

WATER SYSTEM OPERATOR I/II

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

DEFINITION

Under supervision, performs a wide variety of manual and semi-skilled tasks involving the installation, construction, maintenance, and repair associated booster pumps, pumping stations, reservoirs, and domestic water wells; performs preventative and predictive maintenance on assigned equipment; removes, disassembles, cleans reinstalls and performs repair of pump/motor assemblies, equipment and components; assists in the diagnosis and performance analysis of water wells and booster stations.

DISTINGUISHING CHARACTERISTICS

This series class specification defines and describes the nature and levels of work performed in the Water System Operator job series.

Water System Operator I is the entry level in the Water System Operator series. At this level, incumbents learn and perform a limited range of the less complex or specialized work tasks, under closer supervision, with less latitude for independent action.

Water System Operator II is the experienced, journey-level in the Water System Operator series. At this level, incumbents perform the full range of tasks common to the classification series, under less supervision, while exercising discretion and independent judgment within established guidelines.

SUPERVISION RECEIVED AND EXERCISED

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

Technical and/or functional work direction may occasionally be provided to the Water System Operator I/II by the Lead Water System Operator.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS

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

Essential Functions:

1. Operates distribution system to meet goals associated with water supply, water quality, and energy efficiency.
2. Reviews water quality results and calculates blending for Nitrate, DBCP and other constituents in the water as needed to comply with state and federal water quality standards.
3. Participates in mandatory standby rotation.
4. Operates groundwater treatment facilities.

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Essential Functions (continued):

5. Utilizes automated, remote, and local controls for system operation.
6. Completes daily rounds of production facilities including: wells, booster stations, reservoirs; monitors safety and security of sites.
7. Inspects pumps, motors and other equipment; calculates pump run times and pumping rates and enters data into computer.
8. Maintains records of chlorine consumption; reads and interprets various chart recorders, gauges, and water meters; makes associated arithmetic calculations and records results.
9. Calibrates and performs preventive maintenance on water quality monitoring equipment and chemical feed systems.
10. Performs preventive maintenance of pumps, motors, regulators, valves and water meters; repair and replace various defective or worn parts and equipment as needed.
11. Collects grab samples at remote sites; performs various types of field water testing including chlorine residual; adjusts chemical dosage accordingly.
12. Operates crane to pick up and replace industrial motors; operates other pieces of construction equipment and/or hand and power tools needed for work.
13. Performs miscellaneous maintenance tasks on periodic basis, such as weed abatement, debris removal, dirt road repair, and painting.
14. Regular attendance at the work site.

Marginal Functions:

- I. Performs related duties and responsibilities as required.

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of:

Operation and maintenance of water pumping and distribution systems.
Mechanical and electrical maintenance principles and practices.
Basic chemistry, electricity and hydraulics.
Water quality monitoring and sampling techniques and methods.
Pertinent laws, codes and regulations.

Skill in:

Operating a personal computer and related software.
Using hand and power tools.
Operating various pieces of commercial construction equipment.

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Ability to:

- Operate pumps, motors and other water storage and distribution facilities and equipment.
- Calculate flow, volume, detention time, chemical dosage, and pressure.
- Evaluate operational changes such as pressure fluctuations, system demands and production capacities.
- Troubleshoot operational deficiencies of mechanical equipment.
- Read gauges and meters and correct record results.
- Work independently without direct supervision.
- 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 Guidelines

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:

Water System Operator I

Experience:

One (1) year of experience in water distribution system operation and maintenance.

Education/Training:

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

Certificate:

Possession of a valid D2 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) and the ability to obtain within one (1) year of appointment, a valid D3 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) is required.

Possession of a valid T1 Water Treatment Operator Certificate issued by the State Water Resources Control Board (SWRCB) and the ability to obtain within one (1) year of appointment, a valid T2 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) is required.

License:

Possession of, or ability to obtain within one (1) year of appointment, a valid Class A California Commercial driver's license with a Hazardous Materials endorsement is required, together with a satisfactory driving record.

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Water System Operator II

Experience:

Two (2) years of experience in water distribution system operation and maintenance.

Education/Training:

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

Certificate:

Possession of a valid D3 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) and a valid T2 Water Treatment Operator Certificate issued by the State Water Resources Control Board (SWRCB).

License:

Possession of, or ability to obtain within one (1) year of appointment, a valid Class A California Commercial driver's license with a Hazardous Materials endorsement is required, together with a satisfactory driving record.

PHYSICAL DEMANDS AND WORKING CONDITIONS

The physical and mental demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Physical:

While performing the duties of this class, the employee is regularly required to walk; talk or hear in person; sit; climb or balance; stoop, kneel, crouch or crawl; smell; use hands to finger, handle, feel or operate objects, tools or controls; and reach with hands or arms. Employees are frequently required to stand. Employees regularly lift and/or move up to 50 pounds and frequently up to 100 pounds.

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.

Environment:

While performing the duties of the job, the employee frequently works in extreme outside weather conditions, in or near road traffic; near moving mechanical parts and in high or precarious places. The employee is frequently exposed to wet and/or humid conditions, vibration, fumes, airborne particles, toxic or caustic chemicals, and the risk of electrical shock. The noise level is frequently loud.

Vision:

Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception and the ability to adjust focus.

Hearing:

Hear in the normal audio range with or without correction.

JOB STATUS: Non-Exempt

DATE ADOPTED: November 2001

DATE MODIFIED: July 2021

Safety Sensitive Position