Class Code: 7424

- TITLE: HVAC Technician Grade 17
- **REPORTS TO:** Director Maintenance
- SUPERVISES: N/A
- **JOB FUNCTION:** Perform skilled mechanical maintenance duties in the inspection, installation and alteration District repair, of heating, conditioning refrigeration ventilation. air and systems and related equipment and facilities: perform preventive maintenance and routine servicing of equipment.

## DUTIES AND RESPONSIBILITIES:

- Inspect, repair, modify and install HVAC equipment including refrigeration and air conditioning compressors, receivers, condensers, chillers, water cooling towers, forced air converter units, pumps, automatic and hand valves, expansion valves and capillary tubes.
- Conduct regular preventive maintenance inspections of refrigeration units, isolated heating and ventilating units, including boilers, gas and electrically operated airconditioning equipment, and make necessary adjustments or repairs; service and repair evaporative coolers.
- Repair or replace defective parts in units and equipment and their controls, including thermostats, automatic switches, fan controls, log switches, damper motors, louvers, relays, filters, controls, belts, compressors, heat exchangers, high limit controls, pressure controls, safety valves, and automatic gas valves.
- Operate a variety of hand and power tools, welder torch, vacuum pump, test equipment utilized in the trade and a motor vehicle; maintain equipment in effective and safe working condition; maintain parts and tool inventory.
- Repair and rebuild semi-hermetic reciprocating compressors and compressors for centrifugal refrigeration machines.
- Perform skilled electrical maintenance work in the repair, installation and alteration of HVAC equipment, components, timers, motors and wiring systems as needed; connect motors to control panels.

## HVAC TECHNICIAN

#### DUTIES AND RESPONSIBILITIES (CONT.):

- Test and examine boiler operations, observing meter and pressure gauges; conduct boiler water quality test and treatment; adjust boiler burner combustion.
- Lubricate and pack heating, ventilation, refrigeration, and air-conditioning motors, pumps, fans, and other equipment.
- Install and calibrate systems; install copper tubing and repair pipes and tubing as necessary; test joints and insulate pipes of refrigeration and air conditioning systems; flush boilers, descale tubing; rebuild pressure and temperature safety valves and water pumps.
- Install, rebuild, replace or repair fans, motors, thermostats, fuses, filters, bearings, valves, controls, gaskets and other equipment as necessary.
- Maintain related records concerning time, labor and materials; maintain log of tasks performed and write reports as required.
- Perform other duties as assigned.
- Maintain regular attendance.

### KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

- Standard practices of the HVAC and refrigeration trade.
- Theory of HVAC and refrigeration systems.
- Materials, methods and tools used in the operation and repair of HVAC and refrigeration systems.
- Applicable building codes, ordinances and regulations of State and local authorities pertaining to HVAC, refrigeration and boilers.
- Air compressors and pneumatic controls.
- Cooling tower and boiler water treatment.
- Manual and electrical tools and equipment applicable to the HVAC and refrigeration trade.
- Welding and soldering techniques.
- Health and safety regulations.
- Basic record-keeping techniques.
- Proper methods of storing equipment, materials and supplies.

### KNOWLEDGE AND ABILITIES (CONT.):

ABILITY TO:

- Perform skilled mechanical maintenance duties in the inspection, repair, installation and alteration of District heating, ventilation, air conditioning and refrigeration systems and related equipment and facilities.
- Calibrate systems.
- Perform preventive maintenance and routine servicing of equipment.
- Diagnose defects, and install, repair and maintain heating, ventilating, refrigeration, and air-conditioning units.
- Follow oral and written instructions.
- Operate specialized machinery, equipment and tools utilized in the repair, installation and maintenance of heating, ventilation, air conditioning and refrigeration systems.
- Communicate effectively both orally and in writing.
- Understand and follow oral and written directions.
- Work cooperatively with others.
- Work independently with little direction.
- Meet schedules and time lines.
- Maintain routine records and prepare reports.
- Routinely lift objects weighing up to 70 pounds.
- Lift heavy objects.

### **PHYSICAL DEMANDS:**

- Work is performed while standing, sitting and/or walking.
- Requires the ability to communicate effectively using speech, vision and hearing.
- Requires the use of hands for simple grasping and fine manipulations.
- Requires bending, squatting, crawling, climbing, reaching.
- Requires the ability to lift, carry, push or pull medium weights, up to 75 pounds
- Requires activities involving being around moving machinery, exposure to marked changes in temperature and humidity, and exposure to dust, fumes and gases.

## EDUCATION AND EXPERIENCE:

- High school diploma or G.E.D. Certificate
- Two years of documentable HVAC journeyman level operation, maintenance and repair experience in the HVAC and refrigeration trade.

# HVAC TECHNICIAN

## LICENSES AND OTHER REQUIREMENTS:

- Valid Kentucky driver's license
- Active Kentucky state-issued HVAC journeyman or masters HVAC license.

Original Date: \_\_\_\_\_

Revision Date: 07/2012 Revision Date: 12/2014