HVAC MECHANIC
Series Specification
HVAC Mechanic
Lead HVAC Mechanic

DEFINITION
Under direction and supervision, this series specification describes two classes used to perform, plan and direct 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; and do related work as required.

TYPICAL DUTIES
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 may order parts and supplies as needed; perform related work on all related and auxiliary HVAC systems and components; may direct work of others on assigned projects; 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, 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; develop and maintain preventive maintenance reports; understand and operate computer based energy management system (EMS); perform related duties as required.

LEVEL DESCRIPTIONS

HVAC Mechanic: Under direction and supervision of the Lead HVAC and HVAC Supervisor, 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. Incumbents, under direction of Lead HVAC Mechanic, perform skilled refrigeration and air-conditioning, heating, ventilation, controls, water treatment, and auxiliary equipment services.

Lead HVAC Mechanic: The lead level class of the series. The Lead HVAC Mechanic, under direction of Supervisor, HVAC, performs journey level heating and cooling maintenance and installation work and assigns and reviews work of HVAC Mechanics and Environmental Systems Technicians. The lead
obtains quotes from vendors on equipment, repairs, or services to be contracted out and schedules and monitors the installation of these services.

**QUALIFICATIONS**

**EXPERIENCE:**

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<th>Promotional HVAC Mechanic</th>
<th>General HVAC Mechanic</th>
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<tr>
<td>Equivalent to completion of apprenticeship. Four years experience as a Maintenance Technician specializing in HVAC trade.</td>
<td>Equivalent to completion of apprenticeship and two years of experience as a journey-level HVAC Refrigeration/Air Conditioning Mechanic.</td>
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**LEAD HVAC Mechanic**

| One year of experience in Los Rios CCD at the level of HVAC Mechanic. | Four years of experience as a Journey-level HVAC Mechanic. |

**SPECIAL REQUIREMENTS**

Possess and maintain an EPA universal certification for handling refrigerants. Possess and maintain a valid California Driver’s License in compliance with Los Rios Board Regulation R-8343; employment is contingent upon meeting the requirements of Los Rios Board Regulation R-8343. 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; to include 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, OSHA, 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. Complies with rules and regulations applicable to building codes, industry standards, and recommendations contained in manufacturer's technical manuals and service reports.

**Lead HVAC Mechanic:** Basic principles of leadership. Knowledge of boilers, boiler controls, water treatment for mechanical systems and cooling towers, and maintenance heating systems. Fundamental knowledge of EPA, OSHA, Air Quality, ASHRAE, and other regulatory directives governing the safe handling and operation of HVAC responsibilities.
ABILITY TO (ESSENTIAL FUNCTIONS)

**Both Levels:** Perform the basic functions of the position; perform journey level work in the installation, maintenance, troubleshooting and repair of heating, refrigeration and air-conditioning, pumps, towers, boilers, and all equipment associated with the distribution of hot and chilled water and climate control; interpret and work from plans, diagrams, specifications, and established procedures; follow directions; read, write, and communicate orally at a level required for successful job performance; work effectively with others; ensure proper placement of ducts, pipe lines, etc.; identify functioning/malfunctioning equipment; identify differences in color coded electrical wiring; performs duties and responsibilities with view toward department goals, energy conservation, and support of academic and institutional goals. Occasionally work beyond normal duty hours, including weekends and holidays. Must be able to respond to emergency call-outs. Travel to and from Facilities Management and from one job site to another.

**Lead HVAC Mechanic:** Plan and direct the work of skilled Mechanics, and Environmental Systems Technicians, make material and labor estimates. Procure and train personnel in the proper use of personal protective gear and workplace safety.

**Physical And Environmental Factors:** Ability to move about freely and safely at construction sites, climb ladders, crawl in attics, maneuver through tight and cramped spaces (trenches, crawl spaces, electrical and mechanical vaults, etc.). Drive to various district locations; lift up to 50 pounds unassisted; exposure to chemicals, solvents, cleaning and de-greasing solutions, refrigerants, oils, electrical panels, wiring, motors, and controls; perform hard labor in extreme temperature conditions, work in outside environment all times of the year, work around loud machinery in boiler and mechanical rooms, exposure to dust and allergens; lift or descend ladders with heavy objects with and without assistance (objects are sometimes elevated from floor level to above the shoulders); bend, pull, push, kneel, carry, and lift in performance of daily duties.