New Milford WPCA

TITLE: SEWER PLANT INSTRUMENTATION MECHANIC

| Department: | Sewer | Salary Range: | \$26.00 |
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| Division: | O & M | Date Created: | February 28, 2015 |
| Bargaining Status: | Non-union | Date Amended: | 09/01/21 |

GENERAL STATEMENT OF DUTIES:

Reports to Sewer Plant and Collections Supervisor.

Performs skilled work primarily in the repair and maintenance of electro-mechanical systems, and in the maintenance and repair of miscellaneous structures, machinery, and equipment. Operates and performs repairs and maintenance of heating systems, electrical and instrumentation systems, structures, and equipment at the treatment plant and related pump stations. Works with both in-house staff and contractors on repairs and maintenance work.

ESSENTIAL FEATURES:

Performs a variety of miscellaneous mechanical and building trade tasks as assigned, making various adjustments and repairs. Responsible for emergency repairs to provide a basis for continued use or operation of buildings and other facilities until complete and major repairs can be made. May inspect work done by contractors.

Maintains, troubleshoots, and repairs electrical and instrumentation equipment, VFDs, motors, controls, level sensors, flow meters, boilers, air conditioning units, heating systems, fire alarms, plant and pumping station equipment, and other equipment to highest efficiency.

Responsible for all of the WPCA's generators and switch gear, ensuring the weekly operations, maintenance recommendations, co-ordination of necessary sub-contracted work on electrical equipment.

Assists personnel with IT problems and able to consult with contracted IT support.

Assists Supervisor with maintaining up-to-date records of preventative maintenance work.

Performs daily rounds of inspection of plant with particular attention to electrical and instrumentation.

Participates in On-Call rotation providing emergency response to plant and pump stations, as well as CBYD mark-outs.

Performs related work as required.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

Considerable knowledge of the operating methods and procedures of a variety of equipment including electrical and pneumatic heating control systems, air conditioning systems and combined HVAC systems, electrical and instrumentation systems as well as maintenance and repair of associated equipment.

Considerable knowledge of electrical systems including emergency lighting systems, fire alarm systems, and generating machinery.

Knowledge of SCADA systems, systems integration and networking, PLC programming, program language and debugging tools.

Knowledge of the theory and practical application of sewage treatment and the units and equipment used therefor.

Knowledge of the occupational hazards and safety precautions of the work related to wastewater treatment facilities, with awareness of the serious health and safety hazards of working in an environment with infectious bacteria and diseases known to exist in wastewater and the constituents in it, such as typhoid, dysentery, hepatitis A & C, flesh eating bacteria, and infectious needles.

Knowledge and ability to work safely and responsibly with use of proper personal protective equipment, sharps and needle safety, gas monitoring and calibration.

Knowledge and experience working in confined spaces, road and highway traffic, and the safety precautions needed to work safely in these situations.

Knowledge of chemicals used in wastewater treatment: Hypochlorite, aluminum sulfate, sodium hydroxide, polymers, solvents and cleaners; and their uses, handling, and health hazards.

Ability to use independent judgment and to supervise the work of less skilled subordinates.

Ability to understand and follow oral and written instructions.

Considerable knowledge of the maintenance and operations of heat generation equipment and heating systems.

Working knowledge of applicable codes and regulations, including OSHA, ASME Code and National Electrical Code.

Ability to read blueprints and electrical and electronic schematics, operations and maintenance manuals and ability to inspect and analyze instruments for defects in their operations and to make necessary corrective adjustment.

Ability to establish and maintain effective working relationships with peers, subordinates, supervisors, contractors and vendors.

Considerable working knowledge of amp meters and volt meters.

Performs skillful electronic and instrumentation work including wiring, soldering and conduit installation.

Knowledge of the maintenance and repair of plumbing systems.

Ability to walk, stand, kneel, climb ladders, lift and carry up to 20-lbs. continually over the course of their shift. Occasionally lift or move objects 50-100 lbs.

Ability to work indoors and out-of-doors, on high and low levels for lengthy periods of time, in various types of weather.

Color vision is critical for this position – must have the ability to be able to recognize and discern colors.

Ability to maintain comprehensive operations and maintenance records.

Ability to operate all sewer department vehicles.

Ability to operate a motor vehicle in the State of Connecticut, with a preference of a CDL driver license.

MINIMUM QUALIFICATIONS:

Graduation from high school or trade school plus a minimum of 5 years experience in industrial electrical maintenance and repairs, building equipment maintenance and repair or repair work as a skilled mechanic, or an equivalent combination of education and experience.

SPECIAL NECESSARY REQUIREMENTS:

Future candidates must successfully complete Collections I offered by Sacramento State within two years of employment.

• Must obtain a CT DEEP Class I Wastewater Treatment Operator Certification within two years of employment, and work obtaining a Class II Wastewater Treatment Certification within three years of employment.

Prefer position to possess a valid State of Connecticut E-2 license or credentials of electrical knowledge extensive to suffice.