



FACILITIES OPERATIONS TECHNICIAN

DEFINITION

Under general supervision, works alone or with assistance to perform difficult skilled heating, ventilation, and air conditioning (HVAC) repair work on large and complex jobs; monitors, repairs, and adjusts building operating systems; provides technical and functional direction and training to lower-level staff; assists with special projects; assists with general building maintenance assignments and duties; and performs related duties assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the assigned Facilities Operations Supervisor. Exercises technical and functional direction over and provides training to other staff.

CLASS CHARACTERISTICS

This is the lead/advanced-level classification in the Facilities Operations class series. Incumbents work under general supervision and exercise a high level of discretion and independent judgment in performing the full range of routine to complex maintenance and repair of heating, ventilation, air conditioning or refrigeration equipment.

This class is distinguished from the Facilities Operations Supervisor in that the latter has full supervisory responsibility for a variety of maintenance and custodial staff.

EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only)

- Performs complex troubleshooting and repair of industrial and commercial mechanical HVAC equipment and control systems.
- Troubleshoots, repairs, and maintains complex computer-operated direct digital control and energy management control systems.
- Monitors weather, projects, and other events to ensure mechanical systems are not disrupted.
- Monitors the operation of boilers and boiler efficiencies; analyzes stack gases; monitors the safety features of boilers; adds chemicals and tests boiler operations.
- Modifies and repairs forced air heating systems; installs metal duct work, installs and calibrates controls; replaces and repairs motors, blowers, and related equipment.
- Monitors and repairs air conditioning and refrigeration equipment and heat pumps; repairs compressors, valves, and piping systems; changes refrigeration units.
- Maintains and repairs major appliances such as cooking appliances, commercial washers and dryers, walk-in coolers, freezers, ice machines, and commercial refrigeration units.
- Maintains and repairs security hardware in jails, such as pneumatic door controls; monitors and modifies fire alarm systems; installs, repairs, and replaces valves and controllers.
- Assists other maintenance and mechanical personnel in the maintenance of electrical, plumbing, and mechanical systems for the County complexes; provides technical assistance, including review and evaluation of work in progress and upon completion.
- Inspects and evaluates building operating systems; prepares work orders; estimates time and material requirements.
- Performs preventative maintenance on mechanical systems, including lubricating, changing filters, cleaning, and testing components.

- Installs and modifies electrical systems; runs new circuits; pulls wire; installs outlets, switches, and fixtures.
- Installs, modifies, and repairs plumbing and piping systems, including water supply lines, valves, and fixtures, as well as drain, waste, and vent systems.
- Assists with a variety of building maintenance projects, as needed.
- Monitors the work of contract workers, and provides status reports to supervisor.
- May assist with cleaning of sand, ice, and snow from various entrances and walkways.
- Performs related duties as assigned.

QUALIFICATIONS

Knowledge of:

- Principles of providing functional direction and training.
- Diverse building operations systems, including direct digital control, mechanical systems, and HVAC.
- Methods and practices of electrical installation, maintenance, and repair.
- Methods, practices, materials, tools, and equipment used in the HVAC trade.
- Practices and techniques of preventive maintenance.
- Methods and practices of plumbing and pipefitting.
- Use and care of diesel engines and related generation equipment.
- Safety regulations and practices pertaining to the work.
- Rigging principles and techniques.
- Principles and procedures of recordkeeping.
- Basic mathematics.
- Principles and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and County staff.
- The structure and content of the English language to effectively perform the work.
- Modern equipment and communication tools used for business functions and program, project, and task coordination.
- Computers and software programs (e.g., Microsoft software packages) to conduct, compile, and/or generate documentation.

Ability to:

- Train others in work methods.
- Troubleshoot and repair operating problems in equipment.
- Operate and maintain specialized tools and equipment of the carpentry, mechanical, and electrical trades.
- Maintain accurate records of work performed.
- Prepare sketches and estimates of work to be performed.
- Read and interpret plans, controls, schematics, manuals, blueprints, and sketches.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
- Effectively represent the department and the County in meetings with governmental agencies; community groups; various business, professional, and regulatory organizations; and in meetings with individuals.
- Independently organize work, set priorities, meet critical deadlines, and follow-up on assignments.
- Effectively use computer systems, software applications, and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally and in writing.

- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Education and Experience:

Any combination of the required experience, education, and training that would provide the essential knowledge, skills, and abilities is qualifying.

Equivalent to graduation from high school;

AND

Four (4) years of journey-level experience in the maintenance and repair of electrical, mechanical, and/or HVAC equipment.

Licenses and Certifications:

- Possession of, or ability to obtain and maintain, a valid California Driver's License by time of appointment and a satisfactory driving record.
- Possession of a current Environmental Protection Agency Universal Certification of Refrigerant Handling certificate.

PHYSICAL DEMANDS

Must possess mobility to work in and around a standard maintenance shop setting, to operate a motor vehicle and drive on surface streets; strength, stamina, and mobility to perform physical work for extended periods of time, assist with work in confined spaces as appropriately trained and around machines, to climb and descend ladders, and to operate varied hand and power tools, equipment, and machinery; vision to read printed material and a computer screen; and hearing and speech to communicate in person and over the telephone or radio. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate above-mentioned tools and equipment. Positions in this classification bend, stoop, kneel, reach, and climb to perform work and inspect work sites. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 50 pounds, or heavier weights with the use of proper equipment. Reasonable accommodations will be made for individuals on a case-by-case basis.

ENVIRONMENTAL CONDITIONS

Employees work indoors in an office, centralized maintenance shop, or other County facility environment, and outdoors in all weather conditions with varying temperatures; frequent exposure to dust and noise levels associated with mechanical equipment and machinery; work above ground level and in confined spaces; occasional exposure to hazardous machinery and equipment; exposure to electrical shock and hazardous substances; infrequent emergency irregular work hours; work below ground level and in confined spaces. Employees may interact with members of the public or with staff under emotionally stressful conditions while interpreting and enforcing departmental policies and procedures.

WORKING CONDITIONS

May be required to be on call and to work various shifts or emergencies on evenings, weekends, and holidays.