CHICO UNIFIED SCHOOL DISTRICT
SENIOR MAINTENANCE WORKER – HVAC/REFRIGERATION

DEFINITION
Under direction, to perform a variety of skilled tasks and operations in the inspection, servicing, installation, maintenance and repair of heating, ventilation, air conditioning and refrigeration systems in District buildings and facilities; operate, configure and maintain the Energy Management System (EMS).

SUPERVISION EXERCISED
May exercise technical and functional supervision over lower level staff.

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

• Install, service, maintain, troubleshoot and repair heating, ventilation, air conditioning and refrigeration systems; diagnose malfunctions and determine repair needs; inspect and perform electrical and mechanical tests on systems and equipment to identify defective parts; assure systems are maintained in safe and proper operating condition in compliance with applicable codes.
• Operate, configure and maintain the EMS; utilize EMS to troubleshoot and diagnose HVAC & R malfunctions; utilize system controls to adjust temperatures, time schedules, energy use and other settings; adjust the EMS to assure smooth, efficient and effective energy use and allocation; respond to requests for system adjustments as appropriate; generate reports concerning equipment use.
• Install, replace, service and repair various HVAC & R parts, components, devices and equipment such as thermostats, controls, boilers, heaters, generators, gauges, compressors, pumps, coils, chillers, relays, switches, valves, fans, motors, gaskets, filters and belts; cut, bend and join tubing, pipes and wiring as needed; lubricate and adjust various system components.
• Adjust, maintain and repair ducting, air conditioning, cooling and refrigeration systems and units; detect and repair leaks as needed; replenish various refrigerants and oils in accordance with established regulations and procedures as needed.
• Receive work orders; confer with supervisors and building administrators to determine work priorities; confer with originators regarding desired finished product;
• Operate and maintain specialized equipment including testers, meters, gauges, pumps and a variety of hand and power tools; utilize computers and related hardware and software applications to diagnose system malfunctions and operate EMS; drive a vehicle to conduct work.
• Estimate labor, material and equipment needed for assigned projects; prepare cost estimates; monitor inventory levels of materials and equipment; order, receive and maintain adequate inventory of materials and equipment.
• Plan, organize and lay out assigned tasks; interpret HVAC & R plans, diagrams, blue prints, drawings, sketches, specifications and blueprints; work from verbal and written instructions and work orders; respond to emergency situations.
• Schedule and perform preventive maintenance inspections and servicing on heating, refrigeration and air conditioning equipment.
• Store, remove and dispose of oils, refrigerants and other hazardous materials in accordance with established laws, regulations and procedures; perform calculations to determine proper boiling point for refrigerants.
• Inspect and determine source of sewer, gas and other fumes as required; implement corrective actions to eliminate fumes.
• Participate in Department-wide projects and assist other trades workers with maintenance and repair projects as needed.
• Communicate with District personnel and various outside agencies to exchange information and resolve issues or concerns.
• Maintain various records related to refrigerants, projects, EMS and assigned activities.
• Maintain work areas, equipment and tools in a safe, clean and orderly condition.
• Perform related duties as assigned.
JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

- Methods, procedures, equipment and materials used in the installation, maintenance and repair of ventilation, heating, air conditioning and refrigeration equipment.
- Operation, maintenance and adjustment of energy management systems.
- Ventilation, heating, air conditioning and refrigeration systems utilized by the District.
- Appropriate safety precautions and procedures.
- Operation and maintenance of tools, equipment and machinery used in the HVAC & R trade.
- Building codes related to the HVAC & R trade.
- Proper methods of storing equipment, materials and supplies.
- Electrical power supply and high voltage.
- Operation of a computer and assigned software.
- Shop math applicable to the building trades.
- Technical aspects of the HVAC & R trade.
- Mechanics of refrigerant flow control and pneumatic, electrical and electronic control systems.
- Oral and written communication skills.
- Proper lifting techniques.
- Record-keeping techniques.

Ability to:

- Perform a variety of skilled tasks and operations in the inspection, servicing, installation, maintenance and repair of heating, ventilation, air conditioning and refrigeration systems.
- Operate and maintain the EMS to assure smooth, efficient and effective energy use and allocation.
- Troubleshoot and diagnose HVAC & R device, system and equipment malfunctions.
- Read and work from blueprints, shop drawings, sketches, manuals and diagrams.
- Plan and lay out HVAC & R work.
- Operate and maintain tools, equipment and machinery used in the HVAC & R trade.
- Observe health and safety regulations and procedures.
- Estimate material, equipment and supply needs. Replace defective parts and components as necessary.
- Operate a computer and assigned software.
- Communicate effectively both orally and in writing.
- Work cooperatively with others.
- Meet schedules and time lines.
- Understand and follow oral and written instructions.
- Work with hazardous chemicals.
- Work independently with little direction.
- Establish and maintain cooperative and effective working relationships with others.
- Maintain various records related to work performed.

EXPERIENCE and TRAINING GUIDELINES

Any combination equivalent to experience and training that would provide the required knowledge, skill, and ability would be qualifying. A typical way to obtain the knowledge, skill, and ability would be:

Experience:

- Must be at least 21 years of age.
- Four years of journey-level experience in the installation, maintenance, and repair of HVAC & R systems and equipment including work with energy management systems.

Training:

- Formal or informal education or training which ensures the ability to read and write at a level necessary for successful job performance supplemented by completion of a formal apprenticeship program.

License or Certificate:

- Possess an appropriate, valid driver's license.
- Ability to obtain EPA Retrieval and Recovery certification by the 5th month of the probationary period.
Special Requirements:
- Indoor and outdoor work environment.
- Regular exposure to fumes, dust, dirt, oil and grease.
- Driving a vehicle to conduct work.

PHYSICAL DEMANDS:
- Dexterity of hands and fingers to operate specialized equipment and tools.
- Hearing and speaking to exchange information.
- Seeing to read and perform HVAC & R functions.
- Lifting, carrying, pushing or pulling heavy objects as assigned by the position.
- Reaching overhead, above the shoulders and horizontally.
- Bending at the waist, kneeling or crouching.
- Climbing ladders and working from heights.
- Sitting or standing for extended periods of time.
- Heavy physical labor.
- Ability to lift 50 lbs.
- Working around and with machinery having moving parts.
- Working at heights.
- Working in a cramped or restrictive work chamber.