



Water Recycling Plant Operator Trainee/I/II

Summary

Perform a variety of routine and/or non-routine tasks pertaining to the operation and maintenance of the City's water recycling plant and related facilities.

Class Characteristics

Water Recycling Plant Operator Trainee

This is the entry/trainee level class in the Water Recycling Plant Operator series. An incumbent in this class works under the immediate supervision of a higher-level Operator and/or a higher-level supervisor or manager. At this level, an incumbent learns how to perform a variety of duties associated with operating and maintaining the City's Water Recycling Plant and provides assistance to more experienced Operators. Although specific water recycling experience is not required to qualify for the class, incumbents must obtain a Wastewater Treatment Plant Operator-in-Training certificate issued by the California State Water Resources Control Board (SWRCB) within 30 days of employment as required by law.

This class can be distinguished from the higher-level class of Water Recycling Plant Operator I because incumbents in the latter class must have a Grade I certificate and are expected to perform duties that require a higher level of skill and independent judgment. Incumbents at the Trainee level can reasonably expect to promote to the Operator I class when they meet the requirements of the higher-level class and have demonstrated sufficient proficiency at that level.

Water Recycling Plant Operator I

This is the first working level class in the Water Recycling Plant Operator series. An incumbent in this class works under the general supervision of a higher-level Operator and/or a higher-level supervisor or manager. At this level, an incumbent independently performs the more routine duties associated with operating and maintaining the City's Water Recycling Plant, while still receiving direction and supervision as needed from a more experienced Operator. To qualify for this class, applicants must possess a Wastewater Treatment Plant Operator Grade I certificate issued by the California State Water Resources Control Board (SWRCB).

This class can be distinguished from the lower-level class of Water Recycling Plant Operator Trainee because incumbents in the latter class must possess an Operator-in-Training certificate and are trained to perform the most routine plant operations and maintenance activities. This class can also be distinguished from the higher-level class of Water Recycling Plant Operator II because incumbents in the latter class must possess a Grade II certificate and are expected to perform duties that require a higher level of skill and independent judgment. Incumbents at the Operator I level can reasonably expect to promote to the Operator II class when they meet the requirements of the higher-level class and have demonstrated sufficient proficiency at that level.

Water Recycling Plant Operator II

This is the second working level class in the Water Recycling Plant Operator series. An incumbent in this class works under the general supervision of a higher-level Operator and/or a

higher-level supervisor or manager. At this level, an incumbent independently performs a wide variety of duties associated with operating and maintaining the City's Water Recycling Plant while still receiving direction and supervision as needed from a more experienced Operator. To qualify for this class, applicants must possess a Wastewater Treatment Plant Operator Grade II certificate issued by the California State Water Resources Control Board (SWRCB).

This class can be distinguished from the lower-level class of Water Recycling Plant Operator I because incumbents in the latter class must possess an Operator I certificate and generally perform more routine plant operations and maintenance activities. This class can also be distinguished from the higher-level class of Water Recycling Plant Operator III because incumbents in the latter class must possess a Grade III certificate and are expected to perform the full range of journey level Operator duties with a high level of skill and independent judgment. Incumbents at the Operator II level can reasonably expect to promote to the Operator III class when they meet the requirements of the higher-level class and have demonstrated sufficient proficiency at that level.

Essential Duties, Skills, and Demands of the Position

The duties, skills, and demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with a disability to perform the essential duties, skills, and demands.

Duties:

Monitor, operate, and adjust controls at the City's water recycling plant and related facilities, including but not limited to high-strength waste receiving stations and compressed natural gas processing and fueling facilities.

Control the operation of treatment, pumping, and recycling facilities to regulate the flow of wastewater through the system as well as achieve proper processing of wastewater and the re-use of bio-solids and recycled water within mandated operation requirements.

Perform plant rounds and inspections and to read and record gauge and instrument information to evaluate the function of pumps, chemical feed, and other equipment.

Monitor and adjust the plant Supervisory Control and Data Acquisition (SCADA) system to maintain proper operating conditions.

Collect wastewater, sludge, and other samples from various phases of the water recycling and/or treatment process; perform basic chemical and physical tests on these samples to ensure that the plant is operating effectively and that regulatory requirements are being met.

Review and analyze operational information and test results, and revise equipment settings as appropriate.

Respond to and control accidental releases of hazardous liquids and gases.

Perform preventive maintenance and cleaning for a variety of plant equipment such as pumps, chlorinators, filters, chemical valves, bar screens, sludge lagoons, agitators and electric motors; remove screenings and grit; clean clarifiers and other treatment-related equipment.

Perform adjustments and troubleshooting for electrical motors and controls.

Change recording charts and ensure that chemical feeders have a constant supply of treatment chemicals.

Notify supervisor of unusual situations and/or significant changes in process or equipment

conditions; suggest an appropriate solution to the observed problem.

Receive and store chemicals and supplies; monitor and report on inventory needs as assigned.

Deliver samples to the laboratory for testing as required; conduct regulatory testing as required on the off-shift days when the lab is not staffed.

Maintain accurate records of work performed; make logbook entries and laboratory tracking entries.

Help maintain facilities and grounds in a clean and orderly condition by doing things such as sweeping, mopping, cleaning, sanding, painting, and grounds keeping.

Participate in appropriate safety procedures, including those related to working in confined spaces, the safe handling of chemicals, and lock-out-tag-out procedures.

Assist in the investigation and resolution of customer complaints regarding recycling plant-related matters.

Operate and maintain the natural treatment processes of the facility, including oxidation ponds and wetlands.

Attend and participate in meetings, trainings, and safety sessions; participate on team projects and task forces as required.

May provide training and direction to less experienced employees.

Perform related duties as assigned.

Skills/Abilities:

Perform a variety of duties pertaining to the operation and maintenance of equipment, instruments and structures used within the water recycling plant and related facilities, including but not limited to high-strength waste receiving stations and compressed natural gas processing and fueling facilities.

Recognize and report unusual, inefficient or dangerous operating conditions and recommend solutions.

Make proper logbook entries.

Read and interpret a variety of gauges, charts, and meters; record data accurately and obtain/produce required information in a timely manner.

Prepare informative and thorough documents and reports.

Read, understand, and apply information pertaining to the proper and safe operation of a water recycling plant, including written policies, procedures, technical manuals, diagrams, schematics, and specifications.

Conduct basic chemical and physical tests of wastewater, influent, effluent, sludge, and related materials.

Perform standard mathematical calculations as well as more complex calculations pertaining to area, volume, flow, detention time, and other pertinent issues.

Handle hazardous chemicals in a safe manner.

Operate a variety of hand and power tools and testing equipment; operate heavy equipment such

Operate light and heavy vehicles.

Work in confined spaces.

Effectively present information to supervisors and managers in a clear and concise manner.

Respond to emergency situations in an appropriate manner.

Make sound decisions and meet critical deadlines.

Define problems, collect data, establish facts, and draw valid conclusions.

Operate office equipment including computers and supporting word processing, spreadsheet, and database applications.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of the work.

Physical Demands and Work Environment:

While performing the duties of this job, the employee is frequently required to sit, stand, walk, talk, hear, and reach with hands and arms. The employee is frequently required to use hands to finger, handle, or feel objects, tools, or controls, and will frequently be required to enter data into a terminal, personal computer or keyboard device and operate office equipment requiring repetitive arm/hand movement. The employee is often required to climb, balance, stoop, kneel, crouch, or crawl or use the ability to smell. The employee must be able to perform a moderate amount of physical labor, including having sufficient strength to lift, carry, and/or move items up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus. Must be able to hear alarms and respond to others without being able to see them. While performing the duties of this job, the employee is often exposed to outside weather conditions and wet conditions. Other work conditions include exposure to unpleasant odors, mechanical parts, fumes, airborne particles, and moderate noise levels. There is risk of exposure to hazardous fumes and substances.

Special Physical Requirement:

May be required to enter confined space and/or respond in an emergency. Must be able to wear self-contained breathing apparatus (SCBA) and perform confined space entry and emergency response duties in protective clothing and equipment including SCBA weighing up to 32 pounds.

Qualifications

Knowledge of:

Principles of and typical operations, services, and activities within wastewater treatment, water recycling plants, and related facilities, including but not limited to high-strength waste receiving stations and compressed natural gas processing and fueling facilities.

Standard and various methods, materials, and equipment used in the operation and maintenance of wastewater treatment, water recycling plants, and related facilities.

Basic principles of hydraulics.

Laws, codes, and regulations pertaining to the operation of a wastewater treatment, water

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recycling plant, and related facilities.

General safety practices pertaining to the use of vehicles, power equipment, and hazardous materials; specific occupational hazards and safety precautions necessary for working in a wastewater treatment, water recycling plant, and related facilities.

Principles of mathematics, including algebra and geometry.

Methods of effective interpersonal communication.

Record keeping and documentation practices.

Principles and practices of processing digester gas to bio-CNG.

Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.

Education and Experience

Any combination equivalent to the education and experience likely to provide the required knowledge and abilities would be qualifying. A typical way to gain such knowledge and abilities would be:

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Education:

Equivalent to graduation from high school. Technical or college-level course work in environmental science, chemistry, biology, physics, mathematics, or a related area is highly desirable.

Experience:

None.

Certifications/Licenses:

Possession of a valid California Class C driver's license.

Additional Requirement

Must be available to work overtime and off-shift hours, including weekends, and/or holidays.

Water Recycling Plant Operator Trainee

Certifications/Licenses:

Must obtain a Wastewater Treatment Plant Operator-in-Training certificate issued by the SWRCB within 30 days of employment.

Must obtain a Wastewater Treatment Plant Operator Grade I certificate issued by the SWRCB within 18 months of employment.

Water Recycling Plant Operator I

Certifications/Licenses:

Possession of a Wastewater Treatment Plant Operator Grade I certificate issued by the SWRCB at the time of appointment.

Must obtain a Wastewater Treatment Plant Operator Grade II certificate issued by the SWRCB within 24 months of employment.

Water Recycling Plant Operator II

Certifications/Licenses:

Possession of a Wastewater Treatment Plant Operator Grade II certificate issued by the SWRCB at the time of appointment.

Must obtain a Wastewater Treatment Plant Operator Grade III certificate issued by the SWRCB within four years of employment.

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