STATIONARY ENGINEER

DISTINGUISHING FEATURES OF THE CLASS: The incumbent in this position is a working supervisor with responsibility for the safe and efficient operation, maintenance, repair, planning and installation of heating, ventilating, air conditioning and refrigeration systems at County facilities. This is a highly skilled position involving expertise in the operation and maintenance of a large complex system of boilers, chillers, air handlers and associated control equipment. The work is performed under the general supervision of a higher level administrator, who provides work assignments and direction. The incumbent exercises direct supervision over subordinate personnel involved in the operation, maintenance and repair of the heating, ventilating, air conditioning and refrigeration systems. Does related work as required.

TYPICAL WORK ACTIVITIES:

Supervises the maintenance and operation of large low pressure steam and hot water boilers, air conditioning and refrigeration units, cooling towers and all auxiliary controls;

Observes and inspects work while in progress and when completed, to insure the proper use of materials and workers;

Ensures that safety regulations and relevant codes are followed and that work is performed according to plan and schedule;

Maintains proper chemical treatments for boiler water and cooling tower water;

Locates and determines malfunctions using test equipment common to the mechanical, refrigeration and plumbing trades;

Implements the facilities energy conservation policy related to heating, ventilation and air conditioning equipment operation and management, following established procedures, guidelines and standards;

Tours facilities to observe operating equipment, meters and gauges to insure that operations are in accordance with specified instruction and/or parameters;

Stops, starts, adjusts and regulates equipment being operated;

Inspects heating, ventilating and air conditioning equipment periodically and monitors it to insure that efficient operation is maintained;

Makes adjustments as required;

Observes, troubleshoots, repairs and calibrates both pneumatic and electric temperature control mechanisms;

Inspects heating, ventilating and air conditioning systems for required code performance and safety regulations;

Makes repairs as necessary for proper conformance;

Observes, troubleshoots, repairs and maintains auxiliary equipment such as pumps, compressors, valves, regulators and controllers;

Prepares preventive maintenance schedules applicable to heating, ventilating and air conditioning;

Prepares estimates of materials and parts needed and associated costs; Directs the ordering of materials, equipment and parts;

Maintains tool and equipment inventories according to prescribed procedures;

Interprets oral and written instructions, including technical manuals, blueprints, specifications and plans;

Plans and lays out work for implementation;

Inspects work performed by outside contractors to insure conformance to project plans and specifications;

Maintains written records and reports of work performed and accounts for labor and materials used;

Performs technical evaluation and adjustment of boilers, chillers, fans and humidifiers, and their control systems;

Provides training, instruction and assistance in the performance of specific tasks;

Performs other assigned building maintenance tasks as necessary;

May be required to update skill levels through additional education/training relating to new developments in the HVAC field.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Comprehensive knowledge of the principles and practices involved with large, complex heating, ventilating, air conditioning and refrigeration systems;

Comprehensive knowledge of the construction, as well as the safe and efficient operation of heating, ventilating and air conditioning equipment and boilers, chillers, cooling towers and auxiliary equipment, such as pumps, compressors, valves and regulators;

Thorough knowledge of the methods, materials and test equipment used in the maintenance and repair of heating, ventilating, air conditioning and refrigeration equipment and boilers, chillers, cooling towers and associated auxiliary equipment, such as pumps, compressors, valves and regulators;

Thorough knowledge of applicable codes and regulations;

Thorough knowledge of appropriate policies, practices and standards relating to heating, ventilating, air conditioning and refrigeration operations;

Good knowledge of building management software and a variety of computer programs (Word, Excel, Office);

Ability to supervise and train subordinates;

Ability to plan and schedule work;

Ability to estimate materials and equipment requirements as well as costs of repairs and maintenance work;

Ability to read and interpret technical manuals and blueprints;

Ability to diagnose complex heating, ventilating and air conditioning problems;

Ability to adjust DDC controls;

Ability to use hand and power tools of the mechanical, plumbing and refrigeration trade;

Ability to establish priorities for the maintenance of heating, ventilating, air conditioning and refrigeration equipment;

Ability to assign and schedule work as well as provide oral instructions to subordinates;

Ability to read and understand engineering and architectural drawings as related to heating, ventilating, air conditioning and

refrigeration requirements;

Ability to observe and inspects work both in progress and when completed, to insure that the job is done properly and that the appropriate code and safety requirements have been adequately satisfied;

Ability to use good judgement and tact in dealing with contractors, the general public and County employees;

Ability to climb, stoop and do moderately heavy lifting;

Willingness to respond to emergencies associated with duties of the position;

Mechanical aptitude;

Physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS:

Graduation from high school or possession of an equivalency diploma and five years of experience operating and maintaining complex HVAC systems, auxiliary equipment and controls in a facility.

NOTE: Education and/or training at a regionally accredited or New York State registered college, university or technical school in heating, ventilating, air conditioning or closely related field may be substituted for experience on a year-for-year basis.

SPECIAL REQUIREMENTS AT TIME OF APPOINTMENT:

- 1) Certification as a <u>Universal</u> (Type I, II & III) Refrigerant Transition and Recovery Technician as required by the Code of Federal Regulations, Part 82, Subpart F, and approved by the Environmental Protection Agency.
- 2) Possession of the appropriate level Motor Vehicle Operator's License.

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