

TREATMENT PLANT OPERATOR – OIT, I, II, III
Ranges 11, 13, 15, and 17, respectively

DEFINITION

Under direct or general supervision, learns, operates and performs routine maintenance on equipment, facilities and related appurtenances as found in potable water production, treatment and distribution systems and/or continuously-operating wastewater treatment plants, pump stations and related facilities; and perform other duties as assigned.

SUPERVISION RECEIVED AND EXERCISED

Direct supervision and training is given by a Senior Water or Wastewater Treatment Plant Operator. Work instruction and shift leadership may be provided by a Senior level of the class. General supervision is given by the Operations Senior Supervisor under the leadership of the Director of the Utility Services Department. No direct supervision of staff is exercised by the OIT, I, II, or III Operator levels except that the Operator III level may be designated to serve as team leader for specific assignments.

CLASS CHARACTERISTICS

Operator-in-Training (OIT), Pay Range 11, is the entry-level class in the plant operations series. Initially under close supervision, incumbents learn District and operational procedures for water and wastewater treatment and water distribution and wastewater collection system equipment and appurtenances. As experience is gained, assignments become more varied and the work is performed more independently. This class is alternately staffed with Plant Operator I and incumbents may advance after gaining experience, obtaining the required level of certification, meeting the qualifications of and consistently performing the work of the higher-level class.

Plant Operator I, Pay Range 13, is the first working level class in this plant operations series. Under direct supervision, incumbents operate water and/or wastewater treatment and water distribution and wastewater collection system equipment and appurtenances. As experience and certification is gained, operators may independently operate plants and appurtenances under the certification of a Senior Treatment Plant Operator. This class is alternately staffed with Plant Operator II and incumbents may advance after gaining experience, obtaining the required level of certification, meeting the qualifications of and consistently performing the work of the higher-level class.

Plant Operator II, Pay Range 15, is the second working class level in this plant operations series. Under minimal supervision, incumbents perform all tasks related to operation of a water or wastewater treatment plant, including having knowledge of water distribution and wastewater collection system equipment and appurtenances. This class may be alternately staffed with Plant Operator III, and incumbents may advance after gaining experience, obtaining the required level of certification, meeting the qualifications of and consistently performing work of the higher-level class.

Plant Operator III, Pay Range 17, is the full journey level in this class series. Incumbents are fully competent to independently operate and perform routine preventive maintenance and repair in water and wastewater treatment plants and associated equipment and facilities. Incumbents in

this staff may assist with the training and oversight of less experienced staff assigned to a treatment plant.

EXAMPLES OF DUTIES *(Illustrative Only)*

The duties shown are done to differing levels of complexity and under differing levels of supervision depending upon the experience and training of the incumbent. Higher levels of the operator class are expected to completely undertake the duties listed, while lower levels may require instruction and assistance, or may singly accomplish only a portion of a listed activity.

- Inspects plant operational equipment and facilities on a regularly scheduled basis; and 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; and notifies supervisor of unusual situations and makes inspections or corrects system problems as instructed.
- Collects samples of water at various points throughout the system and/or takes 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 water and/or wastewater treatment plants are operating effectively and that regulatory requirements are being met; and
- Prepares other samples for delivery to certified laboratories for testing; may deliver samples to a specified location.
- Operates and performs preventive maintenance on a variety of treatment plant equipment, such as pumps, chlorinators, filters, chemical valves, sludge lagoon, bar screens, agitators and electric motors.
- Operates valves, pumps and automated controls to regulate the flow of water and/or wastewater through the system; and maintains appropriate reservoir levels and/or operates valves to dispose of wastewater effluent.
- Removes screenings and grit; and cleans clarifiers and primary, secondary and other wastewater equipment and facilities.
- Maintains facilities, grounds and equipment in a clean and orderly condition; and performs routine maintenance, painting of machinery, structures, equipment and piping systems.
- Monitors equipment operation; determines when maintenance by others may be needed; notifies supervisor or other responsible parties to schedule.
- Assists in placing orders for chemicals, supplies, and equipment.
- Performs basic adjustments and trouble shooting for electrical motors and controls.
- Uses a variety of hand and power tools and testing equipment.
- Changes recording charts; ensures that chemical feeders have a constant supply of chlorine and other treatment chemicals.
- Maintains accurate records of gauge, chart, graph and meter readings, chemical test results and work performed.
- Observes appropriate safety procedures, including those related to the safe handling of chlorine and other treatment chemicals.
- Investigates and resolves customer complaints regarding water quality and pressure.
- Reports to work on time and fully prepared to undertake scheduled tasks/assignments; flexibly undertakes alternate tasks that may arise.
- Uses good judgment in evaluating information from gauges, charts, meters, and test results; informs others of trends and/or significant changes; offers corrective recommendations.
- Performs other duties as assigned.

QUALIFICATIONS

Knowledge of:

- Principles, practices, tools, equipment and supplies required for the operation, cleaning and preventive maintenance of activated sludge wastewater treatment and disposal facilities and equipment.
- Principles, practices, tools, equipment and supplies required for the operation, cleaning and preventive maintenance of water production, treatment and distribution facilities and equipment.
- The operation and preventive maintenance of piping systems, including pipes, valves, pumps, motors and related appurtenances.
- Tools and equipment required for the work.
- Safety equipment and practices related to the work, including the handling and storage of hazardous chemicals.
- Applicable laws, codes and regulations.
- Computer applications related to the work.
- Arithmetic and mathematics appropriate to the classification level to which assigned.
- Basic mechanical, electrical and hydraulic principles.
- Basic operational and maintenance practices of electrical motors, pumps and circuitry.
- Basic chemical and physical tests of wastewater, sludge and related materials, as well as, potable water.
- Techniques for providing a high level of customer service to public and District staff, in person and over the telephone.

Skill in:

- Operating, maintaining and repairing a variety of wastewater collection and treatment facilities and equipment.
- Operating, maintaining and repairing a variety of water production, treatment and distribution 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.
- Making calculations as necessary to summarize data results, ascertain data trends, and aggregate information over time.
- Conducting basic chemical and physical tests of potable water, influent, effluent, sludge and related materials.
- Using and maintaining the tools and equipment of the work skillfully and safely.
- Handling hazardous chemicals in a safe manner.
- Basic computer skills including word processing, basic spreadsheets, maintaining and sharing computer files.
- Collecting and entering data accurately and creating spreadsheets as directed or required.
- Maintaining accurate records of work performed.
- Using, properly maintaining, and ensuring the security of District-owned equipment that may be provided to assist in the performance of assigned duties.
- Understanding and following oral and written directions.
- Establishing and maintaining effective working relationships with those contacted in the course of the 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-in-Training: Equivalent to graduation from high school.

Plant Operator I: In addition to the above, training required by the California State Water Resources Control Board and a minimum of one year of experience in operating and/or maintaining pumps, motors, mechanical systems or related equipment equivalent to that of a Plant Operator-in-Training.

Plant Operator II: Three years of experience total in operating and performing routine maintenance to facilities and/or equipment in a wastewater treatment plant and related collection systems and pumping stations, and water production, treatment and distribution facilities and equipment and related pumping stations including two full years of experience equivalent to that of a Plant Operator I.

Plant Operator III: Six years of experience total in operating and performing routine maintenance to facilities and/or equipment in a wastewater treatment plant and related collection systems and pumping stations, and water production, treatment and distribution facilities and equipment and related pumping stations including three full years of experience equivalent to that of a Plant Operator II.

Licenses and Certifications:

Plant Operator-in-Training: Must possess a valid California Class C driver's license and have a satisfactory driving record. Must obtain California Water Treatment Plant Operator or Wastewater Treatment Plant Operator-In-Training certificates. Must obtain California Grade I Water Treatment Plant Operator or Grade I Wastewater Treatment Plant Operator certificate within the first full year of employment (the probationary period) with the District, depending upon the assignment within the District.

Plant Operator I: Must possess a valid California Class C driver's license and have a satisfactory driving record. Must possess a California Grade I Water Treatment Plant Operator certificate or a Grade I Wastewater Treatment Plant Operator certificate, depending upon the assignment within the District. If working in both types of plants, both certifications must be obtained. Must obtain forklift certification.

Plant Operator II: Must possess a valid California Class C driver's license and have a satisfactory driving record. To serve as a water treatment plant operator must possess at a minimum California Grade 2 Water Treatment Plant Operator certificate and Grade I Distribution certificate. To serve as a wastewater treatment plant operator, must possess at a minimum a Wastewater Grade 2 certificate, and obtain a CWEA Collections System I certificate, and a California Department of Motor Vehicles B-license is desirable. If working in both types of plants, all certifications must be obtained.

Plant Operator III: Must possess a valid California Class C driver's license and have a satisfactory driving record. To serve as a water treatment plant operator must possess at a minimum a Grade 3 Water Treatment Plant Operator certificate, a Grade 2 Distribution certificate. To serve as a wastewater treatment plant operator, must possess at a minimum a

Grade 3 Wastewater Treatment Plant Operator certificate, a CWEA Grade 1 Collections certificate. If required to work in both types of plans, all certifications must be obtained.

Physical Demands:

Mobility to work in a standard water and/or wastewater treatment plant and laboratory setting, and use specialized test equipment, hand and power tools and instrumentation; stamina to work in confined spaces, around machines, and to climb and descend ladders; ability to lift and carry materials and equipment weighing up to 50 pounds; vision to read printed materials, charts and gauges and a computer screen; and hearing, speech and English language skills to communicate successfully in person and over the telephone or other electronic devices. May be exposed to inclement weather conditions, loud noises from equipment operation, fumes, odors, dust and potentially toxic chemicals and conditions.

Other Requirements:

Must be available for regular and emergency standby and weekend assignments and to be called back and work emergency overtime as required. May be required to monitor treatment plant operation at home using District provided equipment.