# CAJON VALLEY UNION SCHOOL DISTRICT

# CLASS TITLE: HEATING, VENTILATION, AIR CONDITIONING & REFRIGERATION (HVAC&R) TECHNICIAN

#### **BASIC FUNCTION:**

Under the direction of the Director-Facilities, Maintenance and Operations, perform journey-level work in the inspection, servicing, installation, maintenance and repair of heating, ventilation, air conditioning and refrigeration (HVAC&R) systems and equipment for District buildings and facilities; repair, maintain, and program the District's Energy Management Control Systems; assist other maintenance personnel in the performance of a variety of duties as assigned.

# **REPRESENTATIVE DUTIES:**

# **ESSENTIAL DUTIES:**

Perform journey-level work in the inspection, servicing, installation, maintenance and repair of heating, ventilation, air conditioning and refrigeration (HVAC&R) systems and equipment for District buildings and facilities; inspect and perform tests on systems and equipment to identify defective parts and assure proper functioning.

Adjust, repair and replace ducting and air conditioning systems; repair leaks and replenish freon as needed; service heating systems according to established guidelines; light pilots; clean out vents; inspect, maintain, operate and repair pneumatic and electrical thermostats and control systems.

Operate, configure and maintain the District's computerized Energy Management Systems (EMS's) to assure smooth, efficient and effective energy use and allocation; modify system settings and utilize system tools and controls to troubleshoot and diagnose system malfunctions; install software updates; test EMS's to assure proper settings.

Service and repair centrifugal chillers and related hardware; assure proper working condition of chillers.

Calibrate and install valves, thermostats, masters and submasters.

Diagnose, troubleshoot, disassemble, repair, maintain, and service forced air heating, cooling, and refrigeration equipment.

Operate and maintain specialized equipment including pumps, gauges, welding equipment, meters and a variety of hand and power tools; drive a vehicle to conduct work.

Plan, organize and lay out assigned tasks; interpret HVAC & R plans, diagrams, blue prints, sketches and specifications; work from verbal and written instructions and work orders.

Estimate labor, material and equipment needed for assigned projects; monitor inventory levels of materials and equipment; assist in laying out, evaluating, and estimating costs of job request; order, receive and maintain inventory of materials and equipment as needed.

Communicate with other personnel and various outside agencies to exchange information and resolve issues or concerns; oversee the work of outside contractors and vendors; assist other

maintenance personnel in the performance of a variety of duties as assigned.

Maintain various records related to work orders and assigned activities; maintain appropriate parts inventory in shop and on District vehicles.

Maintain shop and work areas in a safe, clean and orderly condition.

#### OTHER DUTIES:

Perform related duties as assigned.

#### **KNOWLEDGE AND ABILITIES:**

#### KNOWLEDGE OF:

Methods, procedures, equipment and materials used in the installation, maintenance and repair of heating, ventilation, air conditioning and refrigeration systems and equipment.

Ventilation, heating and air conditioning systems utilized by the District.

Health and safety regulations.

Operation and maintenance of tools, equipment and machinery used in HVAC and refrigeration maintenance and repair.

Building codes related to the HVAC and refrigeration trade.

Proper methods of storing equipment, materials and supplies.

Shop math applicable to the building trades.

Technical aspects of the HVAC&R trade.

Direct digital, pneumatic and electrical control systems.

Oral and written communication skills.

Record-keeping techniques.

#### **ABILITY TO:**

Perform journey-level work in the inspection, servicing, installation, maintenance and repair of heating, ventilation, air conditioning and refrigeration systems for designated buildings and facilities.

Troubleshoot and diagnose HVAC and refrigeration device system and equipment malfunctions.

Work from blueprints, shop drawings, sketches, manuals and diagrams.

Operate and maintain tools, equipment and machinery used in the HVAC&R trade.

Observe health and safety regulations and procedures.

Replace defective parts and components as necessary.

Communicate effectively both orally and in writing.

Work cooperatively with others.

Meet schedules and time lines.

Understand and follow oral and written instructions.

Work independently with little direction.

Maintain various records related to work performed.

#### **EDUCATION AND EXPERIENCE:**

Any combination equivalent to: high school graduation or equivalent and supplemented by completion of an approved apprenticeship program in the HVAC &R trade and two years journey-level experience in the installation, maintenance and repair of HVAC and refrigeration systems and equipment including experience utilizing a computerized energy management control systems.

# LICENSES AND OTHER REQUIREMENTS:

Valid California driver's license and the ability to qualify and maintain qualification, for District vehicle insurance coverage.

Universal 410A certificate issued by completing the Refrigerant Transition and Recovery Certification Program.

#### **WORKING CONDITIONS:**

#### **ENVIRONMENT:**

Indoor and outdoor work environment.

Regular exposure to fumes, dust, dirt, oil/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 functions.

Lifting, carrying, pushing or pulling moderately 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.

Standing for extended periods of time.

#### **HAZARDS**:

Working around and with machinery having moving parts.

Hazardous chemicals.

Working at heights.

Electrical power supply and high voltage.

Working in a cramped or restrictive work chamber.

Climbing ladders and working from heights.

Standing for extended periods of time.

# **CLEARANCES:**

Criminal Justice Fingerprint/Background

**Tuberculosis** 

Pre-placement Physical and Drug Screen