Job Description

CHIEF WASTEWATER TREATMENT PLANT OPERATOR

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

SUMMARY DESCRIPTION

(Chief Wastewater Treatment Plant Operator I), performs a variety of duties essential to the operation of a major wastewater treatment, disposal, and reclamation facility on an assigned shift; inspects, operates, monitors, and maintains a variety of facilities, equipment, and systems involved in various processes of the wastewater treatment plant facility; monitors plant operation through visual observation and computer screens; regulates flows; performs chemical analysis and tests; and performs a variety of related duties to ensure the facility’s final effluent is of the best quality in order to protect all downstream receiving waters and their users while utilizing plant resources wisely and efficiently.

DISTINGUISHING CHARACTERISTICS

Chief Wastewater Treatment Plant Operator – This is the advanced journey level class in Wastewater Treatment Plant Operator series. Positions at this level require demonstrated ability to perform the full range of wastewater treatment plant maintenance and repair duties as well as the full range of complex plant operations duties. Performs complex analysis of the Wastewater Treatment Plant operations and have direct charge of the operation of the wastewater treatment facility. Positions at this level will provide instruction and assistance to lower level Wastewater Treatment Plant Operators. Position at this level require one year of experience must possess a Grade III Wastewater Treatment Plant Operator Certificate issued by the California State Water Resources Control Board.

REPRESENTATIVE DUTIES

DUTIES AND RESPONSIBILITIES: (Which are not in any hierarchical order)

- Supervises the daily operation and maintenance of the Wastewater Plant.
- Formulates process control strategies.
- Maintains all administrative and regulatory records and reports.
- Reviews plans for plant upgrades, meets with consultants and contractors.
- Trains or ensures training and updating of skills for all the Wastewater Plant employees.
- Responds to requests, inquiries and complaints.
- Prepares and monitors the Wastewater Plant budget and develops capital projects plan.
- Gives monthly presentations to ECR Entity Board.

KNOWLEDGE, SKILLS AND ABILITIES:

- Knowledge of City, federal and state laws, statutes, rules, regulations, and ordinances related to operations of wastewater plants.
- Knowledge of wastewater processing plant operation, maintenance and repair.
Knowledge of supervision and administrative practices and procedures.
Knowledge of budget preparation, monitoring and administration.
Skill in assigning, reviewing and evaluating work.
Skill in analyzing technical data and troubleshooting problems.
Skill in detecting mechanical and operational problems.
Ability to utilize effective written and verbal communication for presentations, training, and consensus building.
Ability to establish and maintain effective working relationships with those contacted in the course of work.

PHYSICAL REQUIREMENTS AND WORK ENVIRONMENT: Work involves supervising or performing work in all types of weather. Work involves long hours with exposure to loud noises, chemicals, toxic fumes, air and waterborne pathogens, and mechanical equipment during the inspection of facilities and equipment, with the ability to detect mechanical or operational problems. There is frequent need to stand, stoop, walk, sit, climb in high areas and on catwalks, lift heavy objects (up to 50 pounds) and perform other similar actions during the course of the workday. The City of Orange Cove promotes a drug/alcohol free work environment through the use of mandatory pre-employment drug testing.

MINIMUM QUALIFICATIONS: Associate’s degree from an accredited vocational/technical school with studies in Wastewater Technology or related field, and five (5) years of related experience in wastewater plant operations, including one (1) year of lead or supervisory experience, or any equivalent combination of training and experience. A State of Florida Wastewater Operators license Class A and a valid California driver’s license

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

- Performs the full range of duties related to plant operations; operates a variety of facilities, systems, equipment, pumps, and valves; learns to operate and maintain new systems and equipment as necessary.
- Performs a variety of equipment maintenance duties; inspects, removes, cleans, lubricates, backwashes, repairs, maintains, and reinstalls equipment related to a variety of wastewater treatment plant facilities, systems, grinders, drip traps, scales, centrifuges, hydrovanes, tanks, pumps, valves, and piping systems; cleans and calibrates meters and probes; performs general housekeeping of all areas associated with assigned facilities.
- Performs a variety of process control related duties; collects samples from various plant processes for chemical/biological analysis; operates and calibrates automatic samplers; collects storm channel water samples outside the plant as necessary; performs a variety of tests and analysis; measures primary and secondary settling basins sludge depths; performs mathematical calculations including
those related to flows, areas, volume, weight, force, pressure, chemical dosage, and those related to various tests and analysis; evaluates laboratory testing results and calculations and implements results in operational control.

- Investigates and acknowledges alarms throughout the wastewater treatment facility; monitors, polls, and responds to lift station alarms; locates and notifies stand-by personnel to respond to lift station alarms; provides support, security, and communication to maintenance personnel at lift stations when responding to alarms.
- Monitors and maintains leak detection system.
- Performs a variety of recordkeeping duties; creates new log books and properly stores old records and log books; ensures NPDES permits are properly maintained and available; tracks status of Advanced Maintenance Management System (AMMS) requests; maintains Material Safety Data Sheet (MSDS) records; completes, maintains, and files a variety of forms, lists, records, schedules, and informational logs; maintains and updates equipment status board; maintains and updates daily readings on process control board.
- Performs a variety of duties in response to power outage emergencies; operates, monitors, adjusts, and maintains backup generators; responds to power outages by properly resetting, restarting, and bringing systems essential to proper plant operations back on-line; maintains proper fuel levels in generators and storage tanks.
- Performs a variety of duties in response to wet weather emergencies; operates, monitors, and adjusts plant drainage system; places sand bags around excess storage pond perimeter; stages, operates, monitors, and lubricates emergency trash pumps.
- Performs a variety of public relations related duties; conducts tours and provides educational information; receives, investigates, documents, and responds to odor complaints; receives telephone inquiries from the public; answers questions and directs inquiries to appropriate personnel as necessary.
- Participates in a variety of training activities; studies equipment manuals for all facility equipment; receives training on new equipment and processes as well as initial and periodic refresher training on processes, procedures, systems, and equipment related to assignment; maintains familiarity with all standard operating procedures pertaining to equipment and plant processes; may provide training to new operators-in-training on equipment and plant processes.
- Performs and participates in a variety of safety related duties and activities; follows all safety standard operating procedures when performing work; maintains awareness of and reports/corrects any trip hazards, spills, and unsafe equipment; properly handles, stores, and labels various chemicals; maintains familiarity with the Chemical Spill Response Plan; maintains familiarity with lift station spill procedures and responses; inspects, cleans, and maintains eye-wash stations; maintains and inspects all personal protective equipment and restocks as necessary; maintains and updates MSDS catalog; maintains proper facility lighting; performs proper lock-out/tag-out procedures; secures facility perimeter and ensures buildings and vehicles are secure.
- Operates a light truck in and out of plant.
- Operates tractor, forklift or other vehicles/carts inside the plant grounds as required.
• Performs related duties as required.

QUALIFICATIONS

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Knowledge of:

• Operations, services, activities, and terminology of a wastewater treatment program including wastewater treatment plant processes and controls.
• Principles, practices, chemicals, and operating procedures related to the operation and maintenance of a wastewater treatment plant.
• Materials, tools, equipment, and methods used in the general construction, operation, maintenance, and repair of wastewater treatment plant facilities, systems, and equipment.
• Operating principles of plant equipment including large pumps, valves, and motors.
• Methods and techniques of reading and interpreting gauges, recording devices, and related monitoring systems.
• Maintenance and repair principles and practices including preventative maintenance procedures.
• Emergency maintenance and repair procedures related to wastewater treatment facilities.
• Methods and techniques of conducting tests and procedures related to wastewater treatment analysis.
• Basic principles of microbiology.
• Mathematical calculations used in wastewater treatment operations including algebraic calculations.
• Hydraulic principles.
• Pertinent federal, state, and local laws, codes, and regulations.
• Operational and safety regulations pertaining to wastewater treatment plant operations.
• Occupational hazards and standard safety precautions.
• Principles and procedures used in the proper handling of chemicals.
• Basic electrical principles.
• Principles and practices of customer service.
• Office procedures, methods, and equipment including computers and applicable software applications.
• Principles and practices of record keeping.
• Basic principles of training.

Ability to:

• Operate, monitor, and maintain a variety of wastewater treatment plant equipment, facilities, and systems.
• Perform inspections and preventive maintenance of treatment plant facilities and equipment.
• Read and interpret gauges, meters, and other instrument readings and take effective course of action.
• Diagnose operational problems and perform effective maintenance on equipment.
• Perform mechanical repairs.
• Monitor and adjust plant processes.
• Collect a variety of samples and conduct appropriate tests in accordance with state and federal regulations and requirements.
• Compile and record complex data and material.
• Maintain accurate and detailed logs and records of work and tests performed.
• Complete emergency response training and perform in emergency situations.
• Respond to emergency situations outside of normal working hours.
• Work well with others in a team environment.
• Complete work within an assigned time frame.
• Perform math calculations related to wastewater treatment processes and related testing and analysis.
• Operate assigned equipment and tools in a safe and effective manner.
• Operate office equipment including computers and applicable software applications.
• Work independently in the absence of supervision.
• Perform heavy manual labor.
• Follow detailed oral and written instructions.
• Demonstrate an awareness and appreciation of the cultural diversity of the community.
• Communicate clearly and concisely, both orally and in writing.
• Establish and maintain effective working relationships with those contacted in the course of work.

Education and Experience Guidelines - Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education/Training: Equivalent to the completion of the twelfth grade supplemented by college level course work or trade school training in wastewater treatment technology.

Experience: One year of experience

License or Certificate: Possession of a Grade III Wastewater Treatment Plant Operator Certificate issued by the California State Water Resources Control Board. Possession of a valid Class C driver’s license.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein 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 disabilities to perform the essential job functions.

Environment: Wastewater treatment plant. Exposure to noise of plant machinery and other equipment; mechanical and electrical hazards of operating equipment; fumes and odors of sewage, chemicals, and gases; toxic substances such as chemicals, cleaners, solvents, and gases; all types of weather and temperature conditions. Work and/or walk for long periods of time on various types of surfaces including slippery or uneven surfaces and rough terrain. Subject to 24-hour emergency callbacks and standby and requires working varying hours, overtime, weekends, and holidays. Work environment is informal, team-oriented, having both routine and variable tasks with variable pace and pressure. Work is performed in both indoors in plant area and outdoors in field and collateral facilities.

Physical: Primary functions require sufficient physical ability to work in a plant and field setting and operate assigned equipment. CONTINUOUS walking; FREQUENT bending, stooping, squatting, and
climbing; OCCASIONAL standing, sitting, reaching at and above shoulder height, kneeling, balancing above ground, pushing and pulling, twisting at waist, upward and downward flexion of neck, side-to-side turning of neck; lifting of objects weighing up to 75 lbs. from below waist level to above shoulder level, with or without assistance; lifting of objects weighing from 76-100 lbs. from below waist level to shoulder level, with or without assistance; transporting of objects weighing up to 25 lbs. for distances up to 300 yards, with or without assistance; transporting of objects weighing 26-50 lbs. for distances up to 100 feet, with or without assistance; transporting objects weighing 51 to over 100 lbs. for distances up to 50 feet, with or without assistance; transporting objects weighing over 100 lbs. for distances up to 50 feet with assistance; hand strength and manual dexterity to grasp and manipulate tools, parts and supplies; fine finger dexterity to operate computer and laboratory equipment. INFREQUENT crawling; lifting of objects weighing over 100 lbs. below and at waist level, with or without assistance.

**Vision:** See in the normal visual range with or without correction; vision sufficient to read computer screens, printed documents, meter-reading equipment, dials, and gauges and to operate vehicles and equipment; color vision acuity.

**Hearing:** Hear in the normal audio range with or without correction.

**Other:** Safety regulations prohibit incumbents from wearing contact lenses when working with certain chemicals, or from wearing beards or other facial hair that prevents a proper respirator fit as required depending on work assignment. Must pass annual respirator physical and fit testing depending on work assignment.