

Facility Systems Engineer

**DEPARTMENT:**

Maintenance

**INCUMBENT NAME:**

**REPORTS TO:**

Facilities Administrator

**FLSA DESIGNATION:**

Non-exempt

**PART I – SUMMARY OF SCOPE OF CLASSIFICATION**

**This class is accountable for the operation and maintenance of high-pressure steam equipment under supervision or with primary responsibility as Building Systems Engineer for the operation and maintenance of low-pressure steam equipment or with primary responsibility for the operation and maintenance of a wide-range of complex heating, ventilation, air conditioning and refrigeration and/or mechanical and electrical equipment and/or system.**

**PART II – MINIMUM KNOWLEDGE, SKILLS AND ABILITIES**

**A. EDUCATION AND EXPERIENCE:**

Three (3) years of skilled mechanical and facilities maintenance experience that has included: heating ventilation, air conditioning and refrigeration, electrical, mechanical and boiler, operation, maintenance and repair work. Completion of a two (2) year post-high school, vocational-technical program with course work in air conditioning/refrigeration/heating, electrical maintenance and boiler control, operation and maintenance may be substituted for two (2) years of experience requirement; or an equivalent combination of training and experience.

**B. CREDENTIALS:**

**C. LICENSURES, CERTIFICATIONS AND OTHER REQUIREMENTS:**

Possession of a valid Minnesota Engineer's 1st Class C

Incumbents in this class may be required to possess a current Minnesota Motor Vehicle Class D Operator License.

**D. CONTINUING EDUCATION REQUIREMENTS:**

**E. KNOWLEDGE, SKILLS AND ABILITIES:**

1. Knowledge of HVAC/R operations, maintenance and repair including boilers, chillers, air handling systems, piping systems, pumps, air conditioning/refrigeration systems, emergency generators and building/equipment electrical systems;
2. Knowledge of pneumatic and DDC theory - circuits, tests and instruments;
3. Knowledge of the operation of computer programs for BAS, CMMS and other facilities maintenance functions;
4. Knowledge of OSHA safety issues;
5. Knowledge of techniques for cutting, brazing, heating, and shaping metals;
6. Knowledge of general building and appliance repair;
7. Knowledge of occupational hazards and safety precautions of the job;
8. Skilled in operating and maintaining HVAC/R electrical systems and their apparatuses in a safe, responsible and efficient manner;
9. Skilled in operating power/hand tools and machines;
10. Ability to work independently with limited supervision;
11. Ability to work within small and confined spaces and from portable ladders at varying heights;

12. Ability to use foot-eye-hand coordination;
13. Ability to lift, grasp, and carry equipment and tools weighing up to 50 pounds;
14. Ability to distinguish colors for water treatment tests;
15. Ability to gain cooperation of other people;
16. Ability to work as a team member;
17. Ability to perform/work and concentrate amid distractions;
18. Ability to make rapid, accurate decisions;
19. Ability to attend to several tasks simultaneously;
20. Ability to learn and understand technical materials, specifications, pneumatic/electrical schematics, and building blueprints;
21. Ability to prepare and maintain reports and logs;
22. Ability to work with individuals from diverse backgrounds.

### **PART III – POSITION SUPERVISES:**

### **PART IV - ESSENTIAL FUNCTIONS**

The following identifies the primary and essential functions of the position and is not intended to be an exhaustive listing of all duties.

1. Operates and maintains heating, ventilation, air conditioning/refrigeration (HVAC/R) systems and their apparatuses in order to maintain comfort of occupants and promote efficient energy use (e.g. boilers, pressure reducing stations, water heaters, building automation system (BAS) and variable air volume (VAV) systems chillers, air conditioning (A/C) and refrigeration units, cooling towers, compressors, pneumatic/direct digital controls (DDC), emergency generators, circulating pumps, fan units, and electrical systems);
2. Assists in and/or troubleshoots the building automation system and, makes recommendations for maintenance of building control systems;
3. Operates computerized maintenance management software systems; performs and/or instructs maintenance staff on preventative maintenance work orders;
4. Performs a variety of facilities system maintenance functions (e.g. electrical, plumbing, mechanical, routine structural, welding, fabrication, and maintenance of related equipment);
5. Ensures the proficient performance of BAS system and makes modifications to its operational parameters as appropriate;
6. Trains staff on technical manuals, specifications, reports, pneumatic and electrical schematics, and building blueprints; and reviews DDC systems/controls/alarms to determine proper operation;
7. Responds to maintenance requests, emergency calls for repair, security hardware problems and utility requests;
8. Maintains and prepares reports and logs (e.g. preventative maintenance reports, work order reports, boiler operations logs, and fuel usage logs);
9. Organizes, cleans and inventories equipment rooms and shops;
10. Performs other related duties.

THE ABOVE STATEMENTS ARE INTENDED TO DESCRIBE THE GENERAL NATURE AND LEVEL OF WORK BEING PERFORMED BY THE EMPLOYEE ASSIGNED TO THIS POSITION. THEY ARE NOT TO BE CONSTRUED AS AN EXHAUSTIVE LIST OF ALL JOB RESPONSIBILITIES AND DUTIES PERFORMED BY PERSONNEL SO CLASSIFIED. DISTRICT IS AN EQUAL OPPORTUNITY EMPLOYER. IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, THE DISTRICT WILL PROVIDE REASONABLE ACCOMMODATIONS TO QUALIFIED INDIVIDUALS WITH DISABILITIES AND ENCOURAGE BOTH PROSPECTIVE AND CURRENT EMPLOYEES TO DISCUSS POTENTIAL ACCOMMODATIONS WITH THE DISTRICT WHEN NECESSARY.