

DEPARTMENT: SEWER
CLASSIFICATION: COMPETITIVE
APPROVED: SEPTEMBER 28, 2015

ELECTRONICS TECHNICIAN - WASTEWATER

DISTINGUISHING FEATURES OF THE CLASS: This is a responsible position that maintains and repairs scientific electrical/electronic equipment, devices, and apparatus that are located in a wastewater treatment facility and associated pump stations. Work is performed on a wide variety of electrical/electronic equipment which requires an in-depth knowledge of modern repair and maintenance procedures. The incumbent maintains proper operating condition of, assembles and installs, and repairs electrical/electronic equipment, devices and apparatus located in a wastewater treatment facility and associated pump stations. The incumbent may be assigned responsibility for maintaining critical equipment during emergencies. Works under the general supervision of the Chief Wastewater Treatment Plant Operator and the Supervisor of Sewer Maintenance. Considerable leeway is allowed for the exercise of independent judgment in accordance with applicable laws and district policy. Employees in this class are required to travel between facilities. Does related electrical and general maintenance work as required.

TYPICAL WORK ACTIVITIES:

1. Conducts detailed process and equipment electrical and control evaluation studies and may be assigned responsibility for overseeing and directing the start-up of major process operations in concert with district operations and/or maintenance personnel;
2. Maintains and repairs such machines as generators, motors, volt meters, oscillators, digital computer trainers, radio transmission equipment, variable and constant speed drive controller, process or treatment plant controller, industrial controls, flow meters, level monitoring equipment, motorized valves and computers (micro and mini), programmable logic controllers, general controls equipment, etc;
3. Diagnoses and corrects problems in electrical and electronic control circuits for various screening, pumping, conveyance and collection, dewatering, filtration, and mixing equipment;
4. Assembles purchased equipment and sets in place; tests new equipment for accuracy in operation and adjustment or calibration where necessary;
5. Maintains inventory of equipment and tools and requisitions supplies as required;
6. Keeps currently abreast of latest developments in the field of electronics, communications, and general controls equipment and systems;
7. May design, fabricate or assemble various types of tools or equipment for use in water pollution control;
8. Installs and terminates new conduit and wire;
9. Updates and maintains department electrical plans with all modifications and maintains necessary maintenance reports as required;
10. Maintains department electrical systems, general controls equipment and systems, heating, ventilating, air conditioning, telephone, paging systems, etc.
11. Prepares reports and maintains records for all electrical and instrumentation repair and maintenance work performed.

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Thorough knowledge of the tools, terminology, procedures and equipment of electricity and electronics; good knowledge of the operation and maintenance of electronic and controls equipment; ability to diagnose problems and make repairs to scientific electronic, instrumentation, and controls equipment; working knowledge of computers, modern software, and related equipment; good communications and report writing skills; ability to design, fabricate and repair various types of electrical and electronic equipment and components; ability to read and interpret electrical diagrams, schematics, and drawings; ability to prepare and maintain records and reports; sound professional judgment; dependability; willingness and ability to learn and understand wastewater treatment processes and general process control equipment; willingness and responsiveness to be called into work during emergency situations; physical condition commensurate with the requirements and demands of the position.

MINIMUM QUALIFICATIONS:

Graduation from a regionally accredited college or university or one accredited by the New York State Board of Regents to grant degrees with an Associate's Degree in electronics **and** two (2) years of full-time paid satisfactory experience in the maintenance, repair and fabrication of electronic equipment of which at least twelve (12) months was in an industrial setting; **OR**

Graduation from high school or possession of an equivalency diploma **and** four (4) years of full-time paid satisfactory experience in the maintenance, repair, and fabrication of electronic equipment as a journeyman electrician of which at least two (2) years was in an industrial setting;

SPECIAL REQUIREMENT:

Candidates must possess a valid New York State driver's license at the time of appointment and for the duration of employment.