

## Approved FCC Job Description

<b>Maintenance Technician (HVAC )</b>	7/01/08, revised 7/01/10
Job Code:	Eligible for Overtime: Yes
Salary Plan and Grade: 8	

### General Description of the Job

Provide HVAC/refrigeration and other technical support to the Maintenance Department. Maintain and operate plant equipment, i.e. boilers, chillers, pumps, etc. and provide other multi-trade support to Plant Operations and the Maintenance Department.

### Essential Functions

The following are the functions essential to performing this job.

1. Install, operate, service, and repair light commercial heat pump/air conditioning systems and other HVAC equipment such as refrigerators, fume hoods, window units, exhaust ventilators, coolers, deep freezers, and unit ventilators.
2. Operate, service, and repair pneumatic, electric, or electronic control systems on HVAC systems.
3. Regulate, maintain, and monitor air conditioning compressors, cooling tower fans and other related support equipment as prescribed by operating procedures.
4. Regulate, maintain, and monitor all building air handling equipment for central and local stations.
5. Perform test and balance procedures to air and hydronic systems to determine required adjustments. Make adjustments to assure optimal system operation.
6. Operate, service, and repair air handling and hydronic pumping systems of various designs.
7. Perform service tasks such as adding refrigerant, lubricating, adjusting and replacing compressors and expansion devices, repairing pumps, servicing cooling towers, and repacking valve glands and pump seals.
8. Install and reinstall wiring and controls to connect components and controls to electrical power sources at low line voltage.
9. Diagnose HVAC system problems utilizing computer applications. Review mechanical blueprints, schematics, specifications, and performance data to identify and provide interpretations of system problems and performance.
10. Provide guidance and training in the HVAC trade to other maintenance personnel.
11. Perform mechanical joining of piping by using industry methods such as soldering, brazing, and gas welding. Insulate piping and mechanical equipment such as heat exchangers and associated subsystems. Perform insulation repairs to air duct systems.
12. Diagnose, maintain, and perform service repairs to gas burners.
13. Diagnose, maintain and perform service repairs to variable frequency drive applications on pumps, fans, and any other power electronic devices.
14. Service and repair humidification systems utilizing steam and/or self-generated applications.
15. Interpret technical data, manufacturer, and supplier information. Recommend equipment selections. Develop analysis of system operation based on mechanical drawings and specifications.
16. Prepare estimates of time, labor and materials to be used on assigned tasks.
17. Remediate air quality issues in the zone.
18. Maintain current Journeyman level knowledge of HVAC/refrigeration practices for commercial buildings.
19. Troubleshoot, repair and calibrate HVAC and/or refrigerated equipment, refrigerant recovery and control systems.
20. Operate and maintain standard tools of the trade including power and hand tools.
21. Perform all work in accordance with all established safety standards (such as OSHA lockout/tagout).
22. Perform preventive maintenance to assure minimal equipment breakdowns.
23. Serve as on-call maintenance technician as scheduled and respond to maintenance emergencies.
24. Maintain proficiency in the use of the computerized facilities management system (Metasys).
25. Prepare specifications for the requisition of equipment, tools, parts and supplies. Inspect these items upon receipt for adherence to specifications.
26. Use heavy equipment such as bucket truck, tractor etc. to complete projects.
27. Serve Maintenance Department with routine multi-trade skills related to plumbing, electrical, carpentry, metal fabrication, general repairs and plant operations.
28. Perform maintenance and plant operations duties for which licensure as a Grade 2 Maryland Stationary Engineer is required, such as, maintaining the operation of plant machinery and/or boilers generating pressure of at least 15 psi and operating at up to 499 horsepower by inspecting equipment to detect routine malfunctions, need for repair, adjustment and lubrication; reading meters and gauges and monitoring the building automated control systems to verify operating conditions; performing first echelon cleaning, repair and maintenance of boilers, chillers, cooling towers, pumps and associated plant operations equipment.

### Other Functions

Individuals in this job may be assigned one or more of the following tasks on a rotating or as-needed basis.

1. Perform as part of the team doing routine setups, moves and snow removal.
2. Other duties as assigned.

### **Required Knowledge, Skills, and Abilities**

The individual in this job must possess these skills and abilities or be able to explain and demonstrate that they can perform the essential functions of the job, with or without reasonable accommodation, using some other combination of skills and abilities.

1. Demonstrated Journeyman level knowledge and skill in the methods and techniques used in the HVAC/refrigeration trade.
2. Current CFC certification; certified refrigerant recovery.
3. Working knowledge of OSHA regulations related to the refrigeration trade; of National Electric Code.
4. Skill in welding, brazing, soldering, and silfoss.
5. Demonstrated proficiency with plumbing, carpentry, electrical and plant operations.
6. Demonstrated knowledge of the proper use, care, and maintenance of standard hand and power tools of the trades.
7. Demonstrated knowledge of computers and related software to diagnose HVAC system problems and to prepare reports.
8. Thorough knowledge of, and skill in, basic mathematics including: area, volume, weights, and the practical application of fractions, percentages, ratios, and proportions.
9. Ability to communicate effectively and carry out oral and written instructions.
10. Ability to read, interpret, and work from blueprints, schematics, drawings, specifications, and construction documents; ability to draw and sketch assigned project items when required.
11. Ability to read and understand manufacturers' recommendations regarding scheduled and preventive maintenance, servicing, and operation.
12. Ability to manipulate heavy equipment, tools and supplies and/or exert force up to 70 lbs.
13. Ability to work in, on, around, over and under fixed equipment and machinery and to work at heights up to 40 feet.
14. Ability to work in hazardous or irritating environments and adverse weather or temperature conditions; to wear and work in personal protective equipment.
15. Demonstrated ability to use heavy equipment such as bucket truck, tractor, etc, and concurrently manipulate multiple controls when necessary to complete projects.
16. Demonstrated ability to diagnose problems, communicate findings, order appropriate parts and make timely repairs.
17. Possession of a valid driver's license and a good driving record.
18. Ability to use varying styles, approaches, skills and techniques that reflect an understanding and acceptance of the role of culture in a diverse, multi-cultural workplace.

### **Qualification Standards**

1. Education: High School or equivalent; licensure as a Grade 2 Maryland Stationary Engineer, or ability to obtain Grade 5 Stationary Engineer license prior to completion of 6 month probationary period and Grade 2 Stationary Engineer license in a reasonable period of time.
2. Successful experience: Five years at the Journeyman's level in the commercial HVAC/refrigeration field. CFC Certification required.
3. Other preferences: Previous Metasys experience; knowledge of other trades, electrical, plumbing, etc. Employees assigned to work with CFC refrigerants must maintain valid certification in accordance with federal law.

### **Performance Standards**

The criteria for evaluation in this position include, but are not limited to, the following:

1. Problems are identified, diagnosed and solved in a reasonable amount of time.
2. Performs work with an emphasis on quality, durability and safety.
3. Responds appropriately when teamwork is necessary.
4. Maintains current knowledge of HVAC/refrigeration trade practices and regulations/codes.

*Note: The College reserves the right to change or reassign job duties, or combine positions at any time.*