project management; inventory management; development and administration of safety programs, maintenance programs, data collection and management programs, staff development/training programs; and other projects or programs relative to the classification.
2. Demonstrates advanced professional communication skills, both written and verbal, to internal and external peers, professionals, and customers – examples include participation in presentations to peers, management, board of directors, and industry professionals; conduct facility tours; participate in career development presentations for local schools; demonstrate professional communication to general public; professional email communications to peers, supervisors, vendors, contractors, consultants; development of standard operating procedure documents; and other professional written or verbal communications relative to the classification.
3. Demonstrates advanced procedural, mechanical, technical, and administrative skills relative to the job classification – examples include advanced trade skills; advanced troubleshooting and analytical skills; advanced computer/software utilization skills; data quality assurance, control, and analysis skills; advanced understanding of regulatory reporting and compliance; and general administrative skills relative to the classification.

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Essential Functions (continued)

4. Demonstrates proficiency in the District procurement policies, procedures, and enterprise systems (e.g. Munis, GeoViewer, Executime, Computerized Maintenance Management Systems).
5. Contributes to and supports a productive culture and work environment. Provides a positive example for peers and coworkers, consistent with District policies and procedures.
6. Makes rounds of treatment facilities several times during an assigned shift to check, monitor and inspect plant operations; reviews and documents console readings, feed rates, water storage levels and other operational information displayed on gauges, dials, graphs and other instrumentation; performs and records related mathematical calculations.
7. Takes grab samples and performs routine water quality laboratory tests; prepares water samples for shipment to outside laboratories for more extensive tests and keeps related records.
8. Operates and adjusts plant pumps, motors, feeders and other equipment to maintain and enhance the efficiency of plant operations; makes flow and chemical feed changes as necessary; manually backwashes filters.
9. Mixes and adds chemical treatments; ensures adequate chemical application according to regulations and guidelines; loads and unloads materials and supplies; assists in the storage and transfer of chlorine and other hazardous chemicals.
10. Calibrates and performs preventive maintenance on plant monitoring equipment and chemical feed systems; flushes and cleans turbidimeters; diagnoses and performs minor repairs on plant electrical and mechanical equipment.
11. Prepares and maintains plant production data such as water flow and chemical usage; monitors and reports on plant performance data such as measures of dissolved solids and chlorine residual.
12. Visits unmanned treatment facilities on a scheduled or as needed basis to monitor, adjust or execute plant operations; monitors safety and security at unmanned sites during visits.
13. Compiles and enters plant operations and water quality data into computerized record systems for eventual use in required reports to regulatory agencies.
14. Respond to emergencies and problems after hours and on weekends as directed.
15. Regular attendance at the work site.
16. Performs related duties and responsibilities as required.

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge of:

Advanced principles and practices of surface water treatment plant operation.

Federal and State laws and regulations governing treatment plant operation and water quality standards.

Characteristics of chemicals used in water treatment processes.

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Knowledge of (continued)

Operational mathematics, including calculation of chemical dosing and water flow rates.
Basic laboratory testing methods, and mechanical, electrical and hydraulic principles.

Skill in:

Water treatment plant operating consoles and personal computers.
Use of hand and power tools.
Operation of front-loader, tractor, and hoist.

Ability to:

Learn and operate water treatment plant equipment.
Diagnose plant operating problems and make effective decisions to resolve.
Read meters and gauges accurately.
Perform physical and chemical tests on water samples and accurately record results.
Organize and prioritize work during an assigned shift.
Perform maintenance and repair of plant equipment and devices.
Respond appropriately under pressure and exercise sound judgment.
Keep accurate records and prepare clear reports.
Understand and carry out oral and written instructions.
Communicate clearly and concisely, both orally and in writing.
Establish and maintain cooperative working relationships with those contacted in the course of work.
Maintain physical condition appropriate to the performance of assigned duties and responsibilities.
Maintain mental capacity which allows the capability of making sound decisions and demonstrating intellectual capabilities.
Maintain effective audio-visual discrimination and perception needed for making observations, communicating with others, reading, writing and operating assigned equipment.

REQUIRED QUALIFICATIONS

Experience and Training/Education:

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience

Three (3) years of progressively responsible journey-level experience maintaining and operating District facilities, systems, assets and/or infrastructure.

Education/Training:

Equivalent to graduation from the twelfth (12th) grade.

Certification:

Possession of a valid T4 Water Treatment Operator Certificate issued by the State Water Resources Board (SWRCB).

Possession of a valid D3 Water Distribution Operator Certificate issued by the State Water Resources Board (SWRCB).

License:

Possession of a valid Class C California driver's license and a satisfactory driving record.

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PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein 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 disabilities to perform the essential job functions.

Work Environment:

Water treatment plant and field environment; exposure to noise, dust, grease, fumes, gases, potentially hazardous chemicals, electrical energy, and inclement weather conditions including hot, cold, wet and/or humid conditions; work around water; work on slippery, uneven, surfaces; work in confined spaces; routinely climb ladders, stairs; regularly work near moving mechanical parts; and work around moderately loud noise levels; incumbents must be available to work variable shifts, including evenings, nights, weekends and holidays.

Physical Demands:

Incumbents require sufficient mobility to walk, stand, and sit for prolonged periods of time; occasionally stoop, bend, kneel, crouch, crawl, reach, and twist; push, pull, lift, and/or carry moderate to light amounts of weights; operate assigned equipment and vehicles; ability to verbally communicate to exchange information.

Mental Demands:

While performing the duties of this class, the employee is regularly required to use oral and written communications skills; read documents or instructions; analyze and solve problems; observe and interpret data or information; use math and mathematical reasoning; learn and apply new information or skills; interact with District staff, other organizations and customers who may be upset or dissatisfied.

Vision:

See in normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

Hearing

Hear in the normal audio range with or without correction.

DATE ADOPTED: January 2015
DATE MODIFIED: May 2022
Safety Sensitive Position