SENIOR MAINTENANCE MECHANIC I (INSTRUMENTATION)

DISTINGUISHING FEATURES OF THE CLASS: Under general supervision, an incumbent performs journeyman level maintenance and repair of meters, register and panel board instrumentation in wastewater treatment plants or various County buildings. The incumbent is responsible for the maintenance, servicing, and proper operation of meters, transmitters, indicators and summators used on a wide variety of mechanical and electrical systems and machinery which control the operation of wastewater treatment plants, pump stations, or County building systems. Work is performed with considerable independence, in accordance with written or oral instructions. The incumbent may work as part of a crew or as lead worker on specific projects and may supervise a number of lower level maintenance and labor employees, or supervise and coordinate the work performed by service contractors. The journeyman is fully proficient in the skills and practices of the trade, with the full knowledge of the principles, tools and techniques. The journeyman has responsibility for determining methods, techniques, materials, and/or devices best suited to complete projects. Work at this grade may be completed with little or no check during progress or on completion. Supervisor may check overall work to see that it meets trade standards. Does related building and site work as required.

EXAMPLES OF WORK: (Illustrative Only)

Installs, services, maintains, and repairs instrumentation equipment needed to monitor and control operations;

Adjusts, calibrates and maintains automatic, electronic, pneumatic and mechanical control instruments to assure operation at specified rates;

Adjusts, calibrates and maintains electric, pneumatic, and clock mechanism drive motors, actuators;

Adjusts, calibrates and maintains gear and cam operated mechanism on chart drives;

Cleans and services relays for pickup and drop-out, checking coil voltage and resistance;

Maintains and repairs flow meters, panel boards, relays, solid state, vacuum, and pneumatic transmitters, receivers and controllers;

Calibrates pressure gauges and diaphragms;

Calibrates bourdon type pressure gauges and air conditioning and heating thermostats;

Repairs and maintains thermocouple, thermisters and radiation type pyrometers;

Repairs and maintains tachometers, converters;

Repairs and maintains liquid level gauges including static pressure, diaphragm, bubbler float and differential pressure types;

Operates and programs DDC HVAC control system;

EXAMPLES OF WORK: (Illustrative Only) (Cont'd.)

Repairs and maintains telemetering equipment;

Repairs, calibrates, trouble shoots all components of a Building Mechanical Control System;

Modifies software as directed by supervisor on computer control system;

Performs routine and emergency repairs and maintenance, both scheduled and in response to emergency situations, as required;

Keeps records of calibration and running parameters after repair;

Works with low and medium voltage electric system controls;

Performs snow removal duties as needed;

Uses computer applications or other automated systems such as spreadsheets, word processing, calendar, e-mail and database software in performing work assignments;

May perform other incidental tasks, as needed.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Thorough knowledge of the tools, terminology and techniques associated with mechanical and electrical control instruments; thorough knowledge of system operation and equipment for which the controls operate and monitor; thorough knowledge of the accident and safety precautions of the trade; ability to plan work and lay out a job in the most economical and efficient manner; ability to coordinate work with other personnel; ability to work effectively with supervisory and subordinate personnel in carrying out the duties of the position; ability to read, write, speak, understand, and communicate in English sufficiently to perform the essential duties of the position; ability to use computer applications such as spreadsheets, word processing, e-mail and database software; resourcefulness in meeting new and unusual problems; initiative in carrying out work and seeking improved work methods; physical condition commensurate with the demands of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: A high school or equivalency diploma and either: (a) four year experience in the trade; or (b) four years full time experience under an instrumentation journeyman which provided training and experience equivalent to that given in an apprenticeship program; or (c) four years experience in electrical and mechanical repair, maintenance and installation, two of which must have included instrumentation; (d) completion of a two year post high school or trade school course* and two years experience in the trade.

SUBSTITUTION: Apprenticeship training in instrumentation or training gained by the completion of technical courses in instrumentation at a school institute or branch of the Armed Services may be substituted for the above training and experience on a year for year basis.

SPECIAL REQUIREMENTS:

1. Possession of a valid license to operate a motor vehicle in the State of New York will be required at time of appointment and maintain same while in the title
2. Depending on work assignment, must meet standards of OSHA regulation 1910.134 Respiratory Protection, and will be required to meet Federal, State and local standards with respect to health and safety.

*SPECIAL NOTE: Education beyond the secondary level must be from an institution recognized or accredited by the Board of Regents of the New York State Department of Education as a post-secondary, degree-granting institution.

NOTE: Unless otherwise noted, only experience gained after attaining the minimum education level indicated in the minimum qualifications will be considered in evaluating experience.