



APRIL 2016
FLSA: NON-EXEMPT

WATER SYSTEMS OPERATOR III

DEFINITION

Under general supervision, performs a variety of semi-skilled and skilled work in the operation and maintenance of the District's water production, treatment, storage, and distribution equipment and facilities; analyzes water quality data from various sources and distribution systems; maintains water production database and water analysis databases; develops and maintains water quality sampling programs; and performs related work as required.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from Water Systems Superintendent. Exercises no supervision of staff. May exercise technical or functional direction and training over less experienced staff.

CLASS CHARACTERISTICS

This is the advanced journey-level class in the Water Systems Operator series responsible for performing the most complex duties required to ensure that District water production and distribution systems and facilities are maintained in a safe and effective working condition, and provide the highest level of safety for public use, in addition to for developing and maintaining the District's water quality programs, and potentially acting as a lead or shift supervisor. Responsibilities include inspecting and attending to assigned areas in a timely manner, and performing a wide variety of tasks in the operation, inspection, and maintenance of assigned facilities and systems. This class is distinguished from the Water Systems Superintendent in that the latter is a mid-management class and has management responsibility for all water system treatment operations and maintenance functions and activities of the District.

EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only)

Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

- Maintains, trouble-shoots, and repairs chemical feeding systems, telemetry system, booster, and well equipment.
- Monitors and controls the operation of water production systems including water and filtration plants; incorporating chemical feeding equipment, utilizing the telemetry system, filtration and treatment equipment, and reservoirs; inspects for compliance with established codes and/or damaged or worn parts and makes repairs as necessary.
- Operates and maintains water production, storage, treatment, and distribution facilities by regulating water flow throughout the system using control valves, pumping stations, and manual, electronic and computer controlled systems such as Supervisory Control and Data Acquisition (SCADA); interprets gauges, meters, charts, and graphs; operates pumps, valves, wells, disinfection systems and related equipment.
- Controls pump stations and valves for scheduled and emergency shut downs; maintains flow using booster pumps to control water level in reservoirs and at other critical points throughout the

system; maintains flow level and pressure from zone to zone; diagnoses problems through the understanding of the theories of hydraulics and fluid mechanics and water system characteristics.

- Performs the most complex duties of the Water Systems Operator crews.
- Performs assigned treatment plant rounds inspecting, monitoring, and documenting plant operations; makes necessary adjustments in computer system; inspects, adjusts and records meter reads, and chemical usage; inspects and records sample results of well sites, reservoirs, booster pumps, blending stations, treatment facility, hydro turbine electric generation site, chemical metering equipment and wholesale water metering station.
- Develops and prepares monthly reports regarding production and water quality.
- Updates and maintains water quality database.
- Collects liquid samples and coordinates a variety of routine water quality laboratory tests; coordinates analysis of water samples taken for nitrates, turbidity, chlorine residual and other contaminants.
- Performs chlorination treatment of potable water; takes samples of water and performs chemical tests of chlorine residual and a variety of other tests to ensure water quality meets required standards.
- Maintains water quality with proper blending between water wells, ensuring that wells with high levels of nitrate blend with wells with lower levels of nitrate to make the water safe for public use.
- Assists with the preparation and administration of the annual production budget for local well and imported water.
- Makes repairs or inspects contract repair work associated with repairs of pipelines, pumps, tanks, reservoirs, and related equipment.
- Trains and assists others in the operation of the water production, treatment, storage, and distribution system.
- May act as shift supervisor; makes decisions regarding water quality and operations.
- Ensures compliance with federal and state water quality control and monitoring requirements.
- Operates and maintains specialized vehicles and a variety of equipment related to the operation, maintenance, and control of water production systems and facilities.
- Observes safe work methods and makes appropriate use of related safety equipment as required.
- Maintains public facilities, storage sites, and other work areas in a clean and orderly condition, including securing equipment at the close of the workday.
- Maintains accurate logs and records of work performed and materials and equipment used.
- Performs related duties as assigned.

QUALIFICATIONS

Knowledge of:

- Advanced principles, practices, tools, equipment and supplies required to maintain, operate, and control water treatment systems, reservoirs, and related infrastructure, facilities, systems, and appurtenances similar to those in the District's environment.
- Principles, practices, and techniques of handling and processing water samples.
- Operational principles of pumps, valves, electric motors, diesel engines, and electronic, computerized, and manual control systems.
- Principles, practices, methods, and techniques of water flushing.
- Operational and maintenance practices of electrical motors, pumps, and circuitry.
- Occupational hazards and safety equipment and practices related to the work, including the handling of hazardous chemicals and confined space entry.
- Mechanical, electrical and hydraulic principles.

- Functions and servicing requirements of the equipment and facilities used in water production, treatment, storage, and distribution systems.
- Federal, State, and local laws, codes, and regulations related to the production, treatment, storage, and distribution.
- Emergency maintenance and repair procedures related to water treatment and distribution facilities.
- General mathematics.
- Safe driving rules and practices.
- Modern office practices, methods, and computer equipment and applications related to the work, including word processing, database, and spreadsheet applications.
- English usage, spelling, vocabulary, grammar, and punctuation.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors and District staff.

Ability to:

- Perform modification, maintenance, and repair work on water production systems, reservoirs, and related infrastructure, facilities, systems, and appurtenances similar to those in the District's environment.
- Operate a wide variety of pumping, treatment, control, transmission, and other water treatment facility equipment.
- Troubleshoot maintenance problems and determine materials and supplies required for repair.
- Understand and follow oral and written instructions.
- Make accurate arithmetic calculations.
- Perform repair and maintenance to plant equipment such as pumps, valves, and electronic monitoring devices.
- Maintain accurate logs, records, and written records of work performed.
- Prepare and present clear and concise reports.
- Read and interpret meters, gauges, recording devices, and related monitors.
- Interpret and apply the policies, procedures, laws, codes, and regulations pertaining to assigned programs and functions.
- Make sound, independent decisions within established policy and procedural guidelines.
- Read, interpret, and apply technical information from manuals, drawings, and specifications.
- Operate modern office equipment including computer equipment and software programs.
- Organize own work, set priorities, and meet critical time deadlines with limited or no supervision.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Education and Experience:

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

Equivalent to the completion of the twelfth (12th) grade supplemented by specialized training in plant operations or a related field, and five (5) years of experience in plant operations including at least two (2) years of experience at a level comparable to a Water Systems Operator II with the District.

Licenses and Certifications:

- Possession of, or ability to obtain, a valid California Driver's License by time of appointment.
- Possession of, and ability to maintain, a valid Grade III Water Distribution Operator Certificate issued by the State Water Resources Control Board.
- Possession of, and ability to maintain, a valid Grade III Water Treatment Operator Certificate issued by the State Water Resources Control Board.

PHYSICAL DEMANDS

Must possess mobility to work in the field; strength, stamina and mobility to perform medium to heavy physical work, to work in confined spaces, around machines and to climb and descend ladders, and operate varied hand and power tools and construction equipment; to operate a motor vehicle and visit various District sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone or radio. The job involves fieldwork requiring frequent walking of long distances in operational areas to identify problems or hazards. Finger dexterity is needed to access, enter and retrieve data using a computer keyboard or calculator and to operate above-mentioned tools and equipment. Positions in this classification bend, stoop, kneel, reach and climb to perform work and inspect work sites. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 50 pounds and heavier weights with the use of proper equipment.

ENVIRONMENTAL ELEMENTS

Employees work in the field and are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives, and contractors in interpreting and enforcing departmental policies and procedures.

WORKING CONDITIONS

Required to be on-call and to work various shifts or emergencies on evenings, weekends, and/or holidays.