



**JULY 2012**  
**FLSA: NON-EXEMPT**

## **OPERATOR-IN-TRAINING/PLANT OPERATOR**

*This class specification indicates, in general terms, the type and level of work performed as well as the responsibilities of employees in this classification. The job functions described are not to be interpreted as being all-inclusive to any specific employee.*

### **DEFINITION**

Under direct or general supervision, operates, monitors and maintains plant equipment including engines, motors, boilers, compressors and pumps to control unit processes; monitors and controls wastewater flow; performs adjustments and repairs to plant equipment; collects samples for laboratory testing; and performs minor maintenance such as flushing sludge lines to digesters, adding oil, and cleaning drains.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives direct or general supervision from assigned supervisory and/or management staff. Exercises no direct supervision of staff.

### **CLASS CHARACTERISTICS**

**Operator-In-Training** – This is the entry-level class in the plant operator series. Initially under close supervision, incumbents with basic plant operations experience learn District infrastructure, systems, and facilities, use of tools and equipment, and a wide variety of practices and procedures. As experience is gained, assignments become more varied and are performed with greater independence. Positions at this level usually perform most of the duties required of the positions at the Plant Operator level, but are not expected to function at the same skill level and usually exercise less independent 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. Certain functions such as process control and isolations are not performed at this level due to regulations and certification requirements. Advancement to the Plant Operator level is based on demonstrated proficiency in performing the assigned functions, certification as a Grade I Plant Operator, and is at the discretion of higher level supervisory or management staff.

**Plant Operator** – This is the full journey-level class in the plant operator series that performs the full range of duties required to ensure that District infrastructure, systems, and facilities to which assigned are operated and maintained in a safe and effective working condition, and are distinguished from the Operator-In-Training level by working independently, and exercising judgment and initiative. Responsibilities include inspecting and attending to assigned areas in a timely manner, and performing a wide variety of tasks in the operations and maintenance of assigned facilities and systems. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit. Work is normally reviewed only on completion and for overall results. Positions in this class series are flexibly staffed and positions at the Plant Operator level are normally filled by advancement from the Operator-In-Training level. This class is distinguished from Senior Plant Operator in that the latter is responsible for providing technical and functional direction to lower-level operations staff and is capable of performing the most complex duties assigned to the division.

## **EXAMPLES OF ESSENTIAL JOB FUNCTIONS**

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

- Perform assigned treatment plant rounds inspecting, monitoring and documenting plant operations by reading plant equipment gauges, dials, graphs and other instrumentation.
- Operate plant equipment including engines, motors, boilers, compressors, conveyers and pumps to control unit processes such as raw sludge pumps and primary clarifiers, digesters, belt presses, activated sludge, dissolved air flotation, scrubbers, prime movers and pumping facilities regulating the flow of wastewater through the treatment plant; ensure compliance with all local, state, and federal laws, rules, and regulations.
- Monitor and control wastewater flow and plant processes to ensure efficient and safe operation and compliance with permit requirements; perform sight and sound inspections of equipment; take readings of meters and gauges; collect wastewater and sludge samples to perform lab tests; adjust processes within authorized parameters, including plant flow, sludge pumping cycles and chemical addition units.
- Maintain equipment or working area by cleaning grit bins, screen bins, pump rooms, dewatering area, tunnels and general facilities.
- Perform minor operational tasks on equipment such as flushing sludge lines to digesters, adding oil, flushing y-screens and clearing drains; report malfunctions to appropriate department; perform emergency repair work on plant operation equipment, as directed, or assist other divisions with repairs.
- Respond to maintenance and construction requests to facilitate process operation equipment; perform isolations, shut-downs, tag-outs and start-ups of plant operation equipment before and after testing, maintenance and emergency repairs are performed.
- Record data related to plant operation processes, including digester temperatures, sludge density, blanket levels and dissolved oxygen reading; complete daily operating logs of routine and unusual operating or maintenance conditions encountered and any repair work performed; initiate work orders, memos and requests for maintenance repairs as necessary.
- Read and review a variety of pertinent data connected with plant operations including logs of previous shifts, lab reports, emails, status boards and bulletin boards.
- Receive and store chemicals, equipment, and parts necessary for plant operations.
- Operate a variety of equipment and tools necessary to maintain the wastewater treatment plant system and equipment.
- Perform general plant maintenance including cleaning, rolling of hoses, sweeping and removal of trash and debris; maintain work area to ensure safety and order.
- Maintain security of plant facilities.
- As assigned, provide guidance and training to less experienced Operators-In-Training.
- Perform related duties as required.

## **QUALIFICATIONS**

### **Knowledge of:**

- Operations, services, and activities of a wastewater treatment program.
- Principles, practices, materials, chemicals, and operating procedures related to the operation and maintenance of a wastewater treatment plant.
- Operating principles of plant equipment such as valves, pumps, and motors.
- Methods and techniques of reading and interpreting gauges, recording devices, and related system monitors.

- Methods and techniques of conducting laboratory tests and procedures related to wastewater treatment analysis.
- Methods and techniques of preventive maintenance.
- Tools, equipment and procedures used in the operation and maintenance of wastewater treatment plant facilities.
- Emergency maintenance and repair procedures related to wastewater treatment facilities.
- Operational and safety regulations pertaining to wastewater treatment plant operations.
- Confined space entry requiring the use and operation of Self Contained Breathing Apparatus (SCBA).
- Principles and procedures used in the proper handling of chemicals.
- Principles of chemistry, biology, and mathematics.
- Shop arithmetic.
- Safety principles, practices, and procedures of all facilities, equipment, and materials used wastewater treatment and wastewater collection systems.
- Construction, maintenance, and operating characteristics of wastewater treatment facilities.
- Basic principles and practices of engineering design, specification, and cost estimate preparation.
- Principles and procedures of record keeping.
- Occupational hazards and standard safety precautions.
- Applicable Federal, State, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Ensure compliance with permit regulations.
- Modern office practices, methods, and computer equipment and applications related to the work, including word processing, database, and spreadsheet applications.
- Maintain accurate and detailed logs and records of work and laboratory tests performed.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and District staff.

**Ability to:**

- Operate, monitor, and maintain a variety of wastewater treatment plant equipment, facilities, and systems.
- Read and interpret gauges, recording devices, and related monitors.
- Collect a variety of wastewater samples and conduct appropriate tests in accordance with state and federal regulations and requirements.
- Diagnose operational problems and perform effective maintenance on equipment.
- Perform inspections and preventive maintenance of treatment plant facilities and equipment.
- Monitor and adjust plant processes.
- Write basic outage and LOTO procedures.
- Ensure compliance with permit regulations.
- Make accurate arithmetic calculations.
- Compile data and material.
- Read and interpret construction drawings and specifications.
- Safely and effectively use and operate hand tools, mechanical equipment, power tools, and equipment required for the work.
- Maintain accurate logs, records and basic written records of work and laboratory tests performed.
- Operate assigned equipment and tools in a safe and effective manner.
- Enter confined space requiring the use and operation of Self Contained Breathing Apparatus (SCBA).
- Operate office equipment including computers and applicable software applications.
- Understand and follow oral and written instructions.
- Apply and ensure compliance with Federal, State, and local policies, procedures, laws, rules, and regulations.
- Make sound decisions within established policy and procedural guidelines.
- Operate modern office equipment including computer equipment and software programs.

- Use English effectively to communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence, and independent judgment within general policy and legal guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

**Employment Standards:**

Any combination of education and experience that provides the required knowledge, skills, and abilities may be qualifying as determined by OCSD.

**Operator-In-Training**

1. High school diploma or equivalent supplemented by specialized training in wastewater treatment plant operations or a related field; AND
2. Some experience in the operation of a wastewater treatment plant performing basic operation and control of plant operation equipment and unit processes is desirable.

**License or Certificate:**

- Must obtain an O-I-T certificate within one (1) month and a valid Grade I California Wastewater Treatment Plant Operator's Certificate within two (2) years from date of employment.
- Possession of a valid California class C driver's license.

**Plant Operator**

1. High school diploma or equivalent supplemented by specialized training in wastewater treatment plant operations or a related field; AND
2. One (1) year of experience performing duties at a level comparable to an Operator-In-Training with the District, and as established by the California State Water Resources Control Board.

**License or Certificate:**

- Possession of a valid Grade I California Wastewater Treatment Plant Operator's Certificate; Grade II is desirable.
- Possession of a valid California class C driver's license.

**Disaster Service Workers:**

All Orange County Sanitation District employees are designated Disaster Service Workers through state law (California Government Code Section 3100-3109). Employment with the Orange County Sanitation District requires the affirmation of a loyalty oath to this effect. Employees are required to complete all related training as assigned, and to return to work as ordered in the event of an emergency.

**PHYSICAL DEMANDS**

Must possess mobility to work in the plant; strength, stamina and mobility to perform medium to heavy physical work, to work in confined spaces, around machines and to climb and descend ladders, and operate varied hand and power tools and construction equipment; vision to read printed materials and a computer screen; 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 or calculator 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 a minimum of 40 pounds, or heavier weights with the use of proper equipment.

**ENVIRONMENTAL ELEMENTS**

Employees work in the field and are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives, and contractors in interpreting and enforcing departmental policies and procedures.