



SENIOR HVAC TECHNICIAN

DEFINITION

Under direction, leads, oversees, reviews and participates in the work of staff performing skilled work in the maintenance and repair of District heating, ventilation, air conditioning (HVAC) refrigeration, and energy management work orders; oversees and ensures that preventive and corrective maintenance on HVAC equipment is completed according to established schedules and timelines; reads and interprets plans and blueprints; and performs related duties as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from assigned supervisory or management personnel. Exercises technical and functional direction over and provides training to less experienced staff. Exercises no direct supervision over staff.

CLASS CHARACTERISTICS

This is the advanced level classification in the HVAC series responsible for performing the most complex work assigned to the series, such as leading and directing the work of assigned maintenance staff and/or performing skilled HVAC maintenance and repair duties. Incumbents regularly work on tasks which are varied and complex, requiring considerable discretion and independent judgment. Positions in the classification rely on experience and judgment to perform assigned duties. Assignments are given with general guidelines and incumbents are responsible for establishing objectives, timelines, and methods to complete assignments. Work is typically reviewed upon completion for soundness, appropriateness, and conformity to policy and requirements.

EXAMPLES OF TYPICAL JOB FUNCTIONS

Management reserves the right to make reasonable accommodations so that qualified employees with verified medical conditions can perform the essential functions of the job.

- Leads, oversees, reviews and participates in the work of staff performing skilled work in the maintenance and repair of District HVAC systems; ensures completed work is of high quality and accomplished in a timely manner.
- Assures optimum comfort and efficiency with District HVAC equipment and related components, including pumps, chillers, cooling towers, interior and exterior lighting, air handling configurations, and related items; redesigns District HVAC, boilers, air handler energy management system functions and coding.
- Design, installs, maintains and repairs heating and air conditioning equipment (HVAC), and maintain major heating/refrigeration and air conditioning units, coils, fans, subsystems and components parts, including kitchen equipment.
- Inspect and examine heating/refrigeration and air-conditioning, chillers, boilers, air compressors, heat exchangers, and all auxiliary equipment to locate defects in operations.
- Disassembles units and restore to operating condition.
- Leads and oversees the repairs or replacements of condensers, compressors, pumps, valves, motors, bearings, belts and other parts.
- Recycle and charge refrigerants as required.
- Oversees preventive maintenance on cooling towers and evaporative condensers.
- Inspect and test refrigeration systems, safety devices, and controls for efficiency of operation and compliance with safety practices, laws and regulations.

- Troubleshoot and take necessary corrective action for major malfunctions and breakdowns of heating/refrigeration and air-conditioning systems, pumps, air handlers, chillers, fans, ducts, dampers and grills.
- Maintains records required by the Environmental Protection Agency (EPA) and Air Quality Management District (AQMD) for District equipment operations, repairs, preventive maintenance, refrigerants utilized, and air quality.
- Reads and interprets plans, blueprints and specifications and ensures conformity with codes and safety regulations.
- Works productively and cooperatively with others by demonstrating respect, patience, and equitable treatment of all internal and external customers.
- Observes and complies with District and mandated safety rules, regulations, and protocols.
- Performs other related duties as assigned.

QUALIFICATIONS

Knowledge of:

- Energy management systems and the related control, design, installation and maintenance of such systems and components.
- EPA regulations related to the use of refrigeration and ozone depleting substances.
- Standard tools, equipment, materials, methods and techniques used in the maintenance and installation of HVAC equipment.
- Operation and proper maintenance of tools, equipment and machinery used in the maintenance of HVAC equipment as well as building and construction maintenance trades.
- Requirements of maintaining HVAC Systems and District vehicles in good repair.
- Applicable building codes, ordinances, fire regulations and safety precautions.
- Proper methods of storing equipment, materials and supplies.
- District and mandated safety rules, regulations, and protocols.
- Basic mathematics.
- Principles and practices of record keeping.
- Techniques of providing a high level of customer service by effectively interacting with students, staff, faculty, representatives of outside organizations, and members of the public, including individuals of diverse academic, socio-economic, ethnic, religious, and cultural backgrounds, physical ability, and sexual orientation.
- The structure and content of the English language to effectively perform the work.
- Modern equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

Ability to:

- Plan, lead, direct, review and participate in the work of staff performing skilled work in the maintenance and repair of District's HVAC systems.
- Maintain and control the District's energy management system.
- Perform a variety of skilled HVAC maintenance and repair of District equipment.
- Design and install all aspects of HVAC equipment and systems.
- Operate a variety of hand and power tools and stationary mechanical equipment, HVAC specialty tools and a variety of hand and power tools in a safe and effective manner.
- Maintain records and prepare reports.
- Analyze situations accurately and adopt an effective course of action.
- Perform heavy physical labor.
- Understand and follow oral and written directions.
- Independently organize work, set priorities, meet critical deadlines, and follow-up on assignments.

- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Effectively use computer systems, software applications, and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally and in writing.
- Demonstrate sensitivity to, and understanding of, the diverse academic, socio-economic, ethnic, religious, and cultural backgrounds of community college students.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Education and Experience:

Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

Education:

- Equivalent to completion of the twelfth (12th) grade, supplemented by specialized coursework and training in HVAC.

Experience:

- Ten (10 years) of increasingly responsible experience in HVAC servicing, preferably at a higher educational institution or a large business with a multi-building campus.

Licenses and Certifications:

- Possession of a valid California Driver's License to be maintained throughout employment.
- Possession of a valid EPA 608 Certification to be maintained throughout employment.

PHYSICAL DEMANDS

Must possess mobility to work in the field; strength, stamina, and mobility to perform medium to heavy physical work; to sit, stand, and walk on level, uneven, or slippery surfaces; frequently reach, twist, turn, kneel, bend, stoop, squat, crouch, grasp, and make repetitive hand movement in the performance of daily duties; to climb and descend ladders, to operate varied hand and power tools and construction equipment, and to operate a motor vehicle and visit various District sites; and vision to read printed materials and computer screens, and to inspect and operate equipment. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards. Finger dexterity is needed to operate and repair tools and equipment. Employees must possess the ability to lift, carry, push, and pull materials and objects averaging a weight of 50 pounds or heavier weights, in all cases with the use of proper equipment and/or assistance from other staff.

ENVIRONMENTAL CONDITIONS

Employees work in the field and are exposed to moving mechanical parts, high voltage, loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, Freon, gas from heaters and boilers, carbon monoxide, mechanical and/or electrical hazards, hazardous physical substances and fumes, dust, and air contaminants. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.