

UTILITIES MAINTENANCE MECHANIC

DEFINITION

Under general supervision, performs journey level mechanical maintenance at water and wastewater facilities; installs, repairs, overhauls, maintains and services pumps, motors, and other mechanical devices necessary to the operation of the water and wastewater systems.

DISTINGUISHING CHARACTERISTICS

This is a journey level position in which the incumbent, exclusive of the Water Pollution Control Facility (WPCF), is responsible for the mechanical maintenance, repair, and operation of all City water and sewer pump stations, stormwater pump stations, water reservoirs, pressure reducing stations, water transmission mains, and regional inter-tie pump stations.

SUPERVISION RECEIVED

Dependent upon assignment, direct supervision is provided by the WPCF Manager, WPCF Maintenance Supervisor or Utilities Operations & Maintenance Supervisor.

SUPERVISION EXERCISED

Assignments frequently require providing assistance and guidance to less experienced WPCF Maintenance or Utilities Operations & Maintenance personnel. The Utilities Maintenance Mechanic will also be called upon to assist other City staff in design and fabrication of various parts, implements and structures.

ESSENTIAL DUTIES

Duties may include but are not limited to the following:

Installs, adjusts, maintains, repairs and overhauls a variety of mechanical equipment necessary to the operation of water and wastewater facilities, including large industrial pumps, portable gas and diesel-driven pumps, motors, hydraulic controls and regulators, valves and allied piping systems, chemical feed and processing equipment, compressors, heating and ventilating equipment, emergency generators and all other related equipment.

Fabricates parts and fittings and makes assemblies and repairs units based on drawings, specifications, sketches, work orders, verbal instructions, or personal visual inspection.

Uses hand and power tools, gas and arc welding equipment, and precision measuring instruments in the performance of various work assignments.

Inspects and tests equipment on a regular basis to determine operating difficulties and the adequacy of preventive maintenance activities.

ESSENTIAL DUTIES (continued)

Investigates interruptions of service, identifies defects, and resolves complex mechanical repair problems at the request of Utilities Division operations personnel.

Provides guidance and assistance to Treatment Plant Operators and other Division personnel in making minor mechanical repairs to machinery and equipment.

Assists in the development of a preventive maintenance schedule and trains employees in other classifications to accomplish the planned maintenance routines.

Assists in the development and update of the computerized maintenance management system (CMMS) and uses system for preventative, predictive and corrective repair of Utilities assets.

Maintains records, makes sketches and prepares written and oral reports of work performed including the posting of work orders, daily logs, ledgers, parts lists, invoices, and inventories.

Prepares rough estimates of labor and materials necessary to accomplish the maintenance and repair of equipment.

Sets up and operates necessary rigging equipment to move or place heavy equipment when performing repair or installation work.

Operation, maintenance and repair of water pump stations, water reservoirs, and stormwater pump stations.

Operation, maintenance and repair of Regional Water Inter-Tie water pump stations and all associated equipment including valves, piping systems and pressure reduction and sustaining equipment.

Performs related work as necessary.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Equipment common to water and wastewater facilities and of the methods, practices, and materials used in inspecting, installing, overhauling, adjusting, lubricating, cleaning, and repairing such equipment.

Safety regulations pertaining to work in water and wastewater operations, including precautions in handling and storing liquid chlorine, acetylene, and oxygen, working at heights or depths of 25', and working in confined spaces while wearing a respirator and other required safety equipment.

Pump operation and basic water distribution principles.

JOB RELATED AND ESSENTIAL QUALIFICATIONS (continued)

Ability to:

Perform journey level repair work on the full variety of mechanical equipment employed in the water and wastewater systems.

Recognize unsatisfactory operating conditions by observing meters, gauges, and other measuring devices, and to quickly and accurately diagnose the causes of failures and malfunctions.

Use with journey-level skill hand tools, power tools, meters, metal working equipment, electric arc and gas welding equipment, and the materials associated with these tools.

Prepare and maintain the forms and records associated with systems maintenance activities including ordering of parts, reviewing of log books, maintenance of work records, and checking off inventories.

Operate water pump stations, remaining cognizant of the effects the operation of the pump station will have on the associated systems, including reservoirs and piping.

Operate sewer lift stations, remaining cognizant of the effects the operation of the pump station will have on the associated systems, including the sewer collection system, WPCF, and other lift stations that may receive the discharge.

EXPERIENCE AND EDUCATION

Any combination equivalent to experience and training that could likely provide the required knowledge and abilities would be qualifying. A typical way to obtain the knowledge and abilities would be:

Experience: Three (3) years of experience in the operation, repair and maintenance of pumps, compressors, motors, and related equipment. Previous experience of this type at a water distribution or wastewater collection and treatment facility is desirable.

Education: Equivalent to completion of the twelfth grade or possession of GED.

Licenses and Certificates: Possession and maintenance of a valid Class B California Driver's License and Tanker Endorsement. Depending upon assignment, a Class A Driver's License may be required.

Possession of or the ability to obtain a Grade 2 Water Distribution Operator certification from the State of California Department of Public Health within 18 months of hire.

SPECIAL REQUIREMENTS

Essential duties require the mental and/or physical ability to: work in a standard office environment and use standard office equipment and current software; work in a field environment when needed in various weather conditions; frequently stand and walk throughout the day; regularly crouch, reach, twist, turn, kneel, bend, squat, and safely reach, lift and move equipment and materials weighing up to 75 pounds; withstand exposure to loud noises, moving objects, dust, chemicals, hazardous waste, mechanical and electrical hazards; ability to read fine print on labels, manuals, and diagrams; ability to converse by telephone, by email, and in person; interact with the public and all different levels of City staff in an effective and professional manner; and safely drive to various locations throughout the City and County to travel to fulfill assigned duties and to review work outdoors. Essential functions must be performed with or without reasonable accommodations.

PROBATIONARY PERIOD: Six Months

325CS94 July 1982

Revised March 1994

Revised February 2012

AAP GROUP 17

FPPC STATUS Non-Designated

FLSA STATUS Non-Exempt

MLC/nk