

Jurisdictional Class: Competitive
EEO Category: Skilled Craft
Revised: 01/15/2020

WASTEWATER TREATMENT PLANT ELECTRICIAN

DISTINGUISHING FEATURES OF THE CLASS: This position involves responsibility for installing, maintaining and repairing highly technical electrical equipment, including instrumentation, low and medium voltage electrical devices, and telemetry equipment which is part of the automatic operation of the facility. The incumbent works under the general supervision of the Wastewater Treatment Plant Maintenance Superintendent, and is allowed considerable leeway in determining work methods and procedures. Supervision may be exercised over the work of helpers assigned to specific projects. The incumbent performs related work as required.

TYPICAL WORK ACTIVITIES: (Illustrative Only)

Installs, repairs and maintains electrical motors and associated controls, switches, variable frequency drives (VFD's) and ultrasonic level equipment within the system;

Repairs, maintains and installs machinery and equipment throughout the system;

Calibrates flow measuring devices, recording instrumentation and monitoring devices;

Installs and maintains instrumentation equipment such as flow meters, level and pressure sensors, transmitting and receiving devices, indicators, recorders and chemical/sludge feed equipment Supervisory Control and Data Acquisition (SCADA) systems;

Maintains comprehensive and accurate records of maintenance work performed;

Makes recommendations to superiors relative to changes designed to improve the efficiency of operation and/or devices and equipment for use in the system;

Consults with supervisors and/or manufacturers' representatives on difficult repairs and installation of new or modified equipment;

Maintains and installs equipment at the main wastewater plant and its pumping stations;

May supervise assistants assigned to help with large or complex maintenance and repair jobs.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Thorough knowledge of the operation and function of instrumentation, communication and electrical/electronic devices, as applied to wastewater treatment facilities; thorough knowledge of the principles, practices and theories of low and medium voltage electrical distribution systems and control systems; ability to work from plans, schedules and schematics; ability to follow oral and written instructions; ability to troubleshoot various electrical/electronic devices, including relay/electronic controls and monitoring systems; initiative and resourcefulness in solving mechanical, electrical and electronic problems; ability to get along well with others.

MINIMUM QUALIFICATIONS: Either:

- (A) Graduation from a regionally accredited or NYS registered college or university with an Associate's Degree in electrical technology, electronics, or electrical service technology **AND** two (2) years of experience in the installation, maintenance and/or repair of electrical equipment, control systems and/or instrumentation equipment in a public or private setting; **OR**

continued...

MINIMUM QUALIFICATIONS cont'd:

- (B) Graduation from high school or possession of a high school equivalency diploma **AND** four (4) years of experience in the installation, maintenance and/or repair of electrical equipment, control systems and/or instrumentation equipment in a public or private setting.

SPECIAL REQUIREMENT: Possession of a valid New York State driver's license at time of appointment. License must remain valid throughout appointment.

NOTE: Verifiable part-time experience as described above will be pro-rated toward meeting full-time experience requirements.

Adopted: 08/17/1982
Revised: 07/06/1995; 01/03/2014; 01/15/2020