

Code: 2771

*Title: WASTEWATER INSTRUMENTATION AND PROCESS CONTROL
SUPERVISOR*

SUMMARY: Supervises skilled technicians in the installation, maintenance, repair, programming and calibration of metering devices, electronic instrumentation systems, process control computers and programmable logic controllers (PLC) for Regional Wastewater Reclamation. This position is responsible for reviewing and recommending plans and specifications for new or modified instrumentation, computer systems and flow metering devices and for coordinating the work of instrumentation staff assigned to the Wastewater treatment facilities.

DUTIES/RESPONSIBILITIES: (Work assignments may vary depending on the department's needs and will be communicated to the applicant or incumbent by the supervisor.)

Supervises the maintenance, installation, calibration, and repair of a variety of electronic instrumentation, metering devices, electrical equipment, process control Supervisory Control and Data Acquisition (SCADA) system, PLCs and operator SCADA work station displays;

Supervises routine diagnostics and component level repair and electrical and pneumatic test equipment;

Assists in the preparation of preliminary and long-range SCADA plans;

Evaluates automatic process control equipment for its ability to meet the operational needs of the county's wastewater treatment facility systems;

Inspects new and existing installation of electronic instrumentation, computers and metering devices for the wastewater treatment facilities;

Monitors warranty repair and services contracts for the county owned equipment;

Troubleshoots problems and takes action to ensure facility integrity;

Completes the more difficult installation of process control systems, calibration and repair job;

Demonstrates continuous effort to improve operations, decrease turnaround times and streamline work processes;

Modifies process control systems and prepares schematic diagrams to reflect changes;

Documents work performed;

Develops and implements PLC programs and operator SCADA work station displays;

May assist in the review of engineering drawings and specifications.

KNOWLEDGE & SKILLS:

Knowledge of:

- principles, practices and techniques of supervision;
- principles, practices and techniques of mechanics, electricity, pneumatics, hydraulics, electronics and mathematics of industrial process control instrumentation, PLCs and SCADA work station displays;
- equipment and tools used in the repair and maintenance of mechanical, electronic and pneumatic instrumentation components;
- principles, practices and techniques of electronic instrumentation and computer maintenance;
- principles, practices and techniques of materials and tools of the electronic instrumentation and metering trade;
- analog and digital electronic control systems, devices, theory, terminology and application;

- operation, repair, maintenance, installation, and calibration of process control systems and components;
- SCADA systems, including programming SCADA operator work station displays;
- word processing and spreadsheet applications.

Skill in:

- repairing, maintaining, installing, and calibrating process control systems and instrumentation;
- supervising assigned staff;
- utilizing hand tools and specialized tools and equipment used in the calibration and repair of electronic process control components;
- reading and interpreting shop manual and schematic diagrams;
- repairing, maintaining and calibrating laboratory analytical equipment;
- preparing schematic diagrams;
- SCADA systems, including programming of PLCs and SCADA operator work station displays.

MINIMUM QUALIFICATIONS:

EITHER:

(1) An Associate's Degree or certificate for Direct Employment from an accredited college or vocational school in electronics technology instrumentation and process control and four years of experience in the repair, programming or maintenance of process control systems, programmable logic controllers (PLC), SCADA system displays, or similar instrumentation in an industrial or environmental setting.

OR:

(2) Six years of experience in the repair, maintenance, installation, operation or calibration of electronic instrumentation or programming of PLCs or SCADA system displays.

OTHER REQUIREMENTS:

Licenses and Certificates: A current Arizona Class D driver's license is required at the time of appointment.

Physical/Sensory Requirements: Some positions may require the ability to: work with or in the presence of noxious odors; work with noxious or potentially hazardous chemicals, compounds or wastewater products. Safety equipment will be provided by Pima County.

This classification specification is intended to indicate the basic nature of positions allocated to the classification and examples of typical duties that may be assigned. It does not imply that all positions within the classification perform all of the duties listed, nor does it necessarily list all possible duties that may be assigned.

Pima County

07/05/05(tj)
Updated 10/05/11 (lsg)