



Water Recycling Plant Lead Operator

Summary

Perform responsible duties as a shift supervisor for the City's water recycling plant and related facilities; serve as a lead worker over subordinate Operators as well as other assigned plant support staff during an assigned shift; and perform the full range of tasks pertaining to the operation and maintenance of the plant.

Class Characteristics

This is the lead worker/shift supervisor level class in the Water Recycling Plant Operator series. An incumbent in this class works under the direction of a higher-level supervisor or manager. At this level, an incumbent is fully certified and competent to serve as the designated Operator-In-Charge (DOIC) on a regular and ongoing basis. Incumbents also serve as lead workers by scheduling, assigning, directing, monitoring and reviewing the work of subordinate Operators and other assigned staff. To qualify for this class, applicants must possess a Wastewater Treatment Plant Operator Grade III certificate issued by the California State Water Resources Control Board (SWRCB) and obtain a Wastewater Treatment Plant Operator Grade IV certificate within 24 months of appointment.

This class can be distinguished from the lower-level class of Water Recycling Plant Operator III because incumbents in the latter class do not have lead worker responsibilities or serve as the DOIC on an intermittent and as needed basis. This class can also be distinguished from the higher-level class of Water Recycling Plant Operations Supervisor because the incumbent in the latter class is the designated Chief Plant Operator as defined by the (SWRCB) and has full supervisory responsibility for operational activities and staff, including staff performance evaluation. In addition, the Water Recycling Plant Operations Supervisor must possess a Grade V Operator certificate.

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:

Serve as the designated plant shift supervisor for an assigned shift.

Serve as a lead worker over assigned staff; schedule, assign, direct, train, monitor, and review the work of subordinate Operators and other assigned staff; develop schedules and training plans.

Perform the full range of duties pertaining to monitoring, operating, and adjusting 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.

Direct and control the operation of treatment, pumping and recycling facilities to regulate the flow

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of wastewater through the system as well as achieve proper processing of wastewater and the re-use of biosolids and recycled water within mandated operation requirements.

Assign and perform plant rounds and inspections; review and monitor readings and recordings of gauge and instrument information to evaluate the function of pumps, chemical feed, and other equipment; modify and update plant round sheets as necessary for efficient operations.

Monitor and adjust the plant Supervisory Control and Data Acquisition (SCADA) system to maintain proper operating conditions; populate the appropriate operator actions in the alarm descriptions and evaluate automatic actions to assure proper computer and manual responses; clear all alarms in the system coordinate assistance and respond to alarm conditions; tune control loops with assistance to optimize river discharge, recycled water discharge, chemical usage, and electrical usage.

Operate and maintain high-strength waste receiving stations and compressed natural gas processing and fueling facilities.

Oversee tasks related to the ponds and wetlands, including maintenance and vegetation removal.

Direct and oversee the collection of wastewater, sludge, and other samples from various phases of the water recycling and/or treatment process; assign and monitor basic chemical and physical testing processes 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.

Direct the appropriate response to and control of accidental releases of hazardous liquids and gases.

Assign and direct the 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; oversee the cleaning of clarifiers, oxidation ditches, and other treatment-related equipment. Verify preventative maintenance tasks have been completed.

Direct and perform adjustments and troubleshooting for electrical motors and controls.

Ensure that chemical feeders have a constant supply of treatment chemicals.

Evaluate unusual situations and/or significant changes in process or equipment conditions; confirm or determine the potential cause of the problem; ensure that an appropriate solution is implemented.

Direct the ordering, receipt, and storage of chemicals and supplies; ensure that inventory needs are maintained.

Ensure that samples are delivered 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 for assigned areas; oversee logbook entries.

Ensure that facilities and grounds are maintained in a clean and orderly condition.

Observe and enforce appropriate safety procedures, including those related to working in confined spaces and the safe handling of chlorine and other treatment chemicals.

Oversee the development of Standard Operating Procedures.

Investigate and resolve customer complaints regarding recycling plant-related matters as assigned; prepare summary reports regarding such matters as needed.

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May assist with budget development and/or administration.

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

Assign or give tours of the plant and related facilities as needed.

Perform related duties as assigned.

Skills/Abilities:

Serve as water recycling plant supervisor on an assigned shift; ensure that all assigned activities are performed in accordance with City and department policies and procedures, as well as laws and regulations.

Schedule, assign, direct, monitor, and review the work of subordinate employees.

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

Develop, recommend and implement working procedures as needed to apply and enforce policies.

Perform activities needed to ensure the safety of assigned staff; ensure that unusual, inefficient, or dangerous operating conditions are addressed and resolved.

Prepare informative and thorough documents and reports.

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, sludge, and other pertinent issues.

Handle hazardous chemicals in a safe manner.

Set production needs for recycled water, river discharge, and biosolids.

Operate a variety of hand and power tools and testing equipment; operate heavy equipment such as a forklift, backhoe, loader, or dump truck.

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.

Utilize standard business computer hardware and software to maximize productivity and efficiency.

Update operating software for process control.

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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:

Advanced principles, operations, services and activities pertaining to 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.

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

Principles and practices of public administration, including those pertaining to budgeting, staff supervision and leadership.

Basic principles of hydraulics.

Principles and practices of co-digestion.

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

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

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Record keeping and documentation practices.

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:

Education:

Equivalent to graduation from high school.

An Associate's degree with major course work in environmental studies, chemistry, biology, physics, mathematics, or a related area pertaining to wastewater treatment is highly desirable.

Experience:

Three years of increasingly responsible experience in the operation and maintenance of a water recycling plant.

Certifications/Licenses:

Possession of a valid California Class C driver's license with a satisfactory driving record.

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

Possession of a valid Grade IV Wastewater Treatment Plant Operator Certificate issued by the SWRCB is required within 24 months of appointment.

Additional Requirement:

Must be available to work overtime and off-shift hours, including weekends, and/or holidays. Must be available to work standby and be on call. Must be able to respond to the Plant within one hour of being called.

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