

UTILITY MAINTENANCE MECHANIC

DEFINITION

Under general supervision, performs a wide variety of skilled utility maintenance and repair work on the **mechanical and electrical/instrumentation** equipment and facilities associated with production, treatment, and distribution of potable water and water reclamation operations; repairs, services, and performs major and minor repairs to division vehicles and equipment; installs, repairs, maintains, and cleans the City's wastewater collection system; and performs related work as required.

EXAMPLES OF ESSENTIAL JOB FUNCTIONS

- Inspects, diagnoses, maintains, and repairs water and water reclamation, pumping, and regulating systems, equipment, **control systems** and fixtures by performing a variety of skilled mechanical repair work.
- Inspects, troubleshoots, repairs, and maintains systems, equipment, and fixtures including motors, engines, pumps, and other treatment plant fixtures and appliances; checks proper equipment operation **and controls**; notifies supervisors of alarms and equipment failure; requisitions materials and supplies needed; writes work orders for needed repairs.
- Performs preventative maintenance and services equipment according to an established schedule and inspects facilities and equipment to determine the need for maintenance or repair.
- Checks and adds oil to pumps and engines, greases bearings, and performs other related preventive maintenance work on equipment.
- Repairs, overhauls, or replaces malfunctioning, damaged or worn parts, materials, and equipment.
- Inspects, diagnoses, and locates mechanical difficulties on division automobiles, trucks, and a variety of maintenance and construction equipment.
- Overhauls, repairs, and adjusts engines, transmissions, differentials, and clutches; tunes up engines; diagnoses fuel injection problems; replaces ignition parts; cleans and adjusts carburetors.
- Replaces or repairs faulty parts including wheel bearings, clutches, oil seals, shock absorbers, exhaust systems, steering mechanisms, and related parts and equipment on vehicles and equipment.
- Ensures that all vehicles and equipment are in safe and operational condition; makes road emergency vehicle and equipment repairs to all division owned rolling stock.
- Maintains the City's wastewater collection system in a safe and sanitary manner to ensure safe conditions for the City, including repairing broken wastewater mains and parts, and hydro cleaning to ensure clean and open distribution.

QUALIFICATIONS

Knowledge of:

- Principles, procedures, methods, equipment, materials, and tools used in the **mechanical and electrical/instrumentation** repair of minor and major equipment systems, including engines, pumps, motors, generators, and pressure regulatory devices.

- Principles, practices, and methods of various maintenance trades related to the maintenance and repair of various utility structures, machinery, and equipment.
- Principles, practices, methods, equipment, materials, and tools used in maintenance and repair of automobiles and vehicles.
- Maintenance principles, practices, tools, and materials for maintaining and repairing wastewater collection systems, including wastewater lines, manholes, wastewater cleanouts, and other related facilities and equipment.
- The operation and minor maintenance of a variety of hand and power tools, vehicles, and power equipment.
- Safe application, operation, and maintenance of tools and equipment used in the mechanical maintenance trade.

Ability to:

- Inspect, operate, diagnose problems, and perform preventive maintenance and repair work on motors, engines, pumps, compressors, **control systems** and power generation equipment.
- Inspect, operate, diagnose problems, troubleshoot, and perform preventive maintenance and repair work on mechanical and **electrical/instrumentation** equipment, systems, and facilities.
- Troubleshoot and determine appropriate action in the maintenance and repair of automobiles, trucks, and a variety of maintenance and construction equipment.
- Perform construction, modification, maintenance, and repair work on wastewater collection systems, facilities, and equipment such as found in the City.
- Set up and operate traffic area construction zones, including cones, barricades, and flagging
- Read, interpret, understand, and apply technical manuals, schematics, diagrams, specifications, and parts inventories.

EDUCATION AND EXPERIENCE

Any combination of training and experience which would provide the required knowledge, skills and abilities is qualifying. A typical way to obtain the required qualifications would be:

Equivalent to the completion of the twelfth (12th) grade. Three (3) years of experience of mechanical and electrical maintenance of water reclamation equipment and water treatment and/or distribution equipment in a plant environment or equivalent mechanical and electrical maintenance plant experience.

License:

- Valid California class C driver's license with satisfactory driving record. A class B driver's license may be required.

Preferred:

- **Electrical and/or Instrumentation certifications**

PHYSICAL DEMANDS

Must possess mobility to work in standard water and water reclamation operations facilities; strength, stamina and mobility to perform light to medium physical work, to work in confined spaces, around machines and to climb and descend ladders, and operate varied hand and power tools and equipment; vision to read printed materials and a computer screen; color vision to read gauges and identify appurtenances; and hearing and speech to communicate in person and over the telephone or radio. The job involves 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 necessary to perform job functions.

ENVIRONMENTAL ELEMENTS

Employees work primarily outdoors and are exposed to loud noise levels, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives, and contractors in interpreting and enforcing departmental policies and procedures.

WORKING CONDITIONS

May be required to work on evenings, weekends and holidays. Participates in after-hours emergency response and on-call and callback assignments.