To perform this job successfully, an individual must be able to perform the essential job functions satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the primary job functions herein described. Since every duty associated with this position may not be described herein, employees may be required to perform duties not specifically spelled out in the job description, but which may be reasonably considered to be incidental in the performing of their duties just as though they were actually written out in this job description.

**JOB SUMMARY**

This is professional scientific work supervising technical oversight to an analytical section of the laboratory, requiring a high level of experience and expertise in performing complex chemical, biological, bacteriological and physical analysis of fluids and solids in the Utilities Laboratory. Employees in this class exercise a high degree of independent judgment and skill in the development, performance and evaluation of scientific analyses, supervising a subordinate staff of Chemists. Work requires a high level of expert knowledge of the current regulations and the methods used for collection and analyses of samples. This position also monitors the output of an analytical section for the timeliness, accuracy and validity of the data being generated for the corresponding laboratory clients. Work is performed under the general direction of an administrative superior.

**ESSENTIAL JOB FUNCTIONS (examples, not all inclusive)**

- Provides expert technical oversight in the performance of scientific analyses, including the utilization of specialized techniques or complex laboratory instrumentation;
- Plans, assigns, reviews and supervises the daily activities of subordinate staff;
- Troubleshoots complex analytical problems;
- Provides lists of materials and supplies needed to ensure the proper timely operation of the section;
- Recommends equipment to be purchased to ensure the proper operation of the section;
- Oversees and reviews routine and complex chemical, biological and bacteriological examinations;
- Interprets laboratory data for county, state and federal officials, judges, and attorneys;
- Develops, modifies and maintains procedures for laboratory certification;
- Calibrates, maintains and operates all manual and automated laboratory instrumentation;
- Trains laboratory personnel;
- Manages P.O./contracts with vendors such as Proficiency Testing, Third-party Assessors, etc.
- Serves as main point of contact with regulatory agencies (FDEP, FDOH, NELAC/TNI).
- Develops, reviews, and recommends methods modifications and development;
- Serves as back-up for various duties within the laboratory Business Section;
- Assists superiors in data acquisition for various reports; and
- Performs other related job duties as assigned.

**QUALIFICATIONS**

**Education and Experience:**

Bachelor’s degree in chemistry, bacteriology, biology, or related discipline and four (4) years of experience in general laboratory analysis including the basic understanding of automated analysis and instrumentation; or an equivalent combination of education, training and/or experience.
Special Qualifications (May be required depending on area of assignment):

- Florida Driver's License or Florida Commercial Driver's License and endorsement, if any.
- Assignment to work a variety of work schedules including compulsory work periods in special, emergency, and/or disaster situations.
- Other highly desirable knowledge, skills, abilities, and credentials required for a specific position.

Knowledge, Skills and Abilities:

- Knowledge of laboratory principles, practices and techniques of chemistry, biology and bacteriology;
- Knowledge of the capabilities and limitations of electronic computers and complex automated instrumentation, and the role they perform in laboratory analysis;
- Knowledge of sewage treatment and disposal, industrial wastes, stream pollution or the methods for treating and testing water supply systems, depending on area of assignment;
- Knowledge of local, state and federal laws and regulations pertaining to water quality, wastewater treatment, and data validity;
- Knowledge of OSHA regulations and recognized safety operating practices for laboratory work;
- Skill in laboratory techniques, and in following and adapting scientific methods and procedures;
- Ability to interpret test results, and to prepare comprehensive analytical reports;
- Ability to perform a variety of laboratory tests on water, wastewater, or sludge samples, and to prepare and standardize laboratory reagents;
- Ability to carry on independent research in the chemistry, biology and bacteriology of wastewater treatment or potable water supplies;
- Ability to train, instruct and oversee personnel;
- Ability to operate, maintain and calibrate laboratory equipment and instruct personnel in their use; and
- Ability to present scientific ideas and findings clearly and concisely in written, oral and graphic form.

PHYSICAL/MENTAL DEMANDS

The work is light work which requires exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force to move objects. Additionally, the following physical abilities are required:

- Crouching: Bending the body downward and forward by bending leg and spine.
- Feeling: Perceiving attributes of objects, such as size, shape, temperature or texture by touching with skin, particularly that of fingertips.
- Fingering: Picking, pinching, typing, or otherwise working, primarily with fingers rather than with the whole hand as in handling.
- Handling: Picking, holding, or otherwise working, primarily with the whole hand.
- Hearing: Perceiving the nature of sounds at normal speaking levels with or without correction. Ability to receive detailed information through oral communication, and to make the discrimination in sound.
- Kneeling: Bending legs at knee to come to a rest on knee or knees.
- Mental Acuity: Ability to make rational decisions through sound logic and deductive processes.
- Speaking: Expressing or exchanging ideas by means of the spoken word including the ability to convey detailed or important spoken instructions to other workers accurately and concisely.
- Standing: Particularly for sustained periods of time.
- Talking: Expressing or exchanging ideas by means of the spoken word including those activities in which they must convey detailed or important spoken instructions to other workers accurately, loudly, or quickly.
- Visual Acuity: Have close visual acuity such as color differentiation, depth perception, and adequate field vision.
- Walking: Moving about on foot to accomplish tasks, particularly for long distances or moving from one work site to another.

WORKING CONDITIONS

Work is typically performed in a dynamic environment that requires sensitivity to changing goals, priorities, and needs.