

## **INSTRUMENTATION TECHNICIAN**

**DISTINGUISHING FEATURES OF THE CLASS:** The work involves responsibility for the installation, maintenance, calibration testing, repair and programming of instruments and controls within the Latham Water District. The Instrumentation Technician maintains repairs, and programs the control system architecture including the SCADA and Programmable Logic Controllers. Evaluates existing equipment and recommends any necessary upgrades. Work is performed under the general direction of the Chief Water Treatment Plant Operator and the Senior Water Pumping System Monitor with considerable independence permitted for planning and carrying out details of the work. The incumbent will be expected to be able to identify areas of concern and independently trouble shoot systems and equipment. The incumbent does related work as required.

### **TYPICAL WORK ACTIVITIES:**

Assists with training of Latham Water District personnel on instrumentation;  
 Act as the instrument and programming liaison with consulting engineers for capital projects;  
 Installs, programs, calibrates and checks instrumentation for proper assembly and connections including wiring to external equipment;  
 Troubleshoots all devices input and output to instrument control circuits;  
 Performs both programming and interfaces with Programmable Logic Controller (PLC) as required to add new instruments and develop new controls and programs;  
 Establishes and maintains a preventative maintenance and repair program for all process control and regulated instrumentation and equipment;  
 Repairs and replaces electric, electronic circuits and mechanical components as needed;  
 Responsible for establishing calibration, repair and maintenance records for all instrumentation;  
 Orders parts and keeps inventory records;  
 Establishes priorities and schedules work routine for maximum efficiency;  
 Uses electronic equipment schematics to locate defective circuits and components;  
 Maintenance and service work at all Latham Water District facilities, as well as all pump stations and all storage reservoirs;  
 Performs Journeyman level calibrations, testing, and repairs of analytical equipment and instrumentation;  
 Respond to emergencies at Latham Water District when assigned.

### **FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:**

Thorough knowledge of the principles and practices of electronic and instrumentation technology; skill in all forms of telemetry; must have a working knowledge of Supervisory Control and Data Acquisition (SCADA) systems; good knowledge of electronic circuitry including transistorized and integrated circuits; ability to read and interpret ladder, logic, function block circuits and schematics diagrams; ability to troubleshoot and isolate electronic malfunctions; mechanical aptitude; ability to follow oral and written instructions; ability to keep records and prepare reports; ability to operate motor vehicle; physical condition commensurate with the demands of the position.

**MINIMUM QUALIFICATIONS:** Graduation from a regionally accredited or New York State registered college or university with an Associates of Applied Science Degree in Electronics and six (6) years of journeyman level experience in instrumentation maintenance, repair and programming including programming of PLCs, their inputs and outputs, maintenance and networking.

**NOTE:** A Certified Control Systems Technician Certificate is preferred.

Adopted 10/3/02  
 Reviewed 3/3/08  
 Amended 3/27/08  
 Amended 5/31/18  
 Town of Colonie  
 Personnel Officer