

City of South San Francisco
Human Resources Department

Apprentice Plant Operator
Class Description

Definition

Under direct supervision, learns to perform and assist others in a variety of unskilled, semi-skilled and skilled mechanical maintenance and plant operations assignments including monitoring treatment plant system operations and responding to alarms, collecting and analyzing water samples, maintaining and documenting activities, maintaining logs, and performing related work as required.

Distinguishing Characteristics

This class represents a trainee level for a journeyman wastewater treatment plant operator. Incumbents in this class must pass a written Apprenticeship Aptitude Test offered by the Union of Operating Engineers, qualify for and remain an indentured Apprentice of the Union of Operating Engineers, Local 39, Apprenticeship Training Program until graduation – a four-year obligation.

Typical and Important Duties

1. Learns to read meters, gauges, charts and instruments associated with the monitoring of operations; ensures proper processing of wastewater to meet local, State and Federal regulations; learns to make adjustments to treatment processes necessary to ensure proper wastewater standards.
2. Learns to inspect plant equipment and report any failures or operating difficulties; stops and starts equipment as required for repairs; operates, adjusts, and maintains equipment to ensure compliance with established standards; troubleshoots electrical system problems and makes minor repairs and/or modifications.
3. Learns to monitor, operate, and adjust controls on plant equipment and machinery, such as valves, motors, pumps, filters, chemical feeders, adjusters, and clarifiers.
4. Collects samples of wastewater and other materials; learns to run laboratory tests and identify and implement process control changes.
5. Performs record keeping functions such as logging plant operations, test results, maintenance work performed and unusual operating conditions; prepares, maintains and submits a variety of records and reports.
6. Operates lift trucks, cranes, and other hoisting and lifting equipment safely.
7. Responds to plant hazardous material spills, leaks, and emergencies.
8. Receives and supervises the safe delivery and handling of chemicals.
9. Performs related duties and responsibilities as assigned.

Job-related Qualifications

Knowledge of:

- Basic math and calculation principles.
- English usage, spelling, grammar, and punctuation used in report writing.

- Modern office equipment, methods, procedures, and computer hardware and software.
- Basic chemistry and safe laboratory procedures.
- Safety principles, practices, regulations, and procedures related to the work, including OSHA regulations.
- Principles and practices of customer service.
- Basic office equipment, methods, procedures, and computer hardware and software.

Ability to:

- Function as part of a team in the operation of the water quality control plant on an assigned shift.
- Properly apply knowledge gained through classes, experience, and training programs.
- Detect, report, and take appropriate corrective action to maintain process control.
- Understand and carry out oral and written directions.
- Observe proper safety precautions and procedures.
- Take a proactive approach to customer service issues.
- Understand and carry out oral and written directions.
- Work in a safe manner, following City safety practices and procedures; safely handle hazardous materials; identify, correct, and report safety hazards; and administer first aid.
- Organize own work, set priorities, meet critical deadlines, and follow-up on assignments with minimal supervision.
- Communicate effectively in writing and orally, and with others to assimilate, understand and convey information, in a manner consistent with job functions.
- Establish and maintain cooperative working relationships with those contacted in the course of work.
- Maintain confidentiality regarding sensitive information.
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- Respond to emergencies and administer first aid.

Skill in:

- Mechanical aptitude and mathematical calculations
- Using scientific instruments, tools and equipment skillfully and safely.
- Using personal computers and associated applications, including but not limited to, Microsoft Office products, SCADA software, and preventative maintenance programs.

Experience and Training

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

Experience:

One year of experience performing duties involving the operation and minor maintenance of mechanical equipment.

Training:

Equivalent to graduation from high school. Graduation from a formal mechanical or technical training program such as that obtained from a trade school may be substituted for experience.

Licenses and Certificates

Incumbents must remain in the Apprenticeship Program as a condition of employment. All licenses and certifications must be maintained as a condition of employment.

- Incumbents must remain in the Apprenticeship Program as a condition of employment.
- Possession of, or ability to obtain and maintain, an appropriate, valid California driver's license and maintenance of a satisfactory driving record.
- Possession of, or ability to obtain and maintain, a Confined Space Certification by the end of the probationary period.
- Possession of, or ability to obtain and maintain, a Forklift Operator's certification by the end of the probationary period.
- Ability to obtain and maintain, a Hazardous Materials First Responder Certification by the end of probationary period.
- Possession of a Wastewater Treatment Plant Operator-in-Training Certificate issued by the State Water Resources Control Board is required within 60 days of appointment; and a Grade I Wastewater Treatment Plant Operator's Certificate by the end of the probationary period.

Special Requirements

Essential duties require the following physical skills and work environment: Physical Skills: Able to sit, stand, walk, kneel, crouch, stoop, squat, crawl, twist, and climb stairs and ladders; lift and carry 75 pounds; maintain sustained posture for prolonged periods of time; distinguish among various colors; distinguish various computer generated auditory signals; use common hand tools; vision to read printed materials and a computer screen; hearing and speech to communicate in person, by radio, and over the telephone; smell to distinguish odors.

Work Environment:

Work in a standard office, shop, or field setting; exposure to cold, heat, noise, outdoors, inclement weather, dust, dirt, vibration, chemicals, traffic, traffic hazards, confining workspace, odors, mechanical hazards, electrical hazards explosive hazards. Ability to: Travel to different sites and locations; drive safely to different sites and locations; maintain a safe driving record; maintain a clean and neat appearance; work shifts including weekends, nights, and holidays; work protracted and irregular hours; respond to a pager; take 24-hour call and stand-by; available for unusual hours in emergencies.

Additional Information:

- Approved: September 2013
- Revised Date:
- Former Titles:
- Abolished:

- Bargaining Unit: Operating Engineers
- DOT: No
- Status: Classified/Non-exempt
- Job Code: D100