

POLICY 2510: Treatment Plant Operator – OIT, I, II, III

2510.10 DEFINITION

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

2510.20 SUPERVISION RECEIVED AND EXERCISED

Direct supervision and training is given by Chief Plant Operator (CPO). The Certified Operator may provide technical supervision to others. The Grade III Operator may be assigned as Designated Operator In Charge (DOIC) when the Chief Plant Operator is not available.

2510.30 CLASS CHARACTERISTICS:

Operator-in-Training (OIT), is the entry-level class in the plant operations series. Initially under close supervision, incumbents learn District and operational procedures for wastewater treatment 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, is the first working level class in this plant operations series. Under direct supervision, incumbents operate wastewater treatment and wastewater collection system equipment and appurtenances. As experience and certification is gained, operators may independently operate plants and appurtenances under the supervision of a DOIC or CPO. 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, is the second working class level in this plant operations series. Under minimal supervision, incumbents perform all tasks related to operation of a wastewater treatment plant, including having knowledge of 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, is the full journey level in this class series. Incumbents are fully competent to independently operate and perform routine preventive maintenance and repair in wastewater treatment plants and associated equipment and facilities.

2510.40 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 wastewater and sludge from various phases of the wastewater treatment process;
- Performs basic chemical and physical tests on these samples to ensure that the wastewater treatment plants is 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, filters, and chemical valves, bar screens, agitators and electric motors.
- Operates valves, pumps and automated controls to regulate the flow of wastewater through the system.
- 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.
- Orders chemicals, supplies, and equipment; and assigns budget codes to purchases and tracks receiving paperwork; assist with annual budget preparation
- Performs basic adjustments and troubleshooting for electrical motors and controls.
- Uses a variety of hand and power tools and testing equipment.
- Records daily reads and maintains accurate records of gauge and meter.
- Observes appropriate safety procedures, including those related to the safe handling of treatment plant chemicals.
- Investigates and resolves customer complaints regarding sewer problems
- Performs other duties as assigned.

2510.50 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.
- 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.

- Techniques for providing a high level of customer service to public and District staff, in person and over the telephone
- 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.

2510.60 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 and six (6) education units accepted by the Office of Operator Certification.
- 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 a wastewater treatment plant.
- 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, including two full years of experience equivalent to that of a Plant Operator I. Technical education may be substituted for experience in accordance with SWRCB guidelines.
- Plant Operator III: Five 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, including two full years of experience equivalent to that of a Plant Operator II. Technical education may be substituted for experience in accordance with SWRCB guidelines.

2510.70 Licenses and Certifications: It is expected that all personnel hired for the Operator position achieve Grade II Wastewater Operations Certification from the SWRCB and Grade 1 Collection System Maintenance Certification from the CWEA in the first 18 months of full-time employment.

Plant Operator-in-Training: Must possess a valid California Class C driver's license and have a satisfactory driving record. Must obtain California Wastewater Treatment Plant Operator-In-Training certificates..

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 Wastewater Treatment Plant Operator certificate.

Plant Operator II: Must possess a valid California Class C driver's license and have a satisfactory driving record. Must possess a California Grade II Wastewater Treatment Plant Operator certificate.

Plant Operator III. Must possess a valid California Class C driver's license and have a satisfactory driving record. Must possess a California Grade III Wastewater Treatment Plant Operator certificate and a Grade II Collection System Maintenance certificate. Note: Step F and Step G of this

classification are earned by enhanced skill development and certifications.

2510.80 Physical Requirements:

While performing the duties of this job, the employee is regularly required to walk long distances, stand, sit; exert considerable physical effort involving stooping/kneeling, pushing/pulling, climbing/balancing, lifting/carrying, bending, and performing other similar actions during the course of the workday. Incumbents require sufficient mobility to work in a field setting with exposure to a variety of weather conditions, slippery and uneven surfaces. While performing the job duties the incumbent is required to operate hand tools and equipment and transport materials and supplies weighing 50 pounds typically, and up to 80 pounds occasionally; use fine and gross motor coordination in using various maintenance, power, and hand tools, and equipment and machinery; reach with hands and arms; drive typical work trucks similar to F-350 in forward and reverse; operate Vactor Truck and Jetter pump on a regular basis; occasionally operate Backhoe and Skid Steer; use standard office equipment such as computers, copiers, and FAX machines; hearing and vision within normal ranges with or without correction in order to read gauges, charts, and computer screens and hear audible alarms. Must be able to speak English effectively in order to communicate with customers and fellow employees in person and on phone; able to read English in order to read technical documents and training materials; able to write legibly in English for official logbooks and district documentation.

5210.90 Work Environment:

Work both indoors (generally in a typical office or warehouse setting) and outdoors are required. Daytime and nighttime hours are required. While performing the duties of this job outdoors, the working conditions are of a varying degree, from freezing temperatures to extreme heat and working in wet weather conditions. Employee works in and around confined spaces, and must be able to be certified for full-face respirator due to occasional work around chemicals. Additionally, incumbents in this position will have exposure to cleaning supplies, solvents, dusts, and other outdoor environmental elements. While performing the duties of this job indoors, the working conditions are those of a typical office environment, with temperatures occasionally too warm or too cold, moderate noise levels and under lighting conditions typical of an office. Travel between District facilities will be necessary via District vehicle for District related duties and activities.

2510.100 Additional Requirements:

- 18 years of age.
- Eligible to work in the United States.
- Must be available for regular weekly on-call, emergency standby, and to be called back and work emergency overtime as required.
- Required to monitor treatment plant operation at home using District provided equipment.