GENERAL SUMMARY

Leads, assigns, reviews, and participates in laboratory activities and functions related to chemistry and complex chemical testing of water purification, wastewater treatment, and environmental monitoring programs; ensures work quality and adherence to established policies and procedures; and performs the more technical and complex tasks related to assigned chemical analysis tasks.

ESSENTIAL DUTIES & RESPONSIBILITIES

The intent of this job description is to provide a representative summary of the major duties and responsibilities performed by incumbents of this job. Incumbents may be requested to perform job-related tasks other than those specifically presented in this description.

1. Supervises staff, which includes prioritizing and assigning work; conducting performance evaluations; ensuring staff is trained; ensuring employees follow policies and procedures; maintaining a healthy and safe working environment; and, making hiring, termination, and disciplinary decisions or recommendations.

2. Plans, prioritizes, assigns, monitors, and participates in the collection and preparation of water, wastewater, food, milk and dairy products samples for analysis; provides technical and analytical support related to laboratory techniques and interpretation of data; ensures laboratory compliance with local, state, and federal laws, rules and regulations.

3. Performs chemical analysis and laboratory examinations of water, wastewater, food, and milk and dairy products as appropriate; reviews data from completed analyses; records and reports results accurately and in accordance with established procedures.

4. Participates in the development of policies and procedures related to laboratory testing and operations; monitors work activities to ensure compliance with established quality control and quality assurance policies and procedures as well as standard operating procedures.

5. Oversees the ordering and maintenance of laboratory stock including glassware, chemicals, and related supplies; procures equipment and service contracts; washes glassware and sterilizes equipment as appropriate.

6. Prepares daily, weekly, and monthly reports as assigned for management staff or regulatory agencies.
7. Performs the more technical and complex laboratory tasks including review of maintenance records on equipment, inspection of laboratory area, and overseeing the more complex laboratory testing.

8. Plans, implements, assesses, and improves work performance according to the National Environmental Laboratory Accreditation Program (NELAP) requirements for laboratory processes.

9. Performs other related duties as required.

10. Adheres to assigned work schedule as outlined in the Department and City attendance policies and procedures; ensures all behaviors comply with the City’s Personnel Rules and Regulations.

KNOWLEDGE, SKILLS & ABILITIES

- **Knowledge of:**
  - Principles and practices of analytical chemistry.
  - Sampling and laboratory testing procedures and methods.
  - Standard chemical, serological, bacteriological tests and procedures.
  - Milk, food, and water microbiology.
  - Principles of training and monitoring lower level staff.
  - Proper use of laboratory equipment, reagents, solutions, and buffers.
  - Standard scientific laboratory methods and equipment.
  - Adjustment and operation of standard equipment or instrumentation use in chemical and laboratory tests.
  - Pertinent federal, state and local laws, codes, and regulations.
  - City purchasing policies and procedures.
  - The NELAC Institute (TNI) standards for laboratory accreditation.
  - Audit process for laboratories.

- **Skill in:**
  - Data analysis.
  - Problem solving.
  - Using computers and related software.
  - Planning and organizing.
  - Personnel management.

- **Ability to:**
  - Communicate clearly and effectively, both orally and in writing.
  - Perform laboratory examinations according to prescribed procedures and regulations.
  - Analyze and interpret test results; report results accurately and properly.
  - Use computer workstations and software for laboratory instrumentation, sample tracking and report preparation.
  - Properly handle toxic and hazardous wastes.
  - Assist in supervising and organizing the work of laboratory personnel.
  - Participate in training lower level personnel.
  - Assemble, calibrate, and maintain equipment used in laboratory tests.
Order and maintain glassware, chemicals, and related supplies; wash glassware as appropriate.
Principles and practices of employee supervision.
Prepare documents for developing testing and analytical requirements.
Assist in supervising, directing, and coordinating the work of subordinate employees.
Interpret and explain City industrial waste policies and procedures.
Prepare clear and concise reports.
Establish and maintain effective working relationships with those contacted in the course of work.
Prepare and maintain detailed and accurate purchasing reports.
Create and present technical training modules.
Develop, implement, and maintain standard operating procedures and a quality manual.

MINIMUM JOB REQUIREMENTS

Bachelor’s degree from an accredited college or university with major course work in Chemistry, Biochemistry, Biology or a related field and three years of responsible laboratory experience required, including one year in chemical testing.

OTHER REQUIREMENTS

Valid Texas driver's license.
Possession of, or ability to obtain, appropriate laboratory certification from the State of Texas.

WORKING CONDITIONS

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Depending on assignment, positions in this class typically require touching, talking, hearing, seeing, grasping, standing, stooping, kneeling, crouching, reaching, walking, repetitive motions, climbing, balancing, pushing, pulling and lifting; depending on assignment. Incumbents may be exposed to moving mechanical parts, odors, dusts, poor ventilation, chemicals, oils, extreme temperatures, inadequate lighting, intense noises, gases and workspace restrictions.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.
Depending on assignment, positions in this class typically exert up to 20 pounds of force occasionally, up to 10 pounds of force frequently, and/or a negligible amount of force constantly having to move objects.