

## **MAINTENANCE HVAC MECHANIC**

### **Series Specification**

#### **Maintenance HVAC Mechanic**

#### **Lead Maintenance HVAC Mechanic**

### **DEFINITION**

Under direction of assigned supervisor/manager, this series specification describes two classes used to perform, plan and oversee skilled electrical and mechanical work in the installation, maintenance and repair of refrigeration, air conditioning, heating equipment, steam and hot water boilers, chillers, cooling towers, associated equipment and hydronic lines.

### **LEVEL DESCRIPTIONS**

**Maintenance HVAC Mechanic:** Under oversight of the Lead Maintenance HVAC Mechanic, perform journey level work installing, modifying, maintaining, repairing, and overhauling district-wide heating, refrigerated equipment, environmental, air conditioning, and all auxiliary systems at district facilities; and skilled refrigeration and air-conditioning, heating, ventilation, controls, water treatment, and auxiliary equipment services.

**Lead Maintenance HVAC Mechanic:** In addition to the duties of the Maintenance HVAC Mechanic, the Lead Maintenance HVAC Mechanic assigns and reviews the work of Maintenance HVAC Mechanics.

### **TYPICAL DUTIES**

**Both Levels:** Incumbents inspect and examine heating/refrigeration and air-conditioning, chillers, boilers, air compressors, heat exchangers, and all auxiliary equipment to locate defects in operations; disassembles units and restore to operating condition; repair or replace condensers, compressors, pumps, valves, motors, bearings, belts and other parts; recycle and charge refrigerants as required; perform preventive maintenance on cooling towers and evaporative condensers; inspect and test refrigeration systems, safety devices, and controls for efficiency of operation and compliance with safety practices, laws and regulations; troubleshoot and take necessary corrective action for major malfunctions and breakdowns of heating/refrigeration and air-conditioning systems, pumps, air handlers, chillers, fans, ducts, dampers and grills; install, repair and maintain major heating/refrigeration and air conditioning units, coils, fans, subsystems and component parts; perform welding and soldering as needed; read and interpret blueprints, shop drawings and technical manuals. Incumbents order parts and supplies as needed; perform related work on all related and auxiliary Heating/Ventilation/Air Conditioning (HVAC) systems and components; inspect equipment, building, utility systems or other facilities needing heating and cooling work; repair and adjust pneumatic controls, lines and fittings, change filters and belts, lubricate and oil equipment according to manufacturer's specifications and industry standards, perform weekly, monthly, and annual preventive maintenance on high and low pressure boilers, chillers, towers, and all related equipment; maintain logs and records of equipment operations, repairs, preventive maintenance, Environmental Protection Agency (EPA) required records on refrigerants, and Air Quality required records on boiler operations; perform safety tests on equipment as required, maintain proper water treatment /chemistry in all systems; perform daily inspections of mechanical spaces; estimate time, materials, and cost involved for major equipment repairs, change-outs, and system upgrades; obtain quotes from vendors on equipment, repairs or services to be contracted out, and schedule and monitor the installation of these services manage/prioritize work orders; understand and operate computer based energy management system (EMS). Perform related duties as assigned.

**Lead Maintenance HVAC Mechanic:** Train, assign, and oversee the work of three or more regular Maintenance HVAC Mechanics.

### **QUALIFICATIONS**

#### **EXPERIENCE**

##### **Promotional**

##### **General**

#### Maintenance HVAC Mechanic

None.

Completion of a formal apprenticeship and two years of experience as a journey-level HVAC mechanic; **OR**, six years of experience as a journey-level HVAC mechanic.

#### Lead Maintenance HVAC Mechanic

One year of experience in Los Rios Community College District as a Maintenance HVAC Mechanic.

Meet the qualifications for Maintenance HVAC Mechanic, plus an additional two years of experience as a journey-level HVAC mechanic.

One year of experience is equal to 12 months of experience at 40 hours per week. Applicable part-time experience will be converted to the full-time equivalent for purposes of meeting the experience requirement.

#### **SPECIAL REQUIREMENTS**

Possess and maintain an EPA universal certification for handling refrigerants at the time of hire. Employment is contingent upon meeting the requirements of Los Rios Board Regulation R-8343, including possessing and maintaining a valid California Driver's License. This position may require operating a District or personal vehicle in order to complete assigned work within the scope of the position duties. Any offer of employment is contingent upon the successful completion of a medical evaluation.

#### **KNOWLEDGE OF**

**Both Levels:** Design, operation, maintenance, troubleshooting, testing, and repair of heating, refrigeration and air-conditioning systems; instruments and equipment used in repair of refrigeration and air-conditioning equipment, including large tonnage (100 ton and larger) reciprocating, centrifugal, and screw type of compressors, heating systems, high and low pressure boilers, pumps, condensers, heat exchangers, air handlers, towers, compressors, controls, electric and pneumatic thermostats, and hot and chilled water distribution systems; existing EPA, Occupational Safety and Health Administration (OSHA), American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), Air Quality, and other applicable laws relating to operation of refrigeration and air-conditioning systems, boilers, towers, and auxiliary equipment; policies, procedures and practices on safety and operation matters; rules and regulations applicable to building codes, industry standards, and recommendations contained in manufacturer's technical manuals and service reports; applicable policies, regulations, procedures and processes, and federal, state, and local laws and regulations; effective customer service skills; how to compose effective correspondence; the structure and content of the English language including the meaning and spelling of words, rules of composition and grammar, and rules for correspondence and report writing at the level required to effectively perform the duties of the position;

principles and practices of effective communication; how to train others to perform specific tasks; arithmetic at the level required to effectively perform the duties of the position; administrative and clerical procedures and systems, such as filing and recordkeeping techniques in a complex business environment; modern office practices, procedures and equipment; safety procedures and safe work practices related to the duties of the position.

**Lead Maintenance HVAC Mechanic:** Basic principles of leadership, oversight and training.

**ABILITY TO**

**Both Levels:** Perform the essential functions of the position; interpret and work from plans, diagrams, specifications, and established procedures; identify differences in color coded electrical wiring; sustain regular work attendance; work cooperatively and effectively with the public, students, faculty and staff; exercise initiative and mature judgment; interpret and apply applicable federal, state and local laws and regulations, District policies and regulations, and office processes and procedures; work as a member of a team; meet schedules and timelines; manage one's own time and the time of others; correctly follow a given rule or set of rules in order to arrange things or actions in a certain order; understand and effectively carry out oral and written directions; effectively communicate information and ideas orally and in writing based on the needs of the audience; read, write and perform mathematical calculations at the level required for successful job performance; be aware of others' reactions and adjust interpersonal skills accordingly; handle personal and private information with discretion; effectively learn and operate equipment and software related to the duties of the position; use technology to effectively perform responsibilities; adapt to changing technologies; work successfully with diverse populations; effectively and safely use and maintain equipment and tools required in the performance of the job duties, including assigned vehicles.

**Lead Maintenance HVAC Mechanic:** Effectively train, assign and oversee the work of; oversee the proper use of personal protective gear and workplace safety; work with minimal direct supervision.

**Physical and Environmental Factors:** Perform physically demanding labor that may include standing and maneuvering for long periods of time; work in an outside environment subject to inclement weather conditions, possible and/or frequent exposure to sun, humidity, and high or low temperatures; exposure to dust and allergens; work around loud machinery, noise and/or pronounced vibration; regularly work with or exposed to hazardous materials such as oils, grease, solvents, glues, adhesives, cleaning and degreasing solutions, refrigerants, electric panels, wiring, motors, and controls; reach, grasp, pull, push, and carry various equipment and furniture across various types of surfaces; frequent maneuvering, stooping, crouching, bending at waist and knees; maneuver, twist, crawl and work in confined and cramped spaces (such as trenches, crawl spaces, electrical and mechanical vaults, etc.); frequent stretching, reaching and kneeling while operating tools and equipment; using proper bending and lifting techniques, lift and/or carry heavy objects up to 50 pounds, with or without assistance, from floor level to above shoulder level; climb and descend 8 to 16 foot ladders and/or stairs with heavy objects, with or without assistance; work on multiple surfaces more than 12 feet above ground level; work on wet, slippery and icy surfaces; wear personal protective and safety equipment when appropriate and/or required; operate and manipulate hand, electric and all types of structural tools and equipment; exposure to sharp blades from tools and equipment.

**TYPICAL EQUIPMENT USE (May include, but not limited to)**

Current office technologies including computers, printers, faxes, telephones and copiers; other equipment common to the field to which the position is assigned.