

WATER QUALITY TECHNICIAN

Job Code	Pay Grade
17195	CL11

Nature of Work

This is specialized field and technical work performing flushing tasks and associated job duties in monitoring, scheduling, and performing water quality related functions connected with the operation of a highly complex urban water distribution system. The incumbent specifically works on flushing the water distribution system utilizing flushing equipment systems and flushing devices utilizing equipment and technologies that ensure drinking water and surface water discharge is in compliance with federal and state regulations. The incumbent checks and monitors the water quality in the distribution system. The incumbent also reviews reports, implements maintenance schedules for equipment to maintain proper water quality and flushing for an assigned area. The incumbent reviews and monitors flushing equipment; initiates, prepares and reviews work orders, and administratively tracks work orders covering maintenance, repairs, and improvements. The duties and responsibilities require the incumbent to be pro-active and work independently or in teams to assess and document both existing and emerging potential problems to ensure timely action on service requests and maintenance plans. The incumbent identifies, describes, schedules, and tracks flushing related plans and activities. The incumbent reports to a manager, supervisor, team leader, or designee.

Minimum Qualification Requirements

- High school graduate and 4 years of skilled utilities field experience with responsibility for water delivery system, water quality monitoring/flushing, flushing related system inspections, and for writing both corrective action work order requests and flushing maintenance tracking reports; or
- Associate's degree with major course work in environmental, physical, natural or biological science, or related field plus 2 years experience as described above; or
- An equivalent combination of education, training, and/or experience.

Appointing Authority May Also Require

- Florida Driver's License or Florida Commercial Driver's License and endorsement, if any.
- Assignment to work a variety of work schedules including compulsory work periods in special, emergency, and/or disaster situations.
- Candidate to obtain and possess a Florida Department of Environmental (FDEP) Class 3 Distribution System Operator License as set forth in Chapter 403, Florida Statutes.
- Candidate to acquire and maintain certification in designated areas according to area of assignment.
- Candidate to terminate employment for failure to achieve and maintain necessary training, education, experience, and required license(s) to perform in designated area of assignment.
- Candidate to perform under working conditions that require climbing, stooping, kneeling, crouching, reaching, standing, walking, lifting, grasping, feeling, talking, hearing, seeing, and repetitive motions. Incumbents may also be subjected to moving mechanical parts, electrical currents, hot equipment (pumps, mufflers, and engines), inclement weather, vibrations, fumes, odors, dust, poor ventilation, low lighting, intense noise and travel.
- Other highly desirable knowledge, skills, abilities, and credentials relevant to the position.

Illustrative Tasks (These are examples and are not all inclusive.)

- Makes independent water quality assessments on how to correct distribution system water quality issues through flushing and initiates or performs actions to implement corrections to resolve customer complaints.
- Performs independent evaluations and makes recommendations for installations of Automatic Flushing Devices (AFD), and new blow-offs to maintain water quality.
- Performs problem-solving, assembly, part replacement and inventory activities related to automatic flushing devices (AFDs).
- Reviews utility distribution system maps to determine water source and flow, proper valves, and adequate flushing locations to conduct specific flushing activities throughout the distribution system.

WATER QUALITY TECHNICIAN (continued)

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Illustrative Tasks (continued)

- Determines the frequency of flushing activity in an area based upon acquired knowledge of a water distribution area and what is needed to maintain compliant water quality parameters.
- Determines the operational status of valves, hydrants, and blow-offs, and to have the knowledge and skills necessary to properly document the equipment and the repairs needed so that work orders can be generated for follow up repairs.
- Operates water distribution system infrastructure including valves, hydrants and blow-offs to utilize various flushing techniques to restore and maintain water quality.
- Operates programmable equipment to control and adjust automatic flushing devices to ensure water quality compliance.
- Maintains and operates monitoring equipment and assures applicable quality control/quality assurance procedures are followed.
- Implements water distribution flushing plan and procedures using automated technologies for mapping, MAXIMO and other applications.
- Prepares written or electronic reports covering customer complaints and generates service maps of the water distribution system, calculations, maintenance requirements and water quality characteristics.
- Applies basic water monitoring procedures while utilizing flushing techniques and operating valves, blow-offs and fire hydrants in connection with distribution system maintenance and other flushing processes.
- Monitors, schedules, tracks, and ensures completion of planned or scheduled preventative/corrective maintenance flushing, projects and tasks.
- Collects and maintains technical water quality data and evaluate historical trends.
- Generates field data records containing the flushing locations, infrastructure utilized, flow and water loss.
- Performs related work as assigned or required.

Knowledge, Skills, and Abilities

- Knowledge of conventional, unidirectional, and alternative pipe cleaning and flushing methods.
- Knowledge of drinking water quality characteristics including odor, color, clarity and disinfectant levels.
- Knowledge of OSHA regulations and recognized safety operating practices for field monitoring activities and safe workplace.
- Knowledge of the operation and maintenance of utilities lines, pumps, electrical machinery, controls and water delivery systems.
- Knowledge of the principles, practices, techniques of water distribution system operations.
- Knowledge of water distribution system hydraulics.
- Ability to apply computer applications to communicate with others, coordinate, track and document activities as well as prepare customer complaint reports.
- Ability to complete written or electronic field data records.
- Ability to formulate and present ideas and findings clearly and concisely in written, oral or graphic form.
- Ability to interact tactfully and courteously with the public and other agencies.
- Ability to operate water distribution infrastructure such as valves, fire hydrants and blow-offs along with the ability to evaluate maintenance requirements.
- Ability to perform flow and water discharge mathematical calculations.
- Ability to perform water quality monitoring utilizing field test equipment.
- Ability to read and interpret blueprints, plats, maps, aerial photos and diagrams.

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Revised	EEOC Code	Overtime Code
11/15	Skilled Craftsmen	Classified