

## **IMPERIAL COMMUNITY COLLEGE DISTRICT**

### **CLASS TITLE: MAINTENANCE WORKER III/HVAC**

#### **BASIC FUNCTION:**

Under direction of the Director of Maintenance and Operations, perform technical mechanical duties in the installation, inspection, diagnosis, repair and maintenance of heating, ventilation, and air conditioning (HVAC) equipment in District buildings and facilities; perform preventive maintenance and routine servicing of equipment.

#### **REPRESENTATIVE DUTIES:**

Maintain, repair and replace a variety of heating, ventilation and air conditioning equipment in District buildings and facilities; install new equipment and assure wiring and power sources are adequate and appropriate; perform other skilled electrical maintenance work as needed.

Determine necessary parts for maintenance and repairs; order parts for HVAC equipment repairs, modifications and improvements; prepare estimates and maintain records related to time and materials required.

Disassemble, overhaul, clean, and inspect HVAC equipment including refrigeration and air conditioning compressors, receivers, condensers, chillers, water cooling towers, forced air converter units, pumps, automatic and manual valves, expansion valves and pneumatic controls.

Inspect, troubleshoot and maintain automated energy management systems related to heating, air conditioning, lighting and compressors; purge and charge old and new refrigeration equipment.

Install copper tubing; repair and replace worn and malfunctioning parts; replace joints as needed; lubricate and pack bearings, ventilation, refrigeration and air conditioning motors, pumps, fans and related equipment.

Develop, implement and maintain a preventive maintenance program for District HVAC systems and refrigeration equipment.

Operate a wide variety of hand and power tools and equipment used in the installation, repair and maintenance of HVAC equipment; operate welder torch, vacuum pump and test equipment used in the trade; maintain equipment in safe and effective working condition.

Operate a forklift; use an arc welder; use a refrigerant recovery system and remove, pack and replace bearings.

Clean and adjust pilots; repair hot water and forced air heating equipment.

Install and adjust switch gauges and other control systems; identify, replace or repair malfunctioning parts and equipment

Read and interpret schematics and diagrams; diagnose and repair mechanical defects in a variety of HVAC equipment; recommend outside assistance in major repairs as appropriate.

Communicate with District personnel regarding equipment failures, malfunctions, repairs and replacements; organize and coordinate repair activities in conjunction with building occupants, program activities and schedules, and maintenance priorities.

Participate in the design, installation and maintenance of HVAC equipment in new buildings and refurbished or expanded facilities.

Maintain shop area, equipment and tools in a safe, clean and orderly condition.

Maintain routine logs and records related to work performed.

Assist other maintenance personnel with special projects as assigned.

Perform related duties as assigned.

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

##### KNOWLEDGE OF:

Methods, equipment, tools and materials used in the HVAC and refrigeration trade.

Diagnostic procedures used in troubleshooting malfunctioning HVAC equipment.

Standard practices used in the installation, alteration, maintenance and repair of heating, ventilation and air conditioning equipment.

Shop math.

Basic record keeping techniques.

Health and safety regulations.

Applicable building codes and regulations related to HVAC and refrigeration units.

Proper methods of storing equipment, tools, materials and supplies.

Hand and power tools used in the HVAC trade including welding and soldering equipment.

##### ABILITY TO:

Diagnose and repair mechanical and electrical defects and faulty parts and components on HVAC equipment.

Perform skilled mechanical maintenance duties in the installation, maintenance, inspection and repair of District heating, ventilation, air conditioning and refrigeration equipment and systems.

Perform preventive maintenance and routine servicing of equipment.

Operate specialized tools and equipment used in the HVAC trade.

Read and work from mechanical diagrams, schematics, plans and specifications.

Maintain routine records related to work performed.

Work both independently and as member of a team.

Communicate effectively with others.

Work in extreme heat and very confined spaces.

**EDUCATION AND EXPERIENCE:**

Any combination equivalent to: graduation from high school and three years of journey level experience in the installation, maintenance and repair of HVAC equipment.

**LICENSES AND OTHER REQUIREMENTS:**

Valid California driver's license. Valid refrigerant recovery certificate.

**WORK ENVIRONMENT:**

Duties are typically performed in an indoor and outdoor environment. An employee regularly works with electronic heating, ventilating and air conditioning equipment and is frequently exposed to adverse weather conditions, dust, airborne particles and the risks and potential hazards of working with electricity.

**PHYSICAL DEMANDS:**

Must regularly stand for long periods of time; use hands to finger, handle, or feel objects, tools or controls; reach with hands and arms; bend, stoop, kneel, crouch or climb; speak clearly and distinctly to provide information to others; and hear and understand voices over telephone and in person. Must travel to various campus locations to conduct work. Must regularly lift, carry and/or move objects weighing up to 75 pounds. Must see clearly to diagnose and conduct repairs.