#### PERSONNEL COMMISSION



Class Code: 5103 Salary Range: 34 (C2)

#### **HVAC TECHNICIAN**

## **JOB SUMMARY**

Under general supervision, perform skilled journey-level work in the installation, repair and maintenance of heating, ventilation, refrigeration and air conditioning equipment systems; perform related duties as assigned.

### **EXAMPLES OF DUTIES**

The classification specification does not describe all duties performed by all incumbents within the class. This summary provides examples of typical tasks performed in this classification.

- Install, inspect, diagnose, repair, maintain and service a wide variety of HVAC equipment and systems; assure compliance with applicable laws, codes, rules and regulations. E
- Make skilled repairs on large built-up multi-zone systems, compressors, and related equipment. *E*
- Adjust, repair or replace parts such as electric, electronic and pneumatic controls, thermostats, high and low voltage controls, sensory instrumentation controls, automatic switches, motors, relays, filters, belts, safety valves and automatic gas valves. *E*
- Service and repair evaporative coolers; check and replace thermocouples and pilot generators. E
- Clean and adjust electronic ignition and hot surface pilot systems; adjust and maintain forced draft burners using a flue gas analyzer. E
- Diagnose malfunctions and make proper changes in Energy Management System to return units to operation. *E*
- Perform piping and duct repairs; descale tubing; cut and thread pipe; make pipe and electrical connections; test and inspect pipelines and equipment to locate leaks. E
- Operate refrigerant recovery units and store in certified containers in accordance with Environmental Protection Agency regulations; refill and add refrigerant; record freon usage. *E*
- Plan and lay out new heating systems; use rigging equipment to move heavy equipment in confined spaces. *E*
- Perform safety inspections of mechanical rooms. E
- Plan work from sketches, schematic diagrams, drawings and blueprints. E
- Determine requirements for parts, materials, supplies, tools and equipment; estimate time and materials needed for service calls. *E*
- Participate in on-the-job training in boiler related duties to perform necessary boiler functions such as trouble shooting, chemical treatment, repairs and maintenance. E

- Prepare list of materials and supplies; requisition materials. E
- Prepare and maintain records and reports related to assigned activities. E
- Contact vendors for quotes, prices and availability of materials and supplies. E
- Operate a variety of specialized machinery, equipment and tools utilized in the repair and maintenance of HVAC equipment; maintain tools, equipment and supplies in a safe and orderly condition. *E*
- Drive a District vehicle to conduct work. E
- Serve as a lead and provide work direction and guidance to other maintenance staff as assigned; train school site Plant Supervisors in the operation of boilers and HVAC equipment. *E*

Note: At the end of some of the duty statements there is an italicized "E" which identifies essential duties required of the classification. This is strictly for use in compliance with the Americans with Disabilities Act.

### **DISTINGUISHING CHARACTERISTICS**

Incumbents in the HVAC Technician classification install, inspect, diagnose, repair, maintain and service a wide variety of HVAC equipment and systems including boilers and heating and ventilating systems of both older and modern technology. Incumbents must assure completed work and work in progress complies with Environmental Protection Agency rules and regulations.

### **EMPLOYMENT STANDARDS**

#### Knowledge of:

Methods, materials, tools and equipment used in the maintenance and repair of heating, ventilating, refrigeration and air conditioning systems.

Applicable laws, codes, rules and regulations.

Health and safety practices related to the HVAC trade.

Air compressors and pneumatic controls.

Welding and soldering techniques.

Basic record-keeping and report preparation techniques.

Proper methods of storing equipment, materials and supplies.

Energy management systems.

Shop math applicable to the HVAC trade.

Oral and written communication skills.

### Ability to:

Perform skilled journey-level work in the installation, repair and maintenance of heating, ventilation, refrigeration and air conditioning equipment systems.

Perform preventive maintenance and routine servicing of HVAC equipment.

Plan work from sketches, schematic diagrams, drawings and blueprints.

Understand and follow oral and written instructions.

Operate a variety of specialized machinery, equipment and tools utilized in the repair and maintenance of HVAC equipment.

Estimate time and materials needed for service calls.

Communicate effectively both orally and in writing.

Establish and maintain effective working relationships with others.

Maintain routine records and prepare reports.

Meet schedules and timelines.

# **Education and Training:**

Graduation from high school and completion of a recognized four-year apprenticeship program, degree or certificate program in the HVAC trade.

OR

## **Experience:**

Four-years experience installing, repairing and maintaining heating, ventilation, refrigeration and air conditioning equipment systems.

Any other combination of training and experience that could likely provide the desired skills, knowledge or abilities may be considered.

### SPECIAL REQUIREMENTS

Valid California Class C driver's license.

An applicant for this class will be required to obtain, at his/her own expense, and submit his/her motor vehicle driving record at the time or appointment. The record must meet and be maintained at the district's safe driving record standard. Failure to meet this requirement will result in the disqualification and/or rejection of the eligible regardless of any other standing.

Incumbents in this classification must possess and maintain a valid Refrigerant Transition and Recovery Usage Certificate (Universal).

Incumbents in this classification are required to furnish and maintain personal hand tools as indicated on the District tool list.

Incumbents are subject to pertinent provisions of the General Industry Safety Orders of the California Code of Regulations regarding protective equipment when exposed to hazardous materials, including, but not limited to, asbestos and lead. Incumbents in this class are required to wear protective clothing, gear, and equipment as required by law and provided by the District.

### **WORKING ENVIRONMENT**

Indoor and outdoor environment.

Extreme heat and cold.

Seasonal adverse weather conditions.

Regular exposure to fumes, dust and odors.

Working in a cramped or restrictive work chamber.

Noise from equipment operation.

Driving a vehicle to conduct work.

### **PHYSICAL DEMANDS**

Dexterity of hands and fingers to operate specialized equipment.

Hearing and speaking to exchange information.

Standing for extended periods of time.

Seeing to read a variety of materials.

Climbing ladders, scaffolding and working at heights.

Lifting, carrying, pushing or pulled objects weighting up to 100 pounds.

Bending at the waist, stooping, kneeling, crouching or crawling.

Reaching overhead, above the shoulders and horizontally.

#### AMERICANS WITH DISABILITIES ACT

Persons with certain disabilities may be capable of performing the essential duties of this class with or without reasonable accommodation, depending on the nature of the disability.

## **APPOINTMENT**

In accordance with Education Code Section 45301, an employee appointed to this class must serve a probationary period of six months during which time an employee must demonstrate at least an overall satisfactory performance. Failure to do so shall result in the employee's termination.

PCA: 9/7/2006 Revised: 8/16/2012 Revised: 4/23/2020