

PLANT OPERATOR

DEFINITION

Under direct or general supervision of the Plant Operations Supervisor and/or Plant Manager, operates and controls wastewater treatment plant and reclamation and recycled water facilities; performs preventative and routine corrective maintenance on a variety of equipment, facilities and related appurtenances; and performs related work as required.

SUPERVISION RECEIVED AND EXERCISED

Receives direct (Plant Operator-in-Training and Plant Operator Grade I) and general (Plant Operator Grade II and Grade III) supervision from the Plant Operations Supervisor and/or Plant Manager. Exercises no direct supervision of staff.

CLASS CHARACTERISTICS

Plant Operator-in-Training (OIT): This is the trainee-level classification in the wastewater treatment plant operator series. Initially under immediate supervision, incumbents learn to operate and maintain District wastewater treatment plant and reclamation and recycled water facilities and equipment. Incumbents learn to perform tasks according to District practices and procedures, as well as state and federal regulations. Since this class is often used as a training class, incumbents may have only limited or no directly related work experience.

Plant Operator Grade I: This is the first working classification in the wastewater treatment plant operator series. Positions at this level usually perform most of the wastewater treatment plant and reclamation and recycled water facilities and equipment operations and maintenance duties required of the positions at the II-level but are not expected to function at the same skill level and usually exercise less independent discretion and judgment in matters related to work procedures and methods. Work is usually supervised while in progress and fits an established structure or pattern. Exceptions or changes in procedures are explained in detail as they arise. Since this class is often used as a training class, incumbents may have only limited or no directly related work experience.

Plant Operator Grade II: This is the experienced-level classification in the wastewater treatment plant operator series. Incumbents are expected to operate wastewater treatment and reclamation and recycled water facilities and equipment according to prescribed guidelines and with assistance from more senior staff. As experience is gained, assignments become more varied and are performed with greater independence. Incumbents receive instruction or assistance as new or unusual situations arise and have working knowledge of District practices, procedures and policies. Employees are responsible for the successful performance of their own work and

able to prioritize and determine methods of work performance within general guidelines. This class is distinguished from the Plant Operator III in that the latter independently performs a wide variety of operations and maintenance work as the requiring advanced knowledge and skills, training and experience and certification.

Plant Operator Grade III: This is the full journey-level classification in the wastewater treatment plant operator series. Incumbents independently perform the full range of wastewater treatment and reclamation and recycled water facilities and equipment operations and maintenance duties. Responsibilities include inspecting and attending to assigned areas in a timely manner to ensure the proper operation and maintenance of the District's wastewater treatment plant systems and equipment. Positions at this level work independently, exercise judgment and initiative and receive occasional instruction or assistance as new or unusual situations arise. This class is distinguished from the Lead Plant Operator in that the latter is responsible for providing technical and functional direction to operations staff and is capable of performing the most complex operations and maintenance duties assigned to the division.

Positions at the I-, II- and III-levels are normally filled by advancement from the OIT, I- and II-levels, respectively; progression in the class series is dependent on (i) satisfactory work performance; (ii) the incumbent meeting the minimum qualifications for the classification, including licenses and certification requirements; (iii) management affirmation that the position is performing the full range of duties assigned to the classification and (iv) management approval for progression.

EXAMPLES OF TYPICAL FUNCTIONS (Illustrative Only)

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

Positions at the Plant OIT, Plant Operator Grade I and Plant Operator Grade II may perform some of these duties in a learning capacity.

- Controls the operation of treatment, pumping and reclamation facilities to achieve proper processing of wastewater and recycled water within mandated operation requirements.
- Reads and records readings of pumps, chemical feed and other treatment and pumping equipment.
- Reviews and analyzes operational information and test results and revises equipment settings as appropriate; notifies supervisor of unusual situations and makes inspections or corrects system problems as instructed.
- Monitors plant Supervisory Control and Data Acquisition (SCADA) system to identify needed adjustments for proper operating conditions; reviews, investigates, identifies, and reports trends using SCADA human machine interface (HMI) and Historian software applications.
- Operates valves, pumps and automated controls to regulate the flow of wastewater through the system; operates valves to dispose of wastewater effluent.

- Changes recording charts; ensures that chemical feeders provide a constant supply of sodium hypochlorite, sodium bisulfite, ferrous chloride, polymer and other treatment chemicals.
- Collects wastewater, sludge and other samples from various phases of the wastewater treatment process; performs basic chemical and physical tests on these samples to ensure that the wastewater treatment plant is operating effectively and that regulatory requirements are being met; delivers other samples to the District laboratory for testing.
- Inspects plant and pump station equipment and facilities on a regularly scheduled basis; investigates, troubleshoots, adjusts and performs preventive mechanical and electrical maintenance, and emergency repairs as needed, on a variety of treatment plant and power and cogeneration equipment, such as pumps, filtration systems, ultra violet disinfection, chemical valves, sludge lagoon, bar screens, chlorination equipment, dechlorination equipment, electric motors and controls and biogas conditioning systems; performs routine calibration of instruments and field measurement devices.
- Removes screenings and grit; cleans clarifiers and primary, secondary and other wastewater equipment and facilities.
- Maintains facilities, grounds and equipment in a clean and orderly condition.
- Operates a variety of hand and power tools and testing equipment.
- Notifies lead operator or supervisor of the need for repair or additional maintenance as found during routine inspection and cleaning activities; refers complex electrical and mechanical maintenance and repair issues to appropriate maintenance staff and/or the Plant Operations Supervisor; prepares work orders or notes service requirements.
- Ensures that adequate materials and supplies are available for assigned work; orders materials and supplies as needed.
- Provides needed information and demonstrations concerning how to perform certain work tasks to new employees in the same or similar class of positions.
- Maintains accurate logs and records of gauge, chart, graph and meter readings, chemical test results and work performed and materials and equipment used.
- Performs on-call duties and special shift work as assigned; responds to emergency calls for service; may investigate and resolve customer complaints regarding wastewater treatment related matters.
- Observes and complies with all District and mandated safety rules, regulations and protocols; takes appropriate action as required to identify and correct safety hazards and report safety concerns to assigned supervisor.
- Observes safe work methods and makes appropriate use of related safety equipment as required.
- Performs related duties as assigned.

QUALIFICATIONS

Incumbents at the OIT, Grade I, and Grade II of the class series would not be expected to have the same level of knowledge and abilities as incumbents at Grade III and perform work in a learning capacity.

Knowledge of:

- Methods and techniques related to the operation, repair, cleaning and preventive and corrective maintenance of wastewater treatment plant and reclamation and recycled water facilities.
- Basic methods, tools, and testing equipment used in the installation, preventative maintenance, calibration and basic repair of electrical, electronic and mechanical equipment.
- Basic mechanical, electrical and hydraulic principles.
- Basic chemical, physical and bacteriological tests of wastewater, sludge and related materials.
- Basic operational and maintenance practices of electrical motors, pumps and circuitry.
- Operational characteristics of tools and equipment required for the work.
- Basic mathematics.
- Applicable federal, state and local laws, regulatory codes, ordinances, policies and procedures relevant to assigned area of responsibility.
- Occupational hazards and safety principles, practices and procedures, including handling and storage of hazardous chemicals and confined space entry.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors and District staff.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition and grammar.
- Modern equipment and communication tools used for business functions and program, project and task coordination, including computers and software programs relevant to work performed.

Ability to:

- Operate, maintain and repair a variety of wastewater treatment plant and reclamation and recycled water facilities and equipment.
- Recognize and correct or report unusual, inefficient or dangerous operating conditions.
- Read a variety of gauges, charts and meters; record data accurately and make appropriate process adjustments.
- Conduct basic chemical, physical and bacteriological tests of wastewater, influent, effluent, sludge and related materials.
- Use test equipment in the preventative maintenance, calibration and basic repair of electrical, electronic and mechanical equipment.
- Safely use hand and power tools.
- Handle hazardous chemicals in a safe manner.
- Interpret and apply the policies, procedures, laws, codes and regulations pertaining to assigned area of responsibility.
- Follow District policies and procedures related to assigned duties.
- Make accurate mathematical calculations.
- Respond to and troubleshoot emergency situations.
- Maintain accurate logs, records and basic written records of work performed.
- Organize own work, set priorities and meet critical time deadlines.

- Effectively use computer systems, software applications and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Use tact, initiative, prudence and independent judgment within general policy, procedural and legal guidelines.
- Establish, maintain and foster positive and effective working relationships with those contacted in the course of work.

Education and Experience

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

Plant Operator: Equivalent to completion of the twelfth (12th) grade.

Plant Operator-in-Training: No prior experience is required.

Plant Operator Grade I: One (1) year of experience equivalent to the Plant Operator-in-Training at the Las Gallinas Valley Sanitary District.

Plant Operator Grade II: One (1) year of experience equivalent to the Plant Operator Grade I at the Las Gallinas Valley Sanitary District.

Plant Operator Grade III: Two (2) years of experience equivalent to the Plant Operator Grade II at the Las Gallinas Valley Sanitary District.

Licenses and Certifications:

Plant Operator

- Possession of a valid California Driver's License by time of appointment and satisfactory driving record consistent with requirements established by the District.

Plant Operator-in-Training

- Possess and maintain a valid Wastewater Treatment Operator-in-Training certificate issued by the California State Water Resources Control Board (SWRCB).

Plant Operator Grade I

- Possess and maintain a valid Grade I Wastewater Treatment Operator certificate issued by the California State Water Resources Control Board (SWRCB).

Plant Operator Grade II

- Possess and maintain a valid Grade II Wastewater Treatment Operator certificate issued by the California State Water Resources Control Board (SWRCB).

Plant Operator Grade III

- Possess and maintain a valid Grade III Wastewater Treatment Operator certificate issued by the California State Water Resources Control Board (SWRCB).

PHYSICAL DEMANDS

Must possess mobility to work in a wastewater treatment plant setting and in the field; stamina and mobility to work in confined spaces and around machines, to climb and descend ladders, to use specialized test equipment, to operate varied hand and power tools and equipment and to operate a motor vehicle and visit various District sites; vision to read printed materials, charts and gauges, and a computer screen; smell to identify odors; and hearing and speech to communicate in person and over the telephone or radio. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard and to operate above-mentioned tools and equipment. Positions in this classification bend, stoop, kneel, reach and climb to perform work and inspect work sites. Employees must possess the ability to lift, carry, push and pull materials and objects weighing 50 pounds, on average, or heavier weights with the use of proper equipment and assistance from other staff.

ENVIRONMENTAL CONDITIONS

Employees work in a wastewater treatment plant and in the field, and are exposed to pollen, dust, loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspaces, chemicals, mechanical and/or electrical hazards and hazardous physical substances and fumes such as raw sewage.

OTHER REQUIREMENTS

Per California Government Code, Title 1, Division 4, Chapter 8, Section 3100, "all public employees are hereby declared to be disaster service workers subject to such disaster service activities as may be assigned to them by their superiors or by law."

Must be available for regular and emergency standby, weekend assignments, shift assignments, and to be called back and work emergency overtime as needed.