Water Systems Operator 1

DEPT:	Water Systems	FLSA:	Non-Exempt
DIV:		EEOC:	Skilled Craft
DATE:	July 2016		

POSITION SUMMARY

Performs a variety of "**restricted**" **entry level skilled duties on an assigned field crew** related to the construction, installation, maintenance and repair of city water, irrigation, storm drain or wastewater systems.

SUPERVISION RECEIVED

Works under the general supervision of an assigned Water Systems Supervisor or Water Systems Operator IV.

SUPERVISION EXERCISED

None.

ESSENTIAL FUNCTIONS

Culinary Water: Acts as lead and participates in the work of a maintenance and repair crew engaged in installation, maintenance and repairs of water mains; service line; fire hydrants; valves and related structure.

Operates various types of heavy equipment such as operates six or ten wheel transport trucks, patrol, backhoe, rollers and trenching equipment; performs installation or repair of water service connections, water lines and meters, repairs or replaces fire hydrants and plugged water meters; repairs water mains; thaws frozen lines; cleans and maintains storage tanks; connects and disconnects service; searches out shut off valves; water line leaks; assists in placement of pipe and water regulators; removes, disassembles, cleans or replaces defective parts of regulators, adjusts pilot valves as needed to assure efficient water line service.

Installs new water lines using forklift, pipe threader , tapping machine, welder, pipe cutting saw, pipe and cable locator old water lines; tears out and repairs curb, gutter and street in locating and uncovering broken lines; builds meter boxes; builds extensions to raise or lower existing boxes as needed; operates a variety of hand tools and small power equipment such as jack hammers, roller, compressors, packing machine, gopher, tamper, tapping machine; cleans tools and equipment to assure proper working order.

Maintains pump house; repairs water/booster pumps; removes and disassembles pumps; cleans and replaces defective parts, grease bearing, adjusts packing and reinstalls in pump housing; monitors city water well storage levels; assures proper operation of telemetering equipment; tests fuses and resisters using OHM meter; replaces fuses and resisters as needed.

Participates in work zone safety procedures; flags on coming vehicles to protect the public and workers; sets up warning signs and signalization equipment; prepares irrigation ditches; lays pipe; builds head gates; prepares and maintains water flow schedules; confers with other water agencies; assists in construction and repair of head gate and diversion structures to control irrigation system water flow.

Operates valves to maintain balance in the pressurized irrigation distribution system; cleans reservoirs; paints valves; leads in maintenance and troubleshooting of PRV valves and related projects.

Water Sampling: Conducts water sampling and delivers to county health for analysis; monitors chlorine levels; tests water using DPD tester to assure proper chlorine residual levels; reads water flow meter, chlorine pound per day gauge; calculates chlorine dosage and makes proper adjustments.

Storm Drain System: Maintains and cleans city storm drain collection system main lines; inspects manholes and storm drain lines to detect leaks or malfunctions; bolts leak proof collars to mains to stop leaks; seals joints with cementing compound; opens clogged storm drain lines using various pipe cleaning equipment.

Correct structural deficiencies, eliminating infiltration and stoppages of drainage mains. Performs daily maintenance and repair of equipment used; operates and supervises operation of jet truck, power rodder, root cutter and other equipment; operates jackhammer; repairs and rebuilding of manholes, and the repair storm drain mains or replacement of covers; operate metal detector to locate concealed manholes and raised to grade for street overlays.

Operates a high velocity jet truck; cleans and maintains existing storm drain lines. Also provides vac truck operation to resolve water leaks in the system; operates television inspection truck used to inspect main sewer lines and storm drain system.

Performs minor storm drain collection system installation, maintenance, and repairs; operates a variety of hand or power equipment, including tapping machine, jack hammer, compactor, rodding machine, etc.; installs new storm drains mains; taps

mains to make service connections.

Pressurized Irrigation: Operates backhoe and front end loader in digging and filling trenches for laying and repair of irrigation lines; assists in operating road cutting machine and operating jack hammer to break up pavement; prepares irrigation ditches; lays pipe; builds head gates; prepares and maintains water flow schedules; confers with other water agencies.

Locates and marks and properly identifies underground irrigation lines on request of contractors and utility owners. Takes field measurements on irrigation valves; fire hydrants; and mainlines. Locates and brings irrigation valves to grade.

Maintains and makes minor repairs on equipment; assists in thawing frozen pipes; assists in meter reading and coordinates with other departments as work load dictates; assists in providing for the maintenance, installation and repair of program facilities; monitors water flows; manages operation of pump stations; assists in construction and repair of head gate and diversion structures to control irrigation systems water flow.

Operates valves to maintain balance in the Pressurized Irrigation Distribution System; clean reservoirs; paint valves, assist in maintenance of PRV valves ; process daily referrals from the main office by doing on site trouble shoot inspections.

Performs field duties in building of irrigation ditches; laying pipe; building head gates; preparing and maintaining water flow schedules; confers with other water agencies; assists in construction and repair of head gate and diversion structures to control irrigation system water flow.

Wastewater: Maintains and cleans city wastewater collection system main lines; inspects manholes and wastewater lines to detect leaks or malfunctions; bolts leak-proof collars to mains to stop leaks; seals joints with cementing compound; opens clogged wastewater lines using various pipe cleaning equipment.

Correct structural deficiencies, eliminating infiltration and stoppages of wastewater mains. Performs daily maintenance and repair of equipment used; operate jet truck, power rodder, root cutter and other equipment; operates jackhammer; repairs and rebuilds manholes, and the repair of wastewater mains or replacement of covers; operate metal detector to locate concealed manholes and raise to grade for street overlays.

Operates a high velocity jet truck; cleans and maintains existing wastewater lines. Also provides vac truck operation to resolve water leaks in the system operates television inspection truck used to inspect main sewer lines and storm drain system.

Installs new wastewater mains; taps mains to make service connections; performs wastewater collection system installation, maintenance, and repairs; operates a variety of hand or power equipment, including tapping machine, jack hammer, compactor, rodding machine, etc.

Operates television viewing and inspection equipment to detect wastewater line leaks obstructions; sets up power equipment; performs maintenance and repairs of specialty equipment; operates jet cleaning unit to clean ditches and culverts; performs dye testing to deter origins of problems; performs maintenance and repairs of electrical parts on TV truck.

Performs related duties as required.

MINIMUM QUALIFICATIONS

1. Education and Experience:

   A. Graduation from high school;

   AND

   B. One (1) year of experience in construction, maintenance or repair of various water systems;

   OR

   C. An equivalent combination of education and experience.

2. Knowledge, Skills, and Abilities:

   Some knowledge of operating basic manual and power tools; the standard practices, methods, materials and tools necessary for pipe line construction and repair activities; pipe fitting procedures, pipe classifications and type; the occupational hazards and safety precautions of trench work construction and pipeline maintenance work; hazards common to heavy equipment operation; drain system construction methods etc.; water supply and distribution systems; construction requirements for water distribution and pumping systems; hazards associated with water treatment chemicals; wastewater line chemical cleaning procedures and associated hazards; state or federal regulations governing installation and maintenance of water systems; water quality laws; interpersonal communication skills.

   Ability to operate heavy equipment of various kinds under varying conditions; make minor repairs on assigned

vehicles, perform heavy physical labor; develop and maintain effective working relationships with co-workers, elected officials, local agencies and the general public; communicate effectively, both verbally and in writing; work from blueprints; tolerate weather extremes in the work environment; ability to perform basic mathematical computations in reading and using various meters, gauges and related devices.

3. Special Qualifications:

Must become a class I Water System Operator certified and class I Wastewater certified within six months (6 mon.) of hire. Must possess a valid commercial driver's license. Must become confined space certified. Must be able to lift 50-75 pounds. Must be willing to work on-call duty and 24 hour standby.

4. Work Environment:

Employees in this position normally work in an outdoor environment, subject to changing and seasonal weather extremes. Frequently, tasks require a variety of physical activities, generally involving muscular strain, related to walking, standing, stooping, sitting, reaching, and lifting; daily potential for hazardous exposure to electrical shock, industrial wastes and raw sewage (containing pathogens such as typhoid, paratyphoid, dysentery, polio, tetanus, etc.); daily exposure to moving parts and equipment such as pumps, motors, heavy equipment, etc.; daily or regular exposure to traffic hazards working in the public right-of-way; daily or regular exposure to hazards associated with confined space operations. Talking, hearing and seeing essential to performing required job functions. Common eye, hand, finger dexterity exist. Mental application utilizes memory for details, verbal instructions, emotional stability, discriminating thinking and creative problem solving.

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Disclaimer: The above statements describe the general nature, level, and type of work performed by the incumbent(s) assigned to this classification. They are not intended to be an exhaustive list of all responsibilities, demands, and skills required of personnel so classified. Job descriptions are not intended to and do not imply or create any employment, compensation, or contract rights to any person or persons. Management reserves the right to add, delete, or modify any and/or all provisions of this description at any time as needed without notice. This job description supersedes earlier versions.

I _____have reviewed the above job description. Date:_____

(Employee)