

TREATMENT PLANT OPERATOR III

General Statement of Duties

Performs difficult semi-skilled operational, laboratory, and maintenance functions in a water or wastewater treatment plant.

Distinguishing Features of the Class

An employee in this class performs a variety of operational, laboratory, and maintenance duties designed to produce safe treatment of potable water, and disposal of domestic and commercial waste materials. Work is performed on an assigned or rotating shift, and employees may work alone during the night shift. The employee serves as the team leader on a shift and is accountable for work quality and standards, training new employees, and making more technical decisions involving plant process controls. The employee may serve as lead worker, serves in the absence of the senior treatment plant operator or superintendent, and assists with training new staff. Work includes monitoring the plant's operation through observation, mechanical readings and the results of standard chemical and biological tests and making necessary adjustments in the process as conditions or test results dictate. Other duties include performing standard laboratory duties and tests and assisting with plant and facilities maintenance. Work also includes substantial record keeping of work activities. Employees are subject to hazards associated with wastewater and plant operations including working both inside and outside environments, in extreme hot and cold weather, and exposure to various hazards such as loud noises, moving mechanical parts, electrical current, chemicals, fumes, odors, dusts, mists, gases, poor ventilation, working in small spaces such as sewer pipes, and oils. Workers may be required to wear respirators when working around chlorine tanks. Work around wastewater is also subject to the final standards of OSHA on blood borne pathogens. Work is performed under general supervision and reviewed by observation, conference, and reviewing records for adherence to operations standards, instructions, and safety practices.

Duties and Responsibilities

Essential Duties and Tasks

Makes regular tours of the plant and checks bar screens, engines, generators, pumps, settling tanks, filters, clarifiers, chlorinators, and other equipment for proper functioning.

Records data from various meters, gauges, and dials; logs daily, weekly, and monthly activities.

Makes decisions for plant compliance during assigned shift and contacts supervisor as needed for direction, decisions, or inclement weather situations.

Provides guidance and direction to other operators in the senior operator's absence.

May serve as back-up Operator Responsible in Charge (ORC) in absence of senior operator.

Performs standard laboratory chemical and biological tests.

Prepares samples and labels for shipment to third-party contract laboratory.

Assists the senior operator and plant superintendent in completing various reports.

Inventories plant supplies.

Assists with new operator training.

Performs general preventive and scheduled maintenance; may assist on maintenance and repairs.

Regulates and adjusts motors, pumps, blowers, valves, and other apparatus to meet changing operating conditions.

Performs routine building and grounds maintenance including mowing, cleaning, and painting.

Cleans and maintains lift stations; scrape wet wells buildup.

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Collects water and wastewater samples.

Analyses plant performance and makes chemical feed and other adjustments consistent with supervisory guidelines; back washes filters.

Drives to lift stations and other City locations.

Participates in an on-call rotating schedule.

Additional Job Duties

Performs related duties as required.

Recruitment and Selection Guidelines

Knowledges, Skills, and Abilities

Considerable knowledge of the operating characteristics and maintenance requirement of water and/or wastewater treatment plants.

Treatment Plant Operator

Considerable knowledge of applicable federal, state, and local laws, ordinances, and permitting requirements.

Knowledge of the occupational hazards of the work and of necessary safety precautions.

Knowledge of standard laboratory tests and procedures used in a water or wastewater treatment plant.

Working knowledge of the use of computers to record data, prepare reports, and operate plant equipment.

Considerable knowledge of hydraulic, chemical and mechanical principles pertinent to water or wastewater treatment plant operations.

Skill in teamwork.

Ability to operate various hand tools and equipment including PH probes, colorimeter, stir plates, SCADA, electrical pumps, turbidimeter, rake, scraper, leaf blower, and weed eater.

Ability to make arithmetic computations using whole numbers, fractions, and decimals.

Ability to compute rates, ratios, and percentages.

Ability to read and understand the policy and procedures, safety manual, and instructions.

Ability to detect flaws in the operation of mechanical equipment and to determine proper remedial measures.

Ability to conduct routine laboratory tests.

Ability to understand and follow moderately complex oral and written instructions.

Ability to read meters, charts, technical manuals and drawings accurately and to maintain records of work activities.

Ability to establish and maintain effective working relationships with peers and superiors.

Physical Requirements

Must be able to physically perform the basic life operational functions of climbing, balancing, stooping, kneeling, crouching, reaching, walking, pushing, pulling, lifting, grasping, and hearing.

Must be able to perform medium work exerting up to 50 pounds of force occasionally; and/or up to 20 pounds of force frequently; and/or up to 10 pounds of force constantly to move objects.

Must possess the visual acuity to read gauges, dials, and observe moving parts of machines, and to record and review written records.

Desirable Education and Experience

Graduation from high school supplemented by course work in chemistry or biology, demonstrable skills, and considerable experience operating water or wastewater treatment plant on a shift independently; or an equivalent combination of education and experience.

Special Requirements

Possession of a valid North Carolina driver's license.

Possession of a North Carolina water operator's grade B certificate (Water Plant) or grade II wastewater operator certificate (Waste Plant); may require a grade III wastewater operator certificate or grade A certificate to serve as ORC.

Belmont
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