

INDUSTRIAL MECHANIC

DEFINITION

To perform technical duties and responsibilities in the maintenance, repair, service, and troubleshooting of equipment and machinery in wastewater treatment plants, water production facilities, pumping stations, and related facilities; to perform collection, distribution, and utility facilities maintenance and repair duties including preventive and corrective maintenance on assigned equipment, and machinery and to provide technical support to an assigned supervisor.

DISTINGUISHING CHARACTERISTICS

This is the journey level in the single level technical Industrial Mechanic class. Incumbents initially perform the more routine duties assigned to positions in this class and work under close supervision. However, as experience is gained, incumbents are expected to perform the full range of duties as assigned with increasing independence.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the assigned supervisor; and may receive technical and functional supervision from more experienced staff.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Perform technical duties and responsibilities in the maintenance, repair, service, and troubleshooting of equipment and machinery in wastewater plant, water production facilities, pumping stations, and related facilities; perform collection, distribution, and utility facilities maintenance duties including preventive and corrective maintenance on assigned equipment, and machinery.

Perform troubleshooting using visual inspection and precision measuring and testing instruments to determine cause of malfunction on process equipment in the plant; repair, replace or service pumps, mobile and stationary engines, air and gas compressors, evaporators, blowers, belt filter presses, centrifuges, bar screens, augers, hydraulic systems, conveyor belts, gauges, gaskets, plugs, coils, wires, bearings, drive lines, valves, pistons, rings, crankshafts and related equipment.

Perform complex preventive mechanical maintenance on process equipment in the plant and pump stations by inspecting, servicing and cleaning equipment, including but not limited to replacing oil, adjusting, and/or replacing belts, gearboxes, pistons, rollers, filters, valves, gaskets, and other related parts and equipment; install and monitor flow meters in sewer lines.

Rebuild equipment by disassembling, cleaning, and repairing mechanical malfunctions; reassemble, install and test equipment to ensure that it is in proper working condition;

disassemble machinery to carefully evaluate for required machine work and parts; clean, bead blast, prime and paint prior to reassembly; test equipment to ensure proper operation.

Complete and log written and/or electronic daily work sheets and service sheets; review equipment service logs for previous comments on repairs to equipment; complete work orders for malfunctions identified during routine maintenance inspections; refine, develop and use Maintenance Management Software system for preventative maintenance, procedures, and documentation of service and work completed.

Read and update blueprints and schematics as required to assist in repairs; prioritize and coordinate the appropriate timing to service equipment; estimate labor and materials necessary to complete the needed work; order replacement parts to perform maintenance and repairs as necessary.

Build and maintain positive working relationships with co-workers, other City employees and the public using principles of good customer service.

Foster an environment that embraces diversity, integrity, trust, and respect.

Be an integral team player, which involves flexibility, cooperation, and communication.

Perform related duties as assigned.

MINIMUM QUALIFICATIONS

Knowledge of:

Methods and procedures of how to troubleshoot and perform a variety of repair, maintenance, servicing, and cleaning tasks on assigned equipment, vehicles, and/or machinery.

Methods and procedures to perform moderately complex pump station repair and maintenance work.

Methods and procedures to disassemble machinery to carefully evaluate it for required machine work and parts; clean, bead blast, prime and paint prior to reassembly and to perform testing for proper operation.

Methods and procedures of how to estimate and prioritize the work and to order parts and equipment.

Principles and practices of maintaining detailed records.

Relevant local, State, and Federal laws, rules and regulations related to area of assignment.

Ability to:

Perform technical duties and responsibilities in the maintenance, repair, servicing, and troubleshooting of equipment and machinery in wastewater treatment plants, water production facilities, pumping stations, and related facilities; perform collection, distribution, and storm water facilities maintenance duties including preventive and corrective maintenance on assigned equipment, and machinery.

On a continuous basis, know and understand operations, and observe safety rules; intermittently analyze problem equipment; identify and locate equipment; interpret work orders; remember equipment location; and explain jobs to others.

Intermittently, sit while studying or preparing reports; bend, squat, climb, kneel and twist when performing installation of equipment; perform simple and power grasping, pushing, pulling, and fine manipulation; and lift or carry weight of 50 pounds or less.

Operate and maintain a variety of hand tools, power tools, pneumatic tools, precision alignment tools and other equipment in the performance of assigned duties.

Read and update blueprints and schematics.

Safely enter confined spaces and work with hazardous chemicals and substances and other mechanical and electrical hazards.

Communicate in person and over the telephone or radio.

Use sound judgment in recognizing scope of authority.

Operate and use modern office equipment including computers and applicable software.

Maintain regular attendance and adhere to prescribed work schedule to conduct job responsibilities.

Learn, master and utilize appropriate safety procedures and practices for assigned duties.

Establish and maintain effective working relationships with those contacted in the course of work.

Work with various cultural and ethnic groups in a tactful and effective manner.

Communicate clearly and concisely, both orally and in writing.

Experience and Training

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

Experience:

Two years of responsible experience involving preventive and corrective mechanical maintenance experience on wastewater and water treatment plants, pumping stations, or related facilities mechanical equipment analysis, maintenance and repair.

Training:

Equivalent to the completion of the twelfth grade supplemented by specialized training in mechanical equipment maintenance and repair.

License and Certificate

Possession of a valid California Class C Driver License is required at the time of appointment. Failure to obtain or maintain such required license(s) may be cause for disciplinary action. Individuals who do not meet this requirement due to a physical disability will be considered for accommodation on a case-by-case basis.

Possession of a Grade I Mechanical Technology certificate from the California Water Environment Association within 18 months of employment.

Possession of a Grade II Mechanical Technology certificate from the California Water Environment Association within 42 months of employment.

Possession of a Grade 2 Water Distribution Operator certificate from the California State Water Resources Control Board within 2 years from date of employment.

Possession of a Grade 1, or above, Water Treatment Plant Operator certificate from the California State Water Resources Control is highly desired.