

**MAJOR FUNCTION**

This is highly skilled engineering technician work with responsibility directly relating to the installation and maintenance of cathodic protection devices utilized in gas distribution construction, installation, and operation of the gas system. Work involves technical skills in the use of sophisticated metering equipment in corrosion control and is performed independently in accordance with general instructions given by the Supervisor-Gas Corrosion Protection System. Work is reviewed through field inspections.

**ESSENTIAL AND OTHER IMPORTANT JOB DUTIES****Essential Duties**

Establishes and implements maintenance and monitoring programs for the analysis and correction of corrosion failures. Directs corrosion aspects of the design and execution of major projects for the City's gas system from the concept stage through completion. Utilizes rectifier, anodes, insulators and other related equipment to eliminate corrosive electrolysis between the gas pipeline and the soil. Measures electrical activity in the soil and the pipeline using voltmeters, amp meters, resistivity meters and other related equipment. Compares electrical quantities with written standards to identify ground areas where electric current exceeds the permissible amount. Tests insulators, rectifiers and anode systems to verify efficiency and recommends remedial corrective measures where required. Updates and modifies the GIS electronic maps for leak survey and cathodic protection, as directed. Locates gas mains for other utilities. Assists supervisor with planning, organizing, directing and coordinating the monitoring of the complete distribution system for leaks and recommends required corrective action. Performs related work as required.

**Other Important Duties**

Assists supervisor in addressing customer complaints. Inspects above ground piping. Performs related work as required.

**DESIRABLE QUALIFICATIONS****Knowledge, Abilities and Skills**

Considerable knowledge of construction procedures as they relate to gas distribution and cathodic protection. Considerable knowledge of electricity, i.e., current, voltage and resistance; electrical instrumentation, and test equipment. Ability to operate and understand the tools, equipment, and instruments used in corrosion control. Ability to recognize symptoms and practical solutions to field problems. Ability to make clear written and oral descriptions of corrosion problems detailing symptoms, means of measurement or detection, and corrective measures to be used. Skill in the use of a microcomputer and the associated programs and applications necessary for successful job performance.

**Minimum Training and Experience**

Possession of a high school diploma or an equivalent recognized certificate and four years of technical experience in gas utilities or another industry that uses cathodic protection systems to prevent corrosion; or an equivalent combination of training and experience.

**Necessary Special Requirements**

Must successfully complete a basic National Alliance Corrosion Engineer (NACE) course within a year of appointment, as a condition of continued employment.

Must possess the appropriate State Commercial Driver's License (CDL) and endorsement(s) at the time of appointment or possess the appropriate CDL permit and obtain the appropriate CDL and endorsement(s) within 60 calendar days from the date of employment, as a condition for continued employment.

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