

GAS MEASUREMENT SPECIALIST

JOB DESCRIPTION

Classification Responsibilities: A Gas Measurement Specialist is responsible for performing a variety of skilled and semiskilled tasks that include calibrating, installing, repairing and testing gas regulating and measurement equipment. Work requires the use of computerized equipment to perform gas system testing. An employee of this class performs specialized gas service activities in the installation and maintenance of residential, commercial and industrial meters and in the construction, repair, and maintenance of district regulator stations. This class performs related duties as required.

Distinguishing Features: A Gas Measurement Specialist works in a wide range of technical tasks (example, sizing loads, repairing regulators, and calibrating recorders for precise pressure measurement). An employee of this class is also responsible for replacing and upgrading gas meters, piping, and regulators to ensure Department of Transportation (DOT) safety standards and local code compliance. Independent judgment must be used as an employee of this class determines when to shut down a gas system due to leaks and hazardous code violations. An employee of this class is subject to adverse weather conditions and works under the hazardous conditions associated with high-pressure natural gas up to 600 pounds-per-square-inch. Employees are required to use appropriate safety equipment and follow safety procedures in performing assignments. Employees may be subject to stand-by and emergency call-out during off hours. This class provides services for the City of Mesa and the Queen Creek/Magma system commercial customers. A Utility Services Field Supervisor supervises this class through conferences, meetings and observation of work in progress and review of overall results achieved. This class is FLSA nonexempt.

QUALIFICATIONS

Employee Values: All employees of the City of Mesa are expected to uphold and exhibit the City's shared employee values of Knowledge, Respect, and Integrity.

Minimum Qualifications Required. Any combination of training, education, and experience equivalent to high school graduation or GED. Considerable (3 - 5 years) full-time employment in gas metering and service maintenance that provided a good knowledge of gas regulators, industrial meters, measurement devices, safety relief valves, and pressure control in a gas distribution system. Experience using computers and experience using gas-detecting equipment.

Special Requirements. Must successfully complete operator qualification training administered by the Energy Resources Department within 18 months of hire/promotion into the class and must retain qualification throughout employment in order to work on the City of Mesa's natural gas system. Must possess a valid Arizona Driver's License by hire or promotion date.

Substance Abuse Testing. This class is subject to DOT Pipeline and Hazardous Materials Safety Administration (PHMSA) drug and alcohol testing as outlined in 49 Code of Federal Regulations (CFR) Part 199.

Preferred/Desirable Qualifications. None.

ESSENTIAL FUNCTIONS

Communication: Maintains appropriate records and forms on gas meters and regulator stations to comply with Arizona Corporation Commission (ACC) and DOT requirements. Communicates with customers and others in order to provide customer service such as: lighting gas pilots, finding gas leaks, resolving gas pressure problems, handling complaints and related problems and concerns. Witnesses City of Mesa gas supplier calibration testing of supply equipment. Communicates with the Fire Department when responding to emergencies.

Manual/Physical: Replaces and removes large gas meters using truck and hoist maneuvering. Inspects master meters for regulator lock-up and safety problems annually. Participates in all aspects of the installation, maintenance, and repair of district regulator stations and residential, commercial and industrial gas meters. Operates service trucks (2-ton) requiring a standard Arizona Driver's License to respond to customer calls, install gas meter sets, maintain gas system and respond to emergencies. Operates jackhammers and tampers. Uses common hand tools such as: hammers, saws, pipe wrenches, screwdrivers, or similar tools. Works with paint and cleaning fluids to paint meters and maintain equipment. Performs physical inventories. Moves meters (sometimes over 50 pounds) for distances of up to and over 20 feet during installation. Digs up ground to set meter boxes. Moves dirt and debris from around meter boxes. Cleans work area and equipment. Measures distances using a tape measure to ensure the sets meet specifications. Works in small, cramped areas (vaults with potential to contain poisonous gases or lack of oxygen) at heights of greater than 10 feet, under the hazardous conditions associated with natural gas, and under a variety of weather conditions. Detects natural gas leaks while working on meters, regulators, etc. Inspects the operability of district regulators, regulator stations and related equipment, industrial and commercial meters, and measuring instruments. Inspects the availability of necessary tools, equipment, and materials to perform work assignments. Selects commercial and industrial gas meters, regulators, orifices, and relief valves based on meter size. Maintains operability of district regulators, regulator stations, and related equipment. Shuts down high-pressure gas and removes and replaces regulator bodies. Calibrates pressure recorder and replaces regulator adjustment loop. Cleans vaults and checks gas piping and fittings for corrosion. Replaces and upgrades industrial and commercial gas meters, piping, and regulators on a scheduled test program cycle. Checks cathodic protection, load changes, gas delivery pressure, odorization, regulator operations, orifice condition, and meter size to ensure proper operation and safety. Builds sets or retrofits existing sets to code and specification in restaurants, factories, churches, hospitals, and other commercial sites. Installs insulating devices to ensure cathodic protection of gas service piping and meter from deterioration. Sets regulator operating pressure by using springs and orifices designated for application. Determines adequacy of relief capabilities where applicable. Isolates gas problems on appliances and red tags unsafe equipment. Calibrates and repairs a variety of gauges and equipment, including Bascom-Turner ranger and sentry gas detectors and recorders. Checks gas pressure by using gauges, differential testers, deadweight testers, and combustible gas indicators. Sizes meters and regulators for gas load requirements. Maintains a truck stock of supplies (examples: a large variety of fittings, lubricants, and paints).

Mental: Analyzes and resolves regulation and measurement problems. Interprets codes and implements standards in the City system. Determines the safety of the gas system. Completes gas regulation and measurement formulas and calculations of a complex nature. Comprehends and makes inferences from written material. Learns job-related material regarding regulations and gas distribution performance in a

classroom setting. Understands operating procedures for field transfer prover and shop prover.

Knowledge/Skill/Abilities:

Knowledge of:

the methods, materials, and equipment used in the installation and repair of gas meters, industrial, distribution, service regulators, and measurement instruments;
the safety equipment and procedures used when working on and around natural gas lines;
the federal regulations concerning gas pipeline safety standards;
gas leak detection procedures;
the basic principles of cathodic protection;
the methods, materials, and equipment used in the installation and construction of gas lines; and
gas regulators and district regulator stations operations and maintenance.

Skill in the use of small hand and power tools.

Ability to:

respond to commercial and industrial gas emergency calls involving fires, damaged services, and gas leaks;
troubleshoot and repair problems by using leak detection equipment;
effectively express ideas to others both verbally and in writing;
maintain City uniform and personal appearance in order to be presentable to customers and the general public;
print or write legibly;
analyze and resolve regulation and measurement problems;
evaluate pressure test results to ensure that they meet City and regulatory agency standards; and
establish and maintain effective working relationships with management, employees, and utility customers.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

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JOB FCTN-TEC

INCREMENTS 53-200

PAY GRADE: 50

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