



City of Phoenix UTILITY MECHANIC

JOB CODE 50420

Effective Date: 1/14

DISTINGUISHING FEATURES OF THE CLASS:

The fundamental reason this classification exists is to perform skilled tasks in the repair and maintenance of pumps and mechanical equipment at a water or wastewater treatment plant, pumping station, deep well site, lift station or booster station. Work may require the operation of machinery, but emphasis is upon servicing, installing, repairing, and maintaining equipment rather than its operation. Work assignments are varied and employees must be knowledgeable in general mechanical maintenance / repair and hydraulic principals. Work is performed under the general supervision of a O&M Supervisor, and the general direction of Senior Utility Operator, Maintenance Planner Scheduler, or an Industrial Maintenance Mechanic, who reviews work while in progress and upon completion. Some positions will require shift, weekend, standby and holiday work hours.

ESSENTIAL FUNCTIONS:

- Repairs mechanical equipment such as pumps, valves, motors, sludge removal machines, centrifuges, chemical feeders, blowers, coolers, air compressors, and heating equipment in a water or wastewater treatment plant; reclamation plants, groundwater wells, pumping stations, lift stations and reservoirs;
- Repairs horizontal and vertical drive centrifugal pumps;
- Diagnoses equipment problems and determine repairs needed;
- Performs maintenance tasks for treatment plant systems and sub-systems associated with: bar screens, grit collectors, chemical feed systems, basins, digesters, and sludge handling equipment;
- Performs primary maintenance tasks at remote facilities associated with booster stations, sewer lift stations, pressure reducing valves, metering stations, tank sites, and distribution chlorination stations;
- Assists in unloading, transferring, storing, and using various hazardous chemicals;
- Responds to emergency call outs, troubleshoots problems and takes actions to ensure plant, station integrity;
- Maintains regular and reliable attendance;
- Demonstrates superior seamless customer service, integrity, and commitment to innovation, efficiency, and fiscally responsible activity.

Required Knowledge, Skills and Abilities:



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Knowledge of:

- Basic arithmetic such as addition, subtraction, multiplication, division, and basic algebra.
- Occupational hazards and necessary safety precautions applicable to mechanical maintenance and repair work, including lockout procedures and confined space entry procedures.
- Methods, practices, tools, and materials used in maintaining, repairing or constructing water/wastewater treatment plant and booster/lift station equipment.
- Computerized maintenance management systems and distributed control systems.
- Email, spreadsheet, and word processing software.

Skill in:

- Use and care of common hand tools and special tools and equipment used in the maintenance of large complex machinery and equipment.
- Use of precision measuring equipment such as micrometers and dial indicators.

Ability to:

- Work cooperatively with other City workers.
- Understand and follow oral and written instructions in the English language.
- Work in a variety of weather conditions with exposure to the outdoor elements.
- Use a personal computer to input and retrieve information.
- Measure distance using a tape measure or calibrated instruments.
- Use graphic instructions, such as blueprints, schematic drawings, pencil diagrams or other visual aids.
- Make precise arm-hand positioning movements and maintain static arm-hand position to operate a hand drill or other tool.
- Coordinate the movement of more than one limb simultaneously to repair equipment or operate machinery.
- Bend or stoop repeatedly or continually over time to repair equipment.
- Lift arms above shoulder level to work on equipment.
- Work in small, cramped areas to repair / maintenance equipment.
- Climb ladders or steps to access equipment in confined spaces.
- Walk over rough, uneven, or rocky surfaces to access equipment.
- Move heavy objects (50 pounds or more) long distances (more than 20 feet).
- Learn job-related material through oral instruction and observation or through structured lecture and reading. This learning takes place in both on-the-job training settings and in classroom settings.
- Work with cleaning fluids, effluent, cleaning agents, paints, chemicals or similar solutions using only normal protective equipment.



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- Work safely without presenting a direct threat to self or others.

Additional Requirements:

- This classification requires the use of personal or City vehicles on City business. Individuals must be physically capable of operating the vehicles safely, possess a valid driver's license and have an acceptable driving record. Use of a personal vehicle for City business will be prohibited if the employee does not have personal insurance coverage.
- Possession of a Grade I Arizona Department of Environmental Quality certification in the appropriate discipline by the end of the probationary period.
- Some positions will require a class A Commercial Driver License Instructional Permit at the time of hire, and possession of a class A Commercial Driver License by the end of probation.
- Positions with SCBA assignment will be required to maintain annual Self-Contained Breathing Apparatus (SCBA) certification through refresher training and annual physical examination per Occupational Safety and Health Administration standards.
- Some positions will require the performance of other essential and marginal functions depending upon work location, assignment, or shift.

ACCEPTABLE EXPERIENCE AND TRAINING:

Two years of experience in equipment maintenance and repair involving pumps, valves, and motors in a water or wastewater industrial setting. Graduation from an accredited mechanical trade school may be substituted for six months of experience. Completion of City of Phoenix Operations & Maintenance Technician Trainee program may be substituted for 6 months experience. Other combinations of experience and education that meet the minimum requirements may be substituted.