

SENIOR WASTEWATER TREATMENT PLANT OPERATOR

General Statement of Duties

Performs skilled operational and maintenance functions in the operations of wastewater treatment plants; serves as back-up ORC.

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. The class is distinguished from the WWTP Operator class by responsibility serving as back up ORC for the plant requiring a grade II certification and for making process control and belt press operation decisions. 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 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

Serves as back-up ORC for the treatment plant; reviews laboratory and makes process control decisions such as when to adjust chemical flow and waste sludge; takes the lead on operation of the belt press; provides back up for laboratory analysis.

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

Adjusts chemical pump settings as necessary for process control.

Washes clarifiers; maintains rotors, replaces belts, changes oil, replaces rings, greases impellers, replaces sump pumps.

Monitors chemical supplies and replenishes as necessary.

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

Performs general preventive and scheduled maintenance; participates in trouble shooting and major maintenance and repairs when needed.

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

Participates in established laboratory analysis for process control and regulatory requirements.

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

Monitors the operation of the activated sludge plant.

Operates equipment to de-water biosolids; operates front end loader to move materials.

Participates in landscape and building maintenance, painting and cleaning.

Additional Job Duties

Collects water and wastewater samples.

Performs related duties as required.

Recruitment and Selection Guidelines

Knowledges, Skills, and Abilities

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

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

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

Considerable knowledge of the occupational hazards of the work and of necessary safety precautions.

Working knowledge of the application of information technology to the work of the plant and of reporting and other state certification and permitting requirements.

Skill in teamwork and collaborative conflict resolution.

Skill in the operations and maintenance of assigned equipment and tools.

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 provide leadership and training to coworkers.

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 considerable experience in the operation and maintenance of machinery and equipment in a wastewater treatment plant; or an equivalent combination of education and experience.

Special Requirements

Possession of a Wastewater Operator's Grade II level certificate from the State of North Carolina.

May require possession of a valid North Carolina Driver's license.