

**CITY OF CONCORD  
CLASS SPECIFICATION**

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**CLASS TITLE:** UTILITY ELECTRICIAN  
**DEPARTMENT:** GENERAL SERVICES  
**REPORTS TO:** UTILITIES MAINTENANCE SUPERVISOR

**JOB CODE:** 2414  
**DATE:** 9/10/09

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**JOB SUMMARY:**

Performs electrical and mechanical inspections, diagnoses , preventive maintenance and repairs on wastewater plant and pump station equipment, controls and instrumentation.

**ESSENTIAL JOB FUNCTIONS:**

Maintains all electrical equipment associated with wastewater plants and pump stations; inspects, troubleshoots, repairs, and maintains equipment.

Operates, tests and inspects generators, transfer switches and other related equipment.

Performs calibrations on wastewater facility and pump station equipment and instrumentation.

Troubleshoots PLC and SCADA control systems to identify problems and implements corrective actions as necessary to maintain process control.

Installs various electrical components such as motors, distribution panels, control panels, measuring devices, meters, variable speed drives, and programmable controllers; plans jobs, orders materials, develops schematics, installs conduits, pulls wires, programs controllers, tests equipment, and trains personnel.

Rebuilds and rewires motors, meters, circuits, motor control units, and related equipment.

Assists with mechanical maintenance of equipment as necessary.

Completes daily reports and preventive maintenance records showing work performed on that day and any problems that may exist.

Assists contractors with the installation of new equipment.

Orders and purchases materials.

Informs appropriate personnel concerning the status of repair projects.

Carries out lead worker responsibilities including: training and instructing in job skills, assigning and directing work, checking and approving work, making recommendations in performance appraisal, and reporting problems to supervisor.

Responds to emergency call-ins.

Performs other related duties as assigned.

**MATERIAL AND EQUIPMENT USED:**

Hand Tools  
Welding Tools  
Machinists Tools  
Telephone

Volt/OHM Meter Calibrators  
Lathe  
Multimeter

Vehicle  
Micrometers  
Computer

## **MINIMUM QUALIFICATIONS REQUIRED:**

**Education and Experience:** High School diploma or GED; and five years of progressively responsible related experience, or any combination of education, training and experience which provides the knowledge, skills and abilities required for the job.

### **Licenses and Certifications:**

Valid New Hampshire Driver's License.

Waste Water Treatment Plant Operator License Class I (desirable).

NH Journeyman Electricians License.

## **KNOWLEDGE, SKILLS, AND ABILITIES:**

### **Knowledge of:**

Principles, practices, tools and materials of the mechanical trades.

Operations of water pumps and related equipment.

Wastewater processes and equipment.

Record keeping, report preparation, filing methods and records management techniques.

Applicable state, federal and local laws, rules and regulations.

### **Skill in:**

Mathematical practices.

Using tact, discretion, initiative and independent judgment within established guidelines.

Communicating clearly and effectively, orally and in writing.

Establishing and maintaining effective working relationships with other departments, employees, and the general public.

### **Mental and Physical Abilities to:**

Instruct and train others in wastewater maintenance techniques and methods.

Rewire electrical circuits, meters, motors, and related equipment.

Conduct an effective preventive maintenance program for a large wastewater plant.

Understand and carry out oral and written instructions, giving close attention to detail and accuracy.

Read and interpret documents such as safety rules, operation and maintenance instructions, procedure manuals, and so forth.

Deal with problems involving several concrete variables in standardized situations.

Perform duties while intermittently sitting, standing, stooping, walking, bending, or crouching.

Frequently lift light and occasionally heavy objects.

Climb ladders.

Use tools or equipment requiring a high degree of dexterity.

Distinguish between shades of color.

**Working Conditions:**

Work is performed in an office and in a wastewater treatment plant.

The employee is exposed to noise, dust, dirt, grease, machinery with moving parts, contagious or infectious diseases, and irritating chemicals.

Work is performed outdoors, occasionally in cold or inclement weather.

Work requires the use of protective devices such as masks, goggles, or gloves.

This class specification should not be interpreted as all inclusive. It is intended to identify the essential functions and requirements of this job. Incumbents may be requested to perform job-related responsibilities and tasks other than those stated in this specification. Any essential function or requirement of this class will be evaluated as necessary should an incumbent/applicant be unable to perform the function or requirement due to a disability as defined by the Americans with Disabilities Act (ADA). Reasonable accommodation for the specific disability will be made for the incumbent/applicant when possible.