

MAJOR FUNCTION

This is highly skilled journeyman level mechanical work in the maintenance and repair of structures and specialized equipment and machinery at a wastewater treatment plant. Work involves repairing a variety of different pumps, gear boxes and various types of mechanical equipment. Work is performed with independence under the supervision of a Foreman-Wastewater Plant Mechanics. Work is reviewed through inspections, observations while work is in progress, and by results obtained.

ESSENTIAL AND OTHER IMPORTANT JOB DUTIES**Essential Duties**

Makes inspections of wastewater treatment structures and mechanical equipment such as master pump station, grit chamber, flow equalization tank, blower buildings, flight boards, clarifier tanks, aeration tanks, sludge thickening and dewatering equipment, aerobic digesters, anaerobic digesters to determine and make repairs and services. Disassembles, rebuilds, repairs and maintains operation of various types of pumps such as piston, progressive cavity, centrifugal, and vortex. Maintains and repairs rotating equipment such as gas compressors, clarifier rotating arms, trickling filter rotary distributor, rotary and centrifugal blowers, belt filter presses, conveyors, and gearboxes. Maintains and repairs valves of various sizes. Makes emergency repairs on equipment. Aligns and calibrates equipment as necessary. Performs related work as required.

Other Important Duties

Initiates purchase of supplies and parts. Rebuilds motors of lawn equipment. Welds, cuts, and fabricates parts of structures and pipes. Maintains orderly repair shop and supply rooms. Maintains maintenance records. May coordinate and oversee the work of maintenance repair workers. Performs preventive maintenance such as changing oil, lubricating, and repairing parts of equipment, pumps, and structures. Maintains maintenance records.

DESIRABLE QUALIFICATIONS**Knowledge, Abilities and Skills**

Considerable knowledge of the methods and techniques used in the installation, repair and maintenance of a wide variety of pumps and other equipment in a wastewater treatment plant. Knowledge of methods and techniques used in the troubleshooting, repair and maintenance of mechanical equipment and valves at a wastewater treatment plant. Basic knowledge of electricity as related to electric motors on pumps and gearboxes. Knowledge of both oil-fired and methane gas-fired heat exchangers. Knowledge of occupational safety and health hazards related to area. Ability to follow prescribed safety precautions in the performance of duties. Ability to make inspections to determine operating conditions of wastewater treatment plant equipment. Ability to diagnose and repair equipment failures quickly. Ability to maintain workshop in an organized fashion. Ability to follow oral and written instructions. Ability to repair equipment, sometimes without necessary maintenance manuals. Skill in the use of tools and equipment used for maintenance and repair of wastewater treatment plant facilities and machinery. Skill in welding. Good physical condition and manual dexterity.

Minimum Training and Experience

Possession of a high school diploma or an equivalent recognized certificate and three years of experience that includes mechanical maintenance, repair, or preventative maintenance and repair of wastewater treatment plant machinery, such as, but not limited to, pumps, motors, compressors, and other components of wastewater distribution systems; or mechanical maintenance work involving the repair and maintenance of pumps, valves, and similar equipment; directly related experience may be substituted on a year-for-year basis for the required education.

Necessary Special Requirements

Must possess the appropriate State Commercial Driver's License (CDL) and endorsement(s) at the time of appointment for the vehicle(s) to be operated or must have passed the appropriate written CDL Test/endorsement(s) and obtained a CDL permit at the time of appointment and obtain the appropriate CDL licensure within 60 calendar days from date of employment as a condition for continued employment.

Established: 01-11-94
Revised: 04-28-04*