

**NORTH CHARLESTON SEWER DISTRICT
JOB DESCRIPTION, OCTOBER 2014**

**JOB TITLE: LABORATORY TECHNICIAN I
QUALITY CONTROL/LABORATORY DEPARTMENT**

GENERAL STATEMENT OF JOB

Under regular supervision, collects samples and performs laboratory analysis work in assisting Laboratory Director for NPDES permit compliance . Reports to the Laboratory Director.

SPECIFIC DUTIES AND RESPONSIBILITIES

ESSENTIAL JOB FUNCTIONS

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 will be required to follow other job-related instructions and to perform any other job-related duties requested by their supervisor.

Prepares, maintains, and calibrates field pH, TRC, and dissolved oxygen meters for field analysis.

Performs TRC, TSS, ammonia, and enterococci testing in laboratory.

Prepares samples, bench sheets, and all required procedures; performs BOD analysis.

Prepares portable samplers (batteries, tubing, bottles, lids, ice, etc.) for field.

Prepares chemical reagents for each specific laboratory analysis.

Prepares growth media and glassware for all testing.

Prepares chain of custody records ensuring complete accuracy.

Collects and loads all equipment and samples into field vehicle; secures for safety.

Drives vehicle to collect field samples.

Performs preventive maintenance on all laboratory equipment (samplers, TRC meter, dissolved oxygen meter, pH meters, incubators, water baths, etc.).

Sets up, analyzes, and records enterococci testing.

Performs analysis on all sludge samples and centrifuge cakes.

Cleans all dirty glassware for next day testing.

LABORATORY TECHNICIAN I

Remove and replace manhole covers to recover samples.

Prepares all paperwork for filing.

Performs acid wash on BOD bottles.

Receives and checks in inventory.

Performs inventory control.

Maintains correct inventory in each testing area.

Files and records all data.

Calibrates analytical balance.

Performs eye wash testing and safety shower inspection.

Prepares crucibles and labels for proper identification.

Prepares DO probe; calibrate portable dissolved oxygen meter.

Prepares borate buffer and all required procedures to distill ammonia samples for ammonia – nitrogen analysis.

Maintains all test files.

Receives and/or reviews various records and reports such as BOD forms, TSS forms, ammonia forms, enterococci forms, and chain of custody.

Prepares and/or processes various records and reports such as equipment forms, pH forms, and dissolved oxygen forms.

Refers to the instruction manuals, notes for training, chemical reference charts, standard operating procedures book, policy and procedure manuals, codes / laws / regulations, publications and reference texts, etc.

Operates District vehicles/vans and a variety of machines and equipment such as pH meter, dissolved oxygen meter, ammonia meters, field samplers, computer, printers, copy machine, etc.

Uses a variety of tools such as screwdrivers, knife, standard weights, etc.; a variety of supplies such as chemicals, buffers, ammonia, soaps, cleaning acid, general office supplies, etc.; and a variety of computer software.

Interacts and communicates with various groups and individuals such as District employees and the general public.

ADDITIONAL JOB FUNCTIONS

Cleans ice machine.

LABORATORY TECHNICIAN I

Completes vehicle inspection forms weekly.
Fills in for Laboratory Technician II when needed.

Delivers and picks up van for scheduled service work.

Receives all deliveries for plant.

Delivers packages received from UPS, Federal Express, etc.

Performs routine administrative / office tasks as required, including but not limited to preparing reports and correspondence, copying and filing documents, answering the telephone, sending and receiving faxes, entering and retrieving computer data, etc.

MINIMUM TRAINING AND EXPERIENCE

Requires a high school diploma or GED equivalent with one-year laboratory experience or related training; or any equivalent combination of education, training, and experience, which provides the required skills, knowledge, and abilities. Must have a valid South Carolina driver's license. Requires Basic Computer Knowledge.

MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS

Physical Requirements:

Must be physically able to operate a variety of water plant machinery and office equipment including various water pumps, chlorinators, mixers, computers, two-way radios, etc. Must also be physically able to operate a motor vehicle. Must be able to exert up to seventy-five 75 pounds of force occasionally, and/or up to thirty 30 pounds of force frequently, and/ force constantly move objects such as manhole covers. Must be able to lift water bottles weighing over 50 pounds. Physical demand requirements are those for Medium Work includes carrying, reaching, lifting, pushing, pulling, climbing, etc.. May require constant walking or standing.

Data Conception: Requires the ability to compare and/or judge the readily observable, functional, structural or compositional characteristics (whether similar or divergent from obvious standards) of data, people, or things.

Interpersonal Communication: Requires the ability of speaking and/or signaling people to convey or exchange information. Includes the receiving of assignments and/or directions from supervisor.

Language Ability: Requires the ability to read a variety of narrative and statistical reports, correspondence, invoices, etc. Requires the ability to prepare correspondence, reports, narrative and statistical reports, forms, studies, graphs, charts, etc., using prescribed formats and conforming to all rules of punctuation, grammar, diction, and style. Requires the ability to speak to people with poise, voice control and confidence.

Intelligence: Requires the ability to apply principles of common sense understanding to carry out instructions furnished in written, oral or diagrammatic form; to deal with problems involving several concrete variable in or from standardized situations. Requires the ability to make routine independent judgments in absence of supervision; to acquire knowledge of topics related to primary

LABORATORY TECHNICIAN I

occupation.

Verbal Aptitude: Requires the ability to record and deliver information, to explain procedures, to follow oral and written instructions. Must be able to communicate effectively and efficiently in a variety of technical or professional languages including scientific, environmental, and other terminology.

Numerical Aptitude: Requires the ability to utilize complex mathematical formulas; to add and subtract; multiply and divide; utilize decimals and percentages; and to understand advanced applications of statistics, algebra, geometry, and statistical inference functions.

Form/Spatial Aptitude: Requires the ability to inspect items for proper length, width, and shape.

Motor Coordination: Requires the ability to coordinate hands and eyes accurately in using wastewater treatment equipment, laboratory, and office machinery.

Manual Dexterity: Requires the ability to handle, grasp, lift and move a variety of items such as wastewater treatment equipment and office machinery.

Color Discrimination and Visual Acuity: Requires the ability to differentiate colors and shades of color; requires the visual acuity to determine depth perception, peripheral vision, inspection for small parts; preparing and analyzing written or computer data, etc.

Interpersonal Temperament: Requires the ability to deal with people beyond giving and receiving instructions. Must be adaptable to performing under stress and when confronted with emergency situations. Must be adaptable to working in varied weather conditions.

Physical Communication: Requires the ability to talk and hear: (Talking: expressing or exchanging ideas by means of spoken words. Hearing: perceiving nature of sounds by ear.)

PERFORMANCE INDICATORS

Knowledge of Job: Has thorough knowledge of the methods, policies, and procedures of the Quality Control/Laboratory Department as they pertain to the performance of duties of the Laboratory Technician I. Has knowledge of the laws, ordinances, standards and regulations pertaining to the specific duties and responsibilities of the position. Has knowledge of laboratory methods, procedures and terminology. Has working knowledge of analytical principles of chemistry and/or microbiology as applied to wastewater treatment. Is skilled in the use of laboratory equipment. Is able to perform independently a variety of laboratory tests and analyses and complete associated calculations. Is able to prepare reports and to maintain records. Is able to use computer databases, spreadsheets, etc. Has knowledge of the laboratory operating principles and practices. Has considerable knowledge of the occupational hazards and safety precautions associated with wastewater plant and related activities. Has general knowledge of Federal, State, and local laws, ordinances, and regulations pertaining to the treatment of wastewater. Is able to recognize breakdowns in laboratory equipment. Has general knowledge of chemistry as applied to wastewater treatment. Is able to understand and follow specified operating and recording procedures. Is able to make repairs of equipment operated. Is able to exercise independent judgment based on training and experience in making decisions and coordinating the proper operation of equipment. Is able to detect defects and to take appropriate action in the operation of laboratory equipment. Is able

LABORATORY TECHNICIAN I

to keep accurate records and prepare reports. Is able to effectively express ideas orally and in writing.. Is able to establish and maintain effective working relationships as necessitated by work assignments.

Quality of Work: Maintains high standards of accuracy in exercising duties and responsibilities. Exercises immediate remedial action to correct any quality deficiencies that occur in areas of responsibility. Maintains high quality communication and interaction with internal and external entities with whom the position interacts.

Quantity of Work: Maintains effective and efficient output of all duties and responsibilities as described under "Specific Duties and Responsibilities."

Dependability: Assumes responsibility for completing assigned work. Completes assigned work within deadlines in accordance with directives, policy, standards and prescribed procedures. Maintains accountability for assigned responsibilities in the technical, human and conceptual areas.

Attendance: Attends and remains at work regularly and adheres to policies and procedures regarding absenteeism and tardiness. Provides adequate notice to higher management with respect to leave requests.

Initiative and Enthusiasm: Maintains an enthusiastic, self-reliant and self-starting approach to meet job responsibilities and accountabilities. Strives to anticipate work to be accomplished, and initiates proper and acceptable action for the completion of work with a minimum of supervision and instruction.

Judgment: Exercises analytical judgment in areas of responsibility. Identifies issues or situations as they occur and specifies decision objectives. Identifies or assists in identifying alternative solutions to issues or situations. Implements decisions in accordance with prescribed and effective policies and procedures and with a minimum of errors. Seeks expert or experienced advice where appropriate and researches issues, situations and alternatives before exercising judgment.

Cooperation: Accepts supervisory instruction and direction and strives to meet the goals and objectives of same. Questions such instruction and direction when clarification of results or consequences are justified, i.e., poor communications, variance with established policies or procedures, etc. Offers suggestions and recommendations to encourage and improve cooperation intra- and inter-departmentally.

Relationships with Others: Shares knowledge with managers, supervisors and co-workers for mutual benefit. Contributes to maintaining high morale among all employees. Develops and maintains cooperative and courteous relationships inter- and intra-departmentally, and with external entities with whom the position interacts. Tactfully and effectively handles requests, suggestions and complaints in order to establish and maintain good will. Emphasizes the importance of maintaining a positive image.

Coordination of Work: Plans and organizes daily work routine. Establishes priorities for the completion of work in accordance with sound time-management methodology. Avoids duplication of effort. Estimates expected time of completion of work elements and establishes a personal schedule accordingly. Attends required meetings, planning sessions and discussions on time. Implements work activity in accordance with priorities and estimated schedules.

Safety and Housekeeping: Adheres to all established safety and housekeeping standards. Ensures such standards are not violated.

LABORATORY TECHNICIAN I

DISCLAIMER: This job description is not an employment agreement or contract. Management has the exclusive right to alter this job description at any time without notice.