

SOUTH CENTRAL WASTEWATER AUTHORITY

I. POSITION TITLE: INSTRUMENTATION AND ELECTRICAL TECHNICIAN

II. DEFINITION: Installation, repair, and perform calibration on instruments of systems and equipment as well as electrical distribution system equipment. Candidate will perform work with a minimum of supervision on all types of electrical and instrumentation equipment; including installation of conduits, wiring, instrumentation, and provide maintenance support of the Process Control System. Ability to troubleshoot electrical control circuits, control equipment, and perform work on low as well as medium voltage equipment. In addition, candidate will be expected to cross train and work / assist with all SCWWA's trades.

III. EXAMPLES OF DUTIES: Calibrates instruments in accordance with manufacturers' specifications; inspects and analyzes treatment plant instrumentation to determine maximum operating efficiency; adjusts and maintains plant instruments. Knowledge of PLC and 120 - 480 volt electricity. Carries out preventive maintenance schedule to keep all plant instruments operating properly. Keeps maintenance records and prepares reports as needed. Makes recommendations on instrumentation modifications to Maintenance Chief. Performs skilled plant electrical work such as the installation of motors, pumps, control systems, auxiliary power systems, data information systems, and major installations in plant facilities. Inspects and performs preventive maintenance on systems and equipment; tests emergency power, lighting, alarm and other backup systems to ensure ongoing usage. Installs and reroutes telephone, computer networks and other data communication lines; installs and maintains such specialized equipment as surveillance cameras, computer components and electronic circuit boards. Tests and troubleshoots electrical and electronic components, repairs or orders and replaces components, rewires systems, and tests equipment prior to placing back into service. Reads diagrams, blueprints, specifications, and manuals for installation and repair projects. Maintains and services electrical test and repair equipment and hand and power tools; keeps inventory of frequently used supplies and parts. Contributes to the efficiency and effectiveness of the unit's service to its customers by offering suggestions and directing or participating as an active member of a work team. May direct the work of less skilled assistants on specific projects; ensures that proper safety precautions are followed, particularly around energized circuits. Maintains records of work performed and materials used. Drives Authority vehicles to work sites and transports materials and assistants as required; may work from lift trucks, ladders and aerial lift platform devices.

IV. QUALIFICATION STANDARD:

EDUCATION: Applicants must have high school diploma or equivalent GED certificate. Trade school / college level course work, sufficient military training in instrumentation and electrical are highly desirable. Other trades, related field experience will be considered.

SKILLS: Operating and maintaining specialized tools and test and safety equipment of the instrumentation and electrical trade; safely using and maintaining hand and power tools and test equipment related to the work; directing and instructing others on a project basis; maintaining accurate records of work performed; reading and interpreting manuals, specifications, drawings and blueprints; using initiative and independent judgment within established procedural guidelines; contributing effectively to the accomplishment of team or work unit goals, objectives and activities; establishing and maintaining effective working relationships with those encountered in the course of the work.

ABILITIES: Mobility to work in a typical plant or related maintenance setting, including operating typical trade equipment, hand and power tools and standard office equipment, and to drive a motor vehicle; stamina to stand, walk and climb and to work in confined or awkward spaces for an extended period of time; strength to lift and maneuver materials and equipment weighing up to 75 pounds with proper equipment; vision to read printed materials; and hearing and speech to communicate in person or over a radio or telephone. Accommodation may be made for some of these physical demands for otherwise qualified individuals who require and request such accommodation.

V. WORKING CONDITIONS: Work Monday through Friday 7:00 a.m. to 3:00 p.m., with the possibility of working extended shifts or being called back in emergency situations; rotating holiday coverage. Work with exposure to hazardous chemicals and substances found in the wastewater treatment process. Must work in varying climatic conditions, may be regularly hot, cold, misty and/or unventilated. Must be accessible by telephone to respond to emergencies as necessary. Work environment exposes employees to hazardous material (with approved protection).

VI. PHYSICAL REQUIREMENTS: Work requires ability to lift moderate loads (40 to 75 pounds). More than 50% of work involves walking, climbing, standing and/or bending. Work at times will be located in an OSHA designated noise environment (more than 85 decibels). Employees must have the physical dexterity to accomplish the duties in

the manner noted, as referenced in this and the above sections. Must be able to climb stairs and ladders. Must be able to use fall arresting safety equipment and work in a wet and slippery environment.

- VII. OTHER:** Must possess a valid driver's license and an updated DMV record. Medical certification of physical requirements may be required. All potential employees must pass a drug screen test and are subject to random drug testing thereafter. This position is subject to police background investigation.

This class specification lists the major duties and requirements of the job and is not all-inclusive. Incumbent(s) may be expected to perform job-related duties other than those contained in this document and may be required to have specific job-related knowledge and skills. Background in the water and wastewater or related field highly desirable.