

WASTEWATER TREATMENT PLANT SENIOR OPERATOR

DEFINITION

Assists the Wastewater Treatment Plant Operations Supervisor in scheduling, purchasing, inventory control and related activities in support of the supervisory and management activities of the plant; operates equipment, facilities and related appurtenances as found in a continuously-operating wastewater treatment plant on an assigned shift; performs standard chemical, biological and physical tests of wastewater influent, plant process samples and effluent; performs preventive maintenance and makes repairs to plant facilities and equipment; performs related work as assigned.

SUPERVISION RECEIVED AND EXERCISED

The Senior Wastewater Treatment Plant Operator receives general supervision from the Wastewater Treatment Plant Operations Supervisor. The incumbent provides direction and work instruction to Operators-in-Training.

CLASS CHARACTERISTICS

This is the advanced journey-level class in this operational class series. In addition to performing the full range of duties of a plant operator, the incumbent performs work involving scheduling, purchasing, inventory control and related activities in support of the supervisory and management activities of the plant. This class is distinguished from Wastewater Treatment Plant Operations Supervisor in that the latter is the first full supervisory level in this class series, responsible for day-to-day operations of the treatment plant and related appurtenances.

EXAMPLES OF DUTIES (Illustrative Only)

- Maintains an inventory of materials, chemicals, supplies and equipment required for the effective operation of the wastewater treatment plant.
- Contacts vendors regarding prices, delivery and services for materials, chemicals, supplies and equipment; obtains bids and recommends suppliers for ongoing contracts.
- Inspects the plant for safety violations; assists in presenting periodic safety presentations to plant staff.
- Assists in the development and administration of the operational budget for the treatment plant.
- Inspects plant operations on a regularly-scheduled basis; reads and records readings of pumps, chemical feed and other treatment, influent and effluent equipment.
- Reviews and analyzes automated information and control system data and revises equipment settings as appropriate; notifies supervisor of unusual situations and makes inspections or corrects system problems as instructed.
- Operates and performs preventive maintenance on a variety of treatment plant equipment, such as pumps, motors, chlorinators, filters, chemical valves, digesters, bar screens and blowers.
- Operates valves, pumps and automated controls to regulate the flow of wastewater through the plant.
- Removes screenings and grit; cleans primary, secondary and other wastewater equipment and facilities.

- Lubricates pumps, motors, chains, conveyors and other machinery and equipment.
- Makes minor repairs to equipment; assists plant maintenance staff with major repair work.
- Performs routine maintenance painting of machinery, structures, equipment and piping systems.
- Collects wastewater, sludge and other samples from various phases of the treatment process; performs standard chemical and physical tests on these samples to ensure that the plant is operating effectively and that regulatory requirements are being met.
- Uses a variety of hand and power tools and testing equipment.
- Drives a motor vehicle to dispose of dewatered sludge.
- Changes recording charts; ensures that chemical feeders have a constant supply of chlorine and other treatment chemicals.
- Maintains accurate records of gauge and meter readings, chemical test results and work performed.

QUALIFICATIONS

Knowledge of:

- Basic budgetary, purchasing and contract administrations principles and practices in a public agency setting.
- Basic techniques for training operations staff on work procedures.
- The operation, cleaning and preventive maintenance of wastewater treatment and disposal facilities and equipment.
- The operation and preventive maintenance of piping systems, including pipes, valves and related appurtenances.
- Standard chemical and physical tests of wastewater, sludge and related materials.
- Tools and equipment required for the work.
- Safety equipment and practices related to the work, including the handling and storage of hazardous chemicals.
- Basic equipment troubleshooting principles and practices.
- Basic record keeping practices.
- Applicable laws, codes and regulations.
- Shop mathematics.
- Basic mechanical, electrical, and hydraulic principles.
- Computer applications related to the work.

Skill in:

- Assisting management staff in performing budgeting, purchasing and other administrative support duties.
- Operating, maintaining and repairing a variety of wastewater treatment and disposal facilities and equipment.
- Recognizing and correcting or reporting unusual, inefficient or dangerous operating conditions.
- Reading a variety of gauges, charts and meters, recording data accurately and making appropriate process adjustments.
- Conducting standard chemical and physical tests of wastewater, sludge and related materials.
- Using and maintaining the tools and equipment of the work skillfully and safely.
- Handling hazardous chemicals in a safe manner.

- Maintaining accurate records related to work performed.
- Making accurate arithmetic calculations.
- Working independently within established procedural guidelines.
- Establishing and maintaining effective working relationships with those contacted in the course of the work.

Education and Experience:

Equivalent to graduation from high school, successful completion of training required by the California State Water Resources Control Board and three years of experience in operating and performing routine maintenance to facilities and equipment in a secondary wastewater treatment plant.

Licenses and Certifications:

Must possess and maintain a valid California class C driver's license and a satisfactory driving record. Must obtain a class B driver's license prior to completion of the probationary period. Must possess a Grade II Treatment Plant Operator certificate issued by the California State Water Resources Control Board.

Working Conditions:

Works inside and outside. . Must be available for regular standby assignments and work off-hours shifts and emergency overtime as required. Must be willing to work out of doors in all weather conditions and with exposure to potentially hazardous chemicals and conditions.

Physical Demands:

Must possess strength, stamina and mobility to work in a standard wastewater treatment plant and laboratory setting, to lift and carry materials weighing up to 50 pounds and to use specialized test equipment, hand and power tools and instrumentation; stamina to work confined spaces, around machines and to climb and descend ladders; vision to read printed materials, charts and gauges and a computer screen; and hearing and speech to converse in person and over the telephone or radio.