



JOB DESCRIPTION

SENIOR WASTEWATER TREATMENT PLANT OPERATOR/MECHANIC

DEFINITION

Under limited supervision from the Treatment Plant Supervisor and Lead Senior Operator, serves as the shift operator responsible for the operation and maintenance of the Wastewater Treatment Plant. In addition, this position is responsible for ensuring that all facility electro-mechanical issues are effectively addressed. This includes but is not limited to, developing maintenance schedules, guiding and participating in preventive maintenance activities, development, implementation, guiding and participating in predictive maintenance activities, guiding and participating in minor and major mechanical repairs to various plant and other equipment, including vehicles. This is a journey level position that performs related duties independently with a high degree of initiative, as assigned.

EXAMPLES OF DUTIES: (These examples are intended only as illustrations of the various types of work performed. The examples of work performed are neither restricted to nor all-encompassing of the duties to be performed under this job title.) **(E=Essential Duty; M=Major Portion of Time)**

- Assists in supervision, training and direction of other plant operations and maintenance personnel (both operators and operator/mechanics). (M)
- Schedule, guide and perform periodic maintenance work, including the disassembly and repair of pumps, valves, flow-rate controllers, chemical dispensers, automatic bar screens, and a variety of other plant equipment. (E-M)
- Oversee and participate in the inspection, diagnostics, and repair of mechanical, hydraulic, and electrical systems on various large and small Wastewater Treatment Plant equipment, including generators, compressors, vehicles, tractors, and trucks. (E-M)
- Implement an equipment Maintenance Management System that provides records and documentation of maintenance activities and costs, schedules preventive maintenance tasks, and provides an up-to-date library of maintenance manuals including hard copy and electronic versions. (E-M)
- Inventory and stock spare parts for critical equipment. (E)
- Ensure that plant equipment is oiled, greased, cleaned, and painted. (E)
- Regulate and control the flow of sewage through the plant, including the operation of bar screens, grit collectors, pumps, blowers, sludge collectors, chlorinators, and other equipment. (E-M)
- Read charts and gauges and maintain a log of plant operations during assigned shift. (E)
- Ensure that outside plant maintenance work, including mowing, watering, and caring for shrubbery is effectively completed. (E)
- Perform metal welding and cutting. (E)
- Properly obtain various samples and perform basic wastewater laboratory tests. (E)

- Operate, adjust, and maintain chemical feed equipment including the valves and other controls that feed sodium hypochlorite and other chemicals into wastewater. (E-M)
- Perform various recordkeeping and prepare special reports as required and requested. (E)
- Follow safe work methods and safety precautions related to the work. (E)
- Maintain buildings and grounds. (M)
- Work various shifts and flexible hours, including weekends and holidays, and be available on standby for callback as assigned. (E)
- Provide training to other operators. (E)
- Utilize Supervisory Control and Data Acquisition (SCADA) system to track operational and plant process control trends
- Perform all other duties as assigned

QUALIFICATIONS

Knowledge of:

- Tools, equipment, and procedures used in the overhaul, repair, and adjustment of automotive and related power driven equipment, stationary power equipment, pumping equipment, and electrical systems used in a wastewater treatment plant.
- Methods, techniques, and equipment used in sewage disposal.
- Operation, maintenance, and repair of wastewater treatment plant equipment.
- Wastewater treatment principles, methods, and practices.
- Safe work practices and occupational hazards related to this work.
- Current methods, techniques, and equipment used in sewage disposal.
- Various chemicals and compounds used in wastewater treatment, and safe and appropriate handling techniques for their use.
- SCADA and personal computer systems, with ability to operate as related to wastewater treatment.
- Recordkeeping and reporting procedures.
- Safety rules, codes, and regulations pertaining to the work.
- Basic first aid and CPR techniques.
- Knowledge of maintenance scheduling techniques and predictive maintenance methodologies

Ability to:

- Inspect, diagnose, and repair mechanical, hydraulic, and electrical systems on various large and small Water & Sewer Department equipment, including generators, compressors, vehicles, tractors, and trucks.
- Perform mechanical repair, maintenance, and modification of treatment plant equipment.
- Read and interpret gauges and recording devices reflecting plant operations.
- Conduct and interpret laboratory tests.
- Maintain records and prepare reports.
- Perform mathematical calculations as related to the wastewater treatment process.
- Perform heavy manual labor and lift up to 50 pounds.
- Tolerate changes in outside temperatures from winter to summer, and tolerate dust, pollen, wind, and rain.
- Climb stairs and ladders in the performance of duties.
- Establish and maintain cooperative relationships with those contacted in the course of work.
- Understand, develop and follow oral and written instructions.
- Read and interpret gauges and recording devices reflecting plant operations.
- Conduct and interpret laboratory tests.

- Maintain, repair, and adjust wastewater treatment equipment.
- Keep records and prepare reports.
- Understand and carry out oral and written directions.
- Perform mathematical calculations as related to the wastewater treatment process.
- Sit or stand for long periods of time.
- Walk on uneven or steep ground.
- Establish and maintain cooperative relationships with those contacted in the course of work.
- Work various shifts and flexible hours, including weekends and holidays.

EXPERIENCE

Five years of experience in the wastewater field of which 50% of time was dedicated to maintaining electromechanical equipment. Two years of experience in the mechanical field as well

EDUCATION

Equivalent to completion of the twelfth grade supplemented by courses in wastewater treatment plant operations and maintenance, electro-mechanical maintenance and/or applicable courses in wastewater treatment as approved by the California State Water Resources Control Board.

NECESSARY SPECIAL REQUIREMENTS

- Possess a Grade III California Wastewater Operator Certificate, or have ability to obtain within 18 months of appointment to position.
- Possess a CWEA Plant Maintenance (PM) Mechanical Technologist Grade II Certification or have ability to obtain within 18 months of appointment to position.
- Possession of a valid Class C California Driver's License.

RESIDENCY REQUIREMENT

All Wastewater Treatment Plant employees shall be expected, within six months of hire, to establish permanent residence within a 45-minute notification to respond zone.