

**DEPARTMENT:** WATER/WASTEWATER TREATMENT PLANT  
**CLASSIFICATION:** COMPETITIVE  
**APPROVED:** DECEMBER 20, 2018

**INSTRUMENT TECHNICIAN – WATER/WASTEWATER TREATMENT PLANT**  
**(North Tonawanda)**

**DISTINGUISHING FEATURES OF THE CLASS:** The work involves responsibility for performing highly technical work in the installation, inspection, maintenance, repair and replacement of electric, electronic, pneumatic and hydraulic instrumentation devices utilized in a modern water and wastewater treatment plant. The incumbent may be assigned responsibility for maintaining critical equipment during emergencies. The work is performed under general supervision received from the Water & Wastewater Treatment Plant Maintenance Supervisor with considerable leeway allowed for the use of independent judgment in carrying out the technical details of the work. Supervision may be exercised over the work of plant maintenance and operational personnel on individual projects. Does related work as required.

**TYPICAL WORK ACTIVITIES:**

1. Installs, inspects, adjusts and repairs electric, hydraulic, electronic and pneumatic activated meters, gauges, programmable logic controllers and other recording, regulating and controlling instruments including computers and SCADA systems necessary for the proper operation of a modern water and wastewater treatment plant;
2. Performs periodic tests of and overhauls all control room electrical and electronic equipment according to schedule to assure continued operation;
3. Collaborates with supervisors in establishing priorities and setting up a preventative maintenance and repair schedule for all instrumentation equipment including but not limited to:
  - a. Controllers
  - b. Interface Equipment
  - c. Indicators
  - d. Recorders
  - e. Integrators
  - f. Solid State Logic
  - g. Bubblers, flow meters, probe sensors
  - h. Controls, AC/DC
  - i. PLC
  - j. SCADA systems
  - k. Test Equipment
4. Calibrates equipment using a variety of testing devices to correlate instruments with established standards;
5. Informs superiors of major repairs required and recommends the purchase of new equipment, and reports when maintenance or repair work requires outside technical assistance;
6. Supervises other plant maintenance personnel in routine inspection, repair and maintenance of control room equipment;
7. Prepares reports and maintains records on all instrumentation repair and maintenance work performed.

**CONTINUED**

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**FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:** Good knowledge of the methods, materials, tools, equipment and procedures used in the installation, repair and maintenance of electronic and electrical water and wastewater treatment plant equipment; good knowledge of the basic principles of electronics and electricity; working knowledge of computers and related equipment; skill in the use of manual and power tools; ability to diagnose problems and to make repairs and adjustments to complex electronic and electrical equipment; ability to work from diagrams, plans and specifications; ability to follow complex written and oral directions; sound judgment; dependability; mechanical aptitude; willingness to be called into work during emergencies; physical condition commensurate with the demands of the position.

**MINIMUM QUALIFICATIONS:**

Graduation from a regionally accredited or New York State registered college with an associate's degree in electronics, electronic technology or a closely related field **AND** two (2) years of full-time paid experience in the maintenance, repair and installation of complex electronic or electrically operated equipment; **OR**

Graduation from high school or possession of an equivalency diploma **AND** four (4) years of full-time paid experience in the maintenance, repair and installation of complex electronic or electrically operated equipment.

**SPECIAL REQUIREMENT:** Candidates must possess a valid New York State driver's license at time of appointment and employees must maintain one for the duration of employment.