



Senior Wastewater Treatment Plant Operator

Purpose of the role:

Under direction, assists in the supervision, operation and maintenance of a wastewater treatment plant on an assigned shift in compliance with state regulatory agency discharge requirements; monitors wastewater treatment plant processes; oversees and performs laboratory tests and a variety of skilled tasks, including making repairs and adjustments to equipment in the operation and maintenance of a wastewater treatment plant; ensures adherence to safe work practices and procedures; and performs related duties as assigned.

Distinguishing Characteristics:

This is the advanced journey-level position and may be distinguished from the lower classification of Wastewater Treatment Plant Operator II by its responsibility for work coordination and assignment. It can be further distinguished from the higher position of Wastewater Treatment Plant Operations Supervisor by that classification's supervisory responsibility.

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

Essential Duties and Responsibilities:

- Schedules and supervises plant operations personnel on an assigned shift; assists in the training, scheduling and assignment of subordinates.
- Verifies the work of assigned employees for accuracy, proper work methods, techniques, and compliance with applicable standards and specifications; ensures adherence to safe work practices and procedures.
- Monitors, analyzes and adjusts all treatment processes within the plant within designated parameters; reads plant equipment gauges, charts, dials, graphs, computer screens, meters, SCADA systems and other instrumentation; maintains an operational log during an assigned shift.
- Checks equipment such as pumps, valves, motors, blowers, and electric and mechanical drive units to ensure proper operation; performs night inspections to monitor equipment.
- Checks and takes wastewater and biosolid samples; performs daily and weekly laboratory tests and analyses to determine compliance with state and federal regulations and to maintain process control parameters.
- Alters or adjusts chemical treatment of the plant as necessary; monitors bactis, ammonia, nitrite and nitrate levels; monitors air rates.

- Records and analyzes plant chemical usage; monitors stock supply; trains employees on safe chemical usage and handling.
- May serve as plant safety officer or plant representative on City-wide safety committee; coordinates plant safety training; performs quarterly plant safety inspections; investigates plant accidents and completes required paperwork.
- Operates motorized equipment such as front-end loaders, backhoes and dump trucks; performs heavy manual labor and grounds maintenance work.
- Maintains logs and other records and prepares reports.
- Conducts tours for the public.
- Responds to after-hour alarms as assigned.
- Performs related duties as required.

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

***Desired
Minimum
Qualifications:***

Knowledge of:

- Theory of treatment processes used in a Class V wastewater treatment plant.
- Principles of lead supervision and training.
- Advanced principles, practices, methods and procedures for operations of a wastewater treatment plant.
- Advanced operating principles of plant equipment such as valves, pumps, and motors.
- Advanced methods and techniques of reading and interpreting gauges, recording devices, and related system monitors.
- Administrative requirements and procedures used in operation of a wastewater treatment plant.
- Water chemistry, bacteriology, and hydraulics.
- Wastewater and biosolids sampling methods and techniques.
- Tools, equipment, and procedures used in the operation and maintenance of wastewater treatment plant facilities.
- Advanced methods and techniques of conducting laboratory tests and procedures related to wastewater treatment analysis.
- Maintenance and operation of equipment commonly found in a wastewater treatment plant.
- Principles and practices of record keeping and reporting.
- Office procedures, methods, and equipment including computers and applicable software applications.
- Occupational hazards and standard safety practices.
- Pertinent federal, state, and local laws, codes, and safety regulations.

Ability to:

- Train and direct the work of an individual or a crew and participate in the operations of equipment commonly found in wastewater treatment plants.
- Operate and maintain a variety of wastewater treatment plant equipment and facilities.

- Monitor and maintain plant processes at an optimal and cost-effective level.
- Read and interpret technical illustrations, blueprints, maps, plans, specifications, wiring and pneumatic diagrams.
- Perform computer calculations as necessary to determine operations parameters.
- Organize, set priorities and exercise sound independent judgment within areas of responsibility.
- Interpret, explain and apply complex federal, state and local law, regulations, policies and procedures.
- Conduct laboratory tests and analyses.
- Read and interpret gauges and recording devices monitoring plant operations.
- Operate motorized equipment used in plant maintenance and operation.
- Prepare clear, accurate and concise technical reports.
- Operate office equipment including computers and supporting software applications.
- Maintain records and files.
- Work under steady pressure with frequent interruptions.
- Learn and apply new information or new skills.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Respond and perform assigned duties in the event of a City-declared emergency.

Competencies:

- Results Oriented
- Customer-Focused
- Accountable
- Problem Solver and Decision Maker
- Technically Knowledgeable

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

Education:

Equivalent to the completion of the twelfth grade supplemented by college level course work in chemistry, biology, or a related field.

Experience:

Four years of increasingly responsible experience in the operation of wastewater treatment facilities.

**Education and
Experience
Guidelines:**

Licenses; Certificates; Special Requirements:

A valid Class C California driver's license is required.

A valid Class B California driver's license may be required for certain positions.

Forklift Certificate, First-Aid/C.P.R, and Confined Space Training/Certificate required.

Position may be required to wear respiratory protection.

State of California Wastewater Treatment Grade III Certificate.

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

**Physical and
Environmental
Conditions:**

Physical: Sufficient physical ability to perform heavy manual labor; sit, stand, walk on level and slippery surfaces, reach, twist, turn, kneel, bend, stoop, squat, crouch, grasp and make repetitive hand movement; lift, carry and push tools, equipment and supplies weighing 25 pounds or more; climb ladders, use power and noise producing tools and equipment, and drive motorized vehicles and heavy equipment. **Vision:** See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment. **Hearing:** Hear in the normal audio range with or without correction.

Environment: Wastewater treatment plant and field environment; exposure to noise, dust, grease, fumes, gases, potentially hazardous chemicals, electrical energy, and inclement weather conditions including wet and/or humid conditions; work around water or wastewater; work on slippery surfaces; regularly work near moving mechanical parts; and work around moderately loud noise levels; incumbents may be required to work evenings, nights, and weekends.

*Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specifications **may not include all** duties performed by individuals within a classification. In addition, specifications are intended to outline the **minimum** qualifications necessary for entry into the class and do not necessarily convey the final qualifications of incumbents within the position.*

Pursuant to California Government Code Section 3100, all public employees are required to serve as disaster service workers subject to such disaster service activities as may be assigned to them by their supervisor or by law.

Date Adopted: 7/5/03

Date Revised: 3/19/09

3/19/09:

- Removed S.C.B.A. requirement. Added "position may be required to wear respiratory protection".