

WATER TREATMENT PLANT OPERATOR

General Statement of Duties

Performs responsible operational, laboratory, and maintenance functions in a water 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. Work includes monitoring the plant's operation through observation, mechanical readings and the results of standard chemical and biological tests and to make 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 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 plant and checks bar screens, engines, generators, pumps, settling tanks, filters, clarifiers, chlorinators, and other equipment for proper functioning; starts and stops pumps; makes adjustments as needed; monitors SCADA.
- Records data from various meters, gauges and dials; logs daily, weekly, and monthly activities.
- Performs standard laboratory chemical and biological tests.
- Performs general preventive and scheduled maintenance; assists on major 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.
- Collects water and samples.
- Analyses plant performance and makes chemical feed and other adjustments consistent with supervisory guidelines; back washes filters.
- Takes various readings at pumps and motors; maintains logs of plant operations activities and laboratory analysis; maintains maintenance and repair logs.

Additional Job Duties

- Performs related duties as required.

Recruitment and Selection Guidelines

Knowledges, Skills, and Abilities

- Working knowledge of the operating characteristics and maintenance requirement of water treatment plants.
- Working knowledge of applicable federal, state, and local laws, ordinances, and permitting requirements.
- Working knowledge of the occupational hazards of the work and of necessary safety precautions.
- Some knowledge of standard laboratory test and procedures used in a water treatment plant.
- Working knowledge of the use of computers to record data, prepare reports, and operate plant equipment.
- Skill in collaborative conflict resolution.
- Some knowledge of hydraulic, chemical and mechanical principles pertinent to water treatment plant operations.
- Ability to detect flaws in the operation of mechanical equipment and to determine proper remedial measures.
- Ability to conduct routine laboratory test.
- Ability to understand and follow moderately complex oral and written instructions.
- Ability to read meters, charts, and technical manuals and drawings accurately and to maintain records of shift operations.
- 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 and some experience in the operation and maintenance of machinery and equipment, preferably in a water treatment plant; or an equivalent combination of education and experience.

Special Requirements

- Possession of a valid North Carolina driver's license.
- Ability to obtain North Carolina water operator's grade C certificate within 12 months of hire date

