



Job Description  
Job Code: 525  
Range: 20

## ELECTRICIAN

**DESCRIPTION:** Under limited supervision, performs work of moderate difficulty in the calibration, repair, installation and maintenance of electric, hydraulic, and pneumatic instrumentation and motor control systems up to 480 volt utilized in the water and wastewater systems. This position may involve exposure to dangerous chemicals and/or raw sewage.

**CLASSIFICATION:** This is a non-exempt, full-time, classified position with full benefits.

**ESSENTIAL FUNCTIONS:** (Essential functions, as defined under the Americans with Disabilities Act), may include the following tasks, knowledge, skills and other characteristics. This list is ILLUSTRATIVE ONLY, and is **not** a comprehensive listing of all functions and tasks performed by incumbents of this classification.

### TASKS:

- Calibrates and tunes flow meters, valves, switches, transducers, programmable logic controllers (PLC) and timers, including electrical, hydraulic, and pneumatic;
- Troubleshoots, repairs and replaces motors and control systems;
- Troubleshoots, repairs, and programs remote terminal computer units;
- Troubleshoots, tests, repairs and programs alarm systems;
- Performs routine maintenance on motors and electrical control systems;
- Assists with system installation, inspection, and repair;
- Evaluates new control systems and components and makes purchase recommendations;
- Prepares and updates schematics;
- Prepares and maintains records and reports;
- Performs related duties as assigned.
- Offers technical input to engineers, vendors and project managers when requested

### KNOWLEDGE, SKILLS, AND ABILITIES:

Considerable knowledge of:

- installation, maintenance, and repair of electrical, hydraulic, mechanical and pneumatic control systems;
- water/wastewater treatment system design and operation;
- computer hardware and software utilized in water / wastewater plant controls;
- maintenance and operation of security systems used to protect water / wastewater facilities.

Some knowledge of:

- use of personal computers and current software, including word processing software.
- SCADA, Supervisory Control and Data Acquisition technology and systems.

Ability to:

- work in potentially hazardous environments;
- enter and exit confined spaces in accordance with established procedures;
- maintain logs and prepare reports;
- effectively handle lifting of various objects up to 60 lbs.;
- respond to emergencies as needed on a 24-hour basis;
- work outdoors in varying weather conditions;

## **Electrician – (Continued)**

- follow written and verbal instructions;
- communicate effectively orally and in writing;
- establish and maintain effective working relationships with employees, vendors, other agencies, and the public.

### **PHYSICAL REQUIREMENTS:**

This classification involves work that requires the ability to traverse uneven terrain, climb ladders, perform repairs on equipment, lifting heavy objects up to 60 pounds, ability to wear a respirator and use public works equipment.

**MINIMUM REQUIREMENTS:** Three years' experience in calibration, troubleshooting, and repair of electronic, pneumatic, and hydraulic control systems up to 480 volt, including at least one year of experience in water/wastewater systems applications; OR, any combination of education, training, and experience which demonstrates the ability to perform the duties of the position. Must possess or obtain Grade 1 Water or Wastewater Treatment Operator certifications within one year of hire. Must possess (or be able to obtain by start date) a current, valid Arizona driver's license.

**SPECIAL REQUIREMENTS:** May be required to work overtime, holidays and weekends and be on-call 24 hours per day, per the departmental on-call policy. Must be able to respond to call out within twenty (20) minutes. Required to complete physical examination and background check to ensure ability to perform work requirements.