

# WASTEWATER TREATMENT PLANT OPERATOR

## General Statement of Duties

Performs skilled operational and maintenance functions in the operations of wastewater treatment plants.

## Distinguishing Features of the Class

An employee in this class performs a variety of operational, laboratory, and maintenance duties designed to produce safe treatment 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. Work also includes a variety of equipment, grounds and facility maintenance and substantial record keeping of work activities. Employees are subject to hazards associated with wastewater and plant operations including working in 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. Work around wastewater is also subject to the final standards of OSHA on blood borne pathogens. Work may require standby and call back time. Work is performed under regular 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, ultra-violet light disinfection system, and other equipment for proper functioning.

- Records data from various meters, gauges and dials; logs daily, weekly, and monthly activities; may enter data into data base.

- Pressure washes clarifiers, measures chemical supplies, wastes sludge, re-supplies chemicals, changes chlorine lines, cleans debris out of the influent pump station and sand out of the bar screen.

- Operates belt press to dewater digester sludge.

- Performs general preventive and scheduled maintenance; assists on major maintenance and repairs; prepares, primes and paints various structures and equipment.

- Starts, stops, regulates and adjusts motors, pumps, blowers, valves and other apparatus to meet changing operating conditions and maintain required permitted standards.

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

- Monitors the operation of the activated sludge plant.

- Performs standard laboratory chemical and biological tests.

- Orders parts and supplies using the requisition system.

### Additional Job Duties

- Collects water and wastewater samples.

- Performs related duties as required.

## Recruitment and Selection Guidelines

### Knowledges, Skills, and Abilities

- Working knowledge of the operating characteristics and maintenance requirement of wastewater treatment plants.

- Working knowledge of hydraulic, chemical and mechanical principles pertinent to wastewater treatment plant operations.

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.

Working knowledge of the application of information technology to assigned tasks.

Skill in teamwork and operation of required tools and equipment.

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 operate light to medium equipment.

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, to operate a computer terminal 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 wastewater treatment plant; or an equivalent combination of education and experience.

#### Special Requirements

Possession of a Wastewater Operator's Grade I level certificate from the State of North Carolina within 6 months of assignment to this class.