Job Description

This job description in no way states or implies that these are the only duties to be performed by the employee occupying this position. Employees are required to follow other job-related instructions and to perform any other job-related duties as requested by their supervisor. Reasonable accommodation may be made to enable individuals with disabilities to perform the job functions described herein.

Job Title: Senior Plant Operator

Department: Operations
Pay Grade: 109
FLSA Status: Non-Exempt

JOB SUMMARY
Under regular supervision, performs technical work in the operation and repair of equipment at the treatment facilities. Work involves plant maintenance; plant compliance; training of shift personnel; operating and making necessary adjustments as needed to equipment within limits defined by standard operating procedures, standard practices, and instructions to ensure maximum efficiency; and performing duties involving sampling and housekeeping of buildings and grounds.

ESSENTIAL JOB FUNCTIONS
- Starts, operates, and shuts down treatment plant equipment and processes, in accordance with established procedures and safety requirements.
- Performs numerous tours, and observes processes; monitors operating conditions, meters, gauges, pumps, etc.; monitors the levels of numerous holding tanks, such as primary and secondary clarifiers, sludge blend tanks, aeration tanks, etc.; and monitors disposal of scavenger night soil waste streams being discharged into facility; makes changes as needed to ensure effective and efficient operation.
- Properly aligns pumps and transfer units via valves and piping to different parts of the treatment facility so as to control flow and meet permitting requirements.
- Performs routine housekeeping of plant equipment, facility buildings and grounds, and vehicles.
- Routinely inspects plant to document relevant problems such as process concerns and equipment malfunction, or to try and fix relevant problems so as to avoid potential noncompliance issues.
- Calibrates laboratory equipment including pH meters and UTV meters
- Collects and properly labels samples from various areas in treatment process for laboratory testing and analysis; may conduct tests that provide up-to-date information for proper operation of treatment plant including pH, OUR, UTV, D.O., etc.; records results for the reporting of operational data to the regulatory agencies.
- Checks clarifier blankets and record findings on appropriate form.
- Properly logs and processes septage and scavenger waste loads brought to facility for disposal.
- Starts up, monitors, and make adjustments to centrifuge operation. Maintains
Senior Plant Operator

equipment and processes sludge in the most efficient manner while operating centrifuge.

- Monitors characteristics of wastewater during treatment process to ensure plant biomass maintains a ‘healthy’ condition.
- Monitors the proper loading of sludge cake and other solids into trucks to ensure safe weight, no leakage, no spilling, and no overfilling.
- Processes forms and maintains related records and logs.
- Disposes bar screenings, grit, and trash.
- Performs general preventive maintenance on related wastewater equipment.
- Receives equipment deliveries and tanker loads, pre-trips and safely operates operations vehicles, vans, loaders forklifts and Mack trucks.
- Performs routine and specific cleaning operations on plant equipment or vehicles. This includes cleaning ultraviolet (UV) channels, UV lights, centrifuge interior and exterior, conveyors and other dewatering equipment, bar screens, Mack trucks and trailers.
- Transports solids to landfill as needed.
- Performs general and specific housekeeping duties. Includes cleaning buildings in assigned quadrants of the treatment plant.
- Receives and/or reviews various records and reports such as turnover from previous shift, shift logs, routine lab results, standard operating procedures, and night soil manifest.
- Prepares and/or generates various records and reports such as pH's, dissolved oxygen (D.O.), blanket level readings, transmittance level, operational logs, turnovers, and pre-trip inspection forms.
- Refers to shift log book, standard operating procedures, night soil manifest, policy and procedure manuals, codes, laws, regulations, publications, and reference texts, etc.
- Operates a variety of vehicles, equipment, machinery, tools, and software.
- Interacts and communicates with various groups and individuals.
- May work on rotating shift schedule.
- Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

Education and Experience:
- High school diploma;
- Three (3) years of related experience; or
- Equivalent education, training, and/or experience.

Licenses or Certifications:
- Valid South Carolina driver’s license.
- Must obtain a Class “A” commercial driver's license within 6 months of hire.
- Must possess a Class “B” Biological Wastewater Treatment Operator certificate.

Special Qualifications:
- Shift work and rotating schedule experience preferred.
- Able to use or learn to use a variety of vehicles such as tractor trailer trucks, equipment, and machinery such as bobcat, front-end loader, forklift, pumps, computer, etc.; a variety of tools such as pH meter, dissolved oxygen meter, sludge judge, transmittance meter, microscope, etc.; a variety of supplies such as writing instruments, calculator, and variety of computer software including Wonderware HMI.
control software.

**Knowledge, Skills and Abilities:**
- Knowledge of the laws, ordinances, standards, and regulations pertaining to the specific duties and responsibilities of the position.
- Knowledge of wastewater terminology and mathematical formulas used in wastewater treatment.
- Knowledge to plant operation, procedures, policies, and duty responsibilities.
- Knowledge of sludge dewatering characteristics, processes, and related equipment.
- Knowledge of the operating principles and practices and the maintenance requirements of treatment equipment and machinery.
- Knowledge of the occupational hazards and safety precautions associated with related materials.
- Knowledge of standard laboratory principles, techniques, terminology, and care/operations of laboratory equipment.
- Skill in applying basic principles and practices of chemical and bacteriological analysis.
- Ability to recognize breakdowns in treatment equipment.
- Ability to exercise independent judgement in making decisions and coordinating the proper operation of treatment equipment.
- Ability to understand and follow specified operating and recording procedures. Ability to make minor repairs of equipment operated.
- Ability to develop abilities to detect defects and to take appropriate action in the operation of treatment equipment chemical feed machines and other related equipment.
- Ability to understand and utilize standards as well as how to use formulas and data analysis to maintain processes and permit compliance.
- Ability to keep accurate records and prepare reports.
- Ability to exercise considerable tact and courtesy in contact with the general public.
- Ability to establish and maintain effective working relationships as necessitated by work assignments.

**PHYSICAL DEMANDS**
The work is medium work. This requires exerting up to 50 pounds of force occasionally; and/or up to 30 pounds of force frequently; and/or up to 10 pounds of force constantly to move objects. Additionally, the following physical abilities are required: balancing, climbing, crawling, crouching, feeling, fingering, grasping, handling, hearing, kneeling, lifting, mental acuity, pulling, pushing, reaching, repetitive motion, speaking, standing, stooping, talking, visual acuity, and walking.

**WORK ENVIRONMENT**
Works inside an environmentally controlled space; but will intermittently work in adverse environmental conditions (e.g., heat, cold, and rain) for moderate periods of time. Exposed to chemicals, water/wastewater site hazards, traffic, and moving machinery.
The North Charleston Sewer District has the right to revise this job description at any time and it does not represent in any way a contract of employment. My signature below indicates that I have received and reviewed the above description. I am able to perform the essential functions of my position with or without reasonable accommodation.

________________________________________
Employee Signature

________________________________________
Supervisor (or HR) Signature

Date

Date