

WATER TREATMENT PLANT 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, operates one or more water treatment plants on an assigned shift; performs related maintenance oriented tasks, keeps records and prepares reports; and performs a variety of tasks relative to assigned area of responsibility.

DISTINGUISHING CHARACTERISTICS

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

Water Treatment Operator I is the entry level in the Water Treatment Operator series. At this level, incumbents learn and perform a limited range of the less complex or specialized work tasks, under closer supervision. At this level, incumbents function as a T2 Shift Operator as defined in applicable state drinking water regulations.

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

Technical or functional work direction may occasionally be provided to Water Treatment Operators I/II by the Lead Water Treatment Plant 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. 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.
2. 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.

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3. 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.
4. 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.
5. Calibrates and performs preventive maintenance on plant monitoring equipment and chemical feed systems; flushes and cleans turbidometers; diagnoses and performs minor repairs on plant electrical and mechanical equipment.
6. 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.
7. 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.
8. Compiles and enters plant operations and water quality data into computerized record systems for eventual use in required reports to regulatory agencies.
9. Respond to emergencies and problems after hours and on weekends as directed within a thirty (30) minute response time to the Lloyd W. Michael Water Treatment Plant.
10. Regular attendance at the work site.

Marginal Functions:

1. Conducts plant tours and explains operating procedures to the public or visitors.
2. Performs related duties and responsibilities as required.

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge of:

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.
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.

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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.

Water Treatment Operator I

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:

Experience/Training:

Equivalent to completion of the twelfth grade, supplemented by specialized training or coursework in the environmental sciences and/or water treatment plant operations.

One year of progressive experience operating a water treatment facility and/or water distribution system.

Certificate:

Possession of a valid T2 Water Treatment Operator Certificate issued by the State Water Resources Control Board.

Possession of a valid D1 Water Distribution Operator Certificate issued by the State Water Resources Control Board.

License:

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

Water Treatment Plant Operator II

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:

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Experience/Training:

Equivalent to completion of the twelfth grade, supplemented by specialized training or coursework in the environmental sciences and/or water treatment plant operations.

Two (2) years of progressive experience operating a water treatment facility.

Certificate:

Possession of a valid T3 Water Treatment Operator Certificate issued by the State Water Resources Control Board.

Possession of a valid D2 Water Distribution Operator Certificate issued by the State Water Resources Control Board.

License:

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

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.

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

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.

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: October 2001

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Safety Sensitive Position