

PERSONNEL COMMISSION

Class Code: 0285 Salary Range: 34 (C2)

# **BOILER AND GAS APPLIANCE TECHNICIAN**

# JOB SUMMARY

Under general supervision, perform journey-level mechanical and electrical work on gas fired heating equipment and appliances; 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, maintain and repair gas fired heating equipment and systems, sewage injection systems and commercial cooking equipment such as steam and hot water boilers, ovens, ranges suspended heaters, blowers, pumps and related systems and forced air heating units. *E*
- Plan, and layout jobs from sketches, drawings and diagrams. *E*
- Diagnose mechanical malfunctions and breakdowns of heating systems. E
- Adjust, maintain, replace and repair electronic, pneumatic and electric thermostats and controls. *E*
- Perform flue gas analysis using flue-gas analyzer. E
- Install, troubleshoot, repair and maintain gas valves, gas pilot safety devices, thermocouples, and solenoid valves. *E*
- Adjust and maintain forced draft burners using a flue gas analyzer. E
- Test and inspect pipelines and equipment to locate gas leaks. E
- Determine pressure and flow of gas. E
- Measure, cut and thread pipe. E
- Install, troubleshoot, repair and maintain pneumatic, low voltage and line voltage modulating motors. *E*
- Repair and maintain swimming pool vacuum type chlorinators, heat exchangers, flow gauges, filters, tanks and related tubing, piping and valves. *E*
- Install, repair and maintain above ground and in-ground steam, condensate, gas lines, air and hydronic lines including related valves and fittings. *E*
- Use rigging equipment to move heavy equipment and boilers in confined spaces. E
- Plan and lay out new heating systems. E
- Perform safety inspections of boilers and boiler rooms and mechanical rooms. *E*
- Apply chemical treatment to closed and open boiler systems. E
- Train school custodian supervisors in the operation of boilers. E
- Obtain price quotes from vendors on parts and materials. E
- Prepare lists for materials and supplies and order and complete requisitions. E

- May direct other assigned maintenance personnel as needed. E
- Prepare and maintain records and reports. E
- Operate a District vehicle. 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**

A Boiler and Gas Appliance Technician performs journey-level installation, maintenance, inspection and repair of boilers, a variety of gas fired heating and cooking equipment, and heating and ventilating systems of both older and modern technology.

# **EMPLOYMENT STANDARDS**

# Knowledge of:

Building and fire codes.
State and local regulations governing heating systems.
Gas fired wet and dry heating systems and related devices.
Proper methods, materials, tools and equipment in the heating systems trade.
Electrical-mechanical ignition devices of gas fired heating systems.
Shop math applicable to the heating trade.
Safety practices and procedures including Occupational Health and Safety regulations.
Commercial cooking equipment.
Pumps and fluid handling equipment.
Pneumatic control systems.
Boiler water treatment.
Pool filtration and chlorination systems.
Nox type burners for boilers and large commercial type water heaters.

# Ability to:

Perform journey-level installation, maintenance, troubleshooting and repair a variety of heating units and equipment.

Use tools, equipment and materials following safety practices and procedures. Plan and estimate installation and repair jobs including materials and labor.

Inspect and troubleshoot pneumatic, electrical and electronic control systems.

Troubleshoot and repair low voltage and line voltage control and safety circuits.

Work from blueprints plans, sketches, diagrams and specifications.

Read and interpret manuals.

Follow oral and written instructions.

Maintain records. Operate a vehicle observing legal and defensive driving practices. Establish and maintain effective relationships with others.

#### Education and Training:

Equivalent to graduation from high school and completion of a recognized four-year apprentice training program.

# Experience:

Four years of experience installing, altering and repairing boilers and heating systems, including three years of experience at the journey-level.

Any other combination of training and/or experience, which demonstrates that the applicant is likely to possess the required skills, knowledges and abilities, may be considered.

# SPECIAL REQUIREMENTS

Possession of a valid California Class C Driver's License and evidence of a safe driving record is required at the time of appointment.

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 of 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 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. Occasional inclement weather. Exposure to dust, dirt and chemical fumes. Crawling in confined and tight spaces and under buildings. Occasional loud noises.

#### PHYSICAL DEMANDS

Walking or standing for extended periods of time. Bending at the waist, kneeling and crouching. Reaching overhead and above the shoulders. Climbing and descending ladders. Lifting and carrying objects weighing up to 60 pounds. Crawling under buildings and in tight spaces. Dexterity of fingers and hands to operate specialized equipment.

#### 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 (6) 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: 7/1990 Revision: 3/2/2000 Revised: 3/27/2003 Revised: 4/23/2020