

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; performs minor maintenance such as flushing sludge lines to digesters, adding oil, and cleaning drains; and performs duties as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives direct (Operator-in-Training) to general (Plant Operator) supervision from assigned supervisory and/or managerial staff. Exercises no direct supervision of staff.

CLASS CHARACTERISTICS

Operator-In-Training (OIT) – This is the first of four levels in the plant operator job series. Initially under close supervision, incumbents with basic plant operations experience learn OC San 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.

Plant Operator – This is the second of four levels in the plant operator job series responsible for performing the full range of duties required to ensure that OC San infrastructure, systems, and facilities to which assigned are operated and maintained in a safe and effective working condition, working independently, and exercising judgment and initiative. 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. This class is distinguished from Senior Plant Operator in that the latter is responsible for performing the more complex duties assigned and providing technical and functional direction to lower-level operations staff.

Positions in the OIT/Plant Operator class series are flexibly staffed and positions at the Plant Operator-level may be filled by advancement from the OIT-level; progression to the Plant Operator-level is dependent on (i) management affirmation that the position is performing the full range of duties assigned to the classification; (ii) satisfactory work performance; (iii) the incumbent meeting the minimum qualifications for the classification including any licenses and certifications; and (iv) management approval for progression to the Plant Operator-level.

EXAMPLES OF ESSENTIAL JOB FUNCTIONS (Illustrative Only)

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.

For entry-level (OIT-level) positions, the essential functions are limited and performed in a learning capacity.

- Performs assigned treatment plant rounds including inspecting, monitoring, and documenting plant operations by reading plant equipment gauges, dials, graphs, and other instrumentation.
- Operates plant equipment including engines, motors, boilers, compressors, conveyers, and pumps to control unit processes such as raw sludge pumps and primary clarifiers, digesters, centrifuges, activated sludge, dissolved air flotation, scrubbers, prime movers, and pumping facilities regulating the flow of wastewater through the treatment plant; ensures compliance with all local, state, and federal laws, rules, and regulations.
- Monitors and controls wastewater flow and plant processes to ensure efficient and safe operation and compliance with permit requirements; performs sight and sound inspections of equipment; takes readings of meters and gauges; collects wastewater and sludge samples to perform lab tests; adjusts processes within authorized parameters, including plant flow, sludge pumping cycles, and chemical addition units.
- Performs general maintenance of plant facilities and work areas by cleaning grit bins, screen bins, pump rooms, dewatering area, tunnels, rolling hoses, sweeping, and removal of trash and debris; maintains security of plant facilities.
- Performs minor maintenance tasks on equipment such as flushing sludge lines to digesters, adding oil, flushing y-screens, and clearing drains; reports malfunctions to appropriate department; performs emergency repair work on plant operation equipment, as directed, or assists other divisions with repairs.
- Responds to maintenance and construction requests to facilitate process operation equipment by performing isolations, shut-downs, tag-outs, and start-ups of plant operation equipment before and after testing, maintenance, and emergency repairs are performed.
- Records data related to plant operation processes, including digester temperatures, sludge density, blanket levels, and dissolved oxygen reading; completes daily operating logs of routine and unusual operating or maintenance conditions encountered and any repair work performed; initiates work orders, memos, and requests for maintenance repairs as necessary.
- Reads and reviews a variety of pertinent data connected with plant operations including logs of previous shifts, lab reports, correspondence, and status and bulletin boards.
- Receives and stores chemicals, equipment, and parts necessary for plant operations.
- Operates a variety of equipment and tools necessary to operate and maintain the wastewater treatment plant system and equipment.
- As assigned, provides guidance and training to less experienced operators.
- Ensures safety and health procedures and precautions are adhered to, corrects unsafe work conditions/practices, and/or reports unsafe work conditions/practices to assigned supervisory or managerial staff.
- Performs duties as required.

QUALIFICATIONS

Knowledge of:

- Operations, services, and activities of a wastewater treatment program.
- Principles, practices, operating procedures, materials, chemicals, tools, and equipment related to the operation and maintenance of a wastewater treatment plant and related facilities.

- Operating principles and preventative maintenance methods and techniques related to plant equipment, such as valves, pumps, and motors, and facilities.
- Methods and techniques of reading and interpreting gauges, recording devices, and related system monitors.
- Methods and techniques of collecting samples and conducting laboratory tests and procedures related to wastewater treatment analysis.
- Emergency maintenance and repair procedures related to wastewater treatment facilities.
- Principles of chemistry, biology, and mathematics.
- Safety principles, practices, and procedures of all facilities, equipment, and materials used in wastewater treatment operations including the proper handling of chemicals.
- Principles and procedures of record keeping.
- Applicable federal, state, and local laws, codes, and ordinances relevant to area(s) of responsibility.
- The structure and content of the English language to effectively perform the work.
- Current 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, monitor, and maintain a variety of wastewater treatment plant equipment, facilities, and systems.
- Read and interpret gauges, recording devices, and related monitors and adjust plant processes.
- Collect a variety of wastewater samples and conduct appropriate tests in accordance with state and federal regulations and requirements.
- and perform effective maintenance on equipment.
- Perform inspections, monitor processes, diagnose operational problems, and perform preventive maintenance of treatment plant facilities and equipment.
- Write basic outage and lock out/tag out (LOTO) procedures.
- Ensure compliance with permit regulations.
- Make accurate arithmetic calculations.
- 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.
- Learn and implement procedures for confined space entry including the use and operation of Self Contained Breathing Apparatus (SCBA); enter confined space requiring the use and operation of SCBA.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
- Organize work, set priorities, meet critical deadlines, and follow-up on assignments.
- Use tact, initiative, prudence, and independent judgment within general policy and legal guidelines.
- Comply with safe work practices and procedures in the workplace.
- Provide a high level of customer service by effectively dealing with the public, vendors, contractors, and OC San staff.
- Effectively use computer systems, software applications relevant to work performed, and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally and in writing, using appropriate English.
- 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 OC San.

Operator-In-Training

1. High school diploma or equivalent supplemented by specialized training in wastewater treatment plant operations or a related field.
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.

Licenses and/or Certificates:

- Must obtain an Operator-in-Training Certificate within one (1) month and a valid Grade I California Wastewater Treatment Plant Operator Certificate within eighteen (18) months from date of employment.
- Must possess a valid California Class C driver's license.

Plant Operator

1. High school diploma or G.E.D., supplemented by specialized training in wastewater treatment plant operations or a related field.
2. One (1) year of experience in wastewater treatment plant operations.

Licenses and/or Certificates:

- Must possess a valid Grade I California Wastewater Treatment Plant Operator Certificate.
- Must possess 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

- Mobility to work the plant; to sit, stand, and walk on level, uneven, or slippery surfaces; frequently reach, twist, turn, kneel, bend, stoop, squat, crouch, grasp, and make repetitive hand movement in the performance of daily duties; to climb and descend ladders, to operate varied hand and power tools and equipment, and to operate a motor vehicle and visit various OC San sites, projects, and/or meetings.
- Perform medium to heavy physical work; to lift, carry, push, and pull materials and objects up to 51 pounds, or 75 pounds or heavier weights with the use of proper equipment and/or assistance from other staff.
- Work requires entry into confined spaces and the use of confined entry equipment and protective safety equipment.
- Vision to read printed materials, recording devices, and related monitors and to inspect and operate equipment; color vision to read gauges and identify appurtenances.
- Field work requiring frequent walking in operational areas to identify problems or hazards.
- Finger dexterity to access, enter, and retrieve data using a computer keyboard or calculator and operate tools and equipment.

ENVIRONMENTAL ELEMENTS

- Field work with exposure to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, heights, chemicals, mechanical and/or electrical hazards, hazardous physical substances and fumes, dust, and air contaminants.
- Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.

OTHER REQUIREMENTS

- Probationary Period: All OC San employees, except classifications considered “at-will”, are subject to the probationary period provisions as specified in the applicable Memorandum of Understanding, policies, and/or resolutions. Employees who have not yet successfully completed their initial probationary period serve “at-will” and may be released from employment without cause or recourse to any appeal or grievance procedures.
- Pre-Employment: All employment offers are contingent upon successful completion of OC San’s pre-employment process, which includes a background investigation, a physical examination, and a drug screen.
- Work Location Assignment: Employees will be assigned to a work location based on business needs which may be located at any/all of OC San locations; this work location may be changed at any time.