



Water Recycling Plant Operator III

Summary

Perform the full range of journey level tasks pertaining to the operation and maintenance of the City's water recycling plant and related facilities; may occasionally serve as a plant shift supervisor on an as needed basis.

Class Characteristics

This is the full journey level class in the Water Recycling Plant Operator series. An incumbent in this class works under the direction of the Water Recycling Plant Lead Operator and/or the Water Recycling Plant Operations Supervisor. At this level, an incumbent independently performs the full range of journey level duties associated with operating and maintaining the City's Water Recycling Plant, and is fully certified and competent to serve as a plant shift supervisor if needed on an occasional basis. 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).

This class can be distinguished from the lower-level class of Water Recycling Plant Operator II because incumbents in the latter class must possess a Grade II certificate and generally perform less complex plant operations and maintenance activities with a greater amount of direct supervision. This class can also be distinguished from the higher-level class of Lead Operator because an incumbent in the latter class serves as a regular plant shift supervisor on an ongoing basis serves as a lead worker over subordinate employees, and must possess an SWRCB Grade IV 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:

Perform the full range of journey level duties pertaining to monitoring, operating and adjusting controls at the City's water recycling plant and related 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. Populate the appropriate operator actions in the alarm descriptions and evaluate automatic actions to assure proper computer and manual responses.

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 oxidation ditches other treatment-related equipment.

Perform adjustments and troubleshooting for electrical motors and controls.

Ensure that chemical feeders have a constant supply of treatment chemicals. Assist with chemical inventory use, control, and ordering.

Identify unusual situations and/or significant changes in process or equipment conditions as well as the potential cause of the problem; develop and implement an appropriate solution.

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

Understand and follow all regulatory requirements for discharge to waters of the state and recycled water programs (tertiary and secondary).

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 proper log book entries and proper 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 and the safe handling of treatment chemicals, and proper lock-out-tag-out procedures.

Investigate and resolve customer complaints regarding recycling plant-related matters as assigned.

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

Give tours of the plant and related facilities as assigned.

Provide training and direction to less experienced employees as assigned.

Serve as a Lead Operator as needed on an occasional and intermittent basis.

Perform related duties as assigned.

Skills/Abilities:

Perform the full range of journey level duties pertaining to the operation and maintenance of equipment, instruments and structures used within the water recycling plant.

Recognize, resolve and report unusual, inefficient or dangerous operating conditions.

Read and interpret a variety of gauges, charts, meters and computer generated data; 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 the water recycling plant, including written policies, procedures, technical manuals, diagrams, schematics and specifications. Assist develop standard operating procedures and verify procedures.

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 age and other pertinent issues.

Meet production needs for recycled water, river discharge and biosolids. Understand the water balance and tracking mechanisms.

Develop safe practice procedures for working at the water recycling plant.

Handle hazardous chemicals in a safe manner.

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

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.

Communicate effectively, 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 and water recycling plants.

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

Basic principles of hydraulics.

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

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 or water recycling plant.

Principles of mathematics, including algebra and geometry.

Methods of effective interpersonal communication.

Record keeping and documentation practices.

Standard business computer applications including Microsoft Windows and Office.

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 is required. An associate's degree from an accredited college or university with major coursework in environmental science, chemistry, biology, physics, mathematics or a related area is highly desirable.

Licenses/Certificates:

Must possess a Wastewater Treatment Plant Operator Grade III certificate issued by the SWRCB at the time 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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