LABORATORY SUPERVISOR

JOB DESCRIPTION

Classification Responsibilities: A Laboratory Supervisor is responsible for managing and administering the activities of a Water Resources Department laboratory engaged in the analysis of water and wastewater samples to ensure compliance with federal, state, and local environmental analysis requirements. The employee in this class supervises professional staff in the day-to-day laboratory operations. Other duties include: overall laboratory management, long-range planning for staff and capital acquisitions, developing and reviewing new analytical procedures, preparing, administering and monitoring laboratory budgets, and developing and implementing laboratory policies. This class performs related duties as required.

Distinguishing Features: This class is distinguished from the Chemist II class by the greater involvement with administrative oversight, supervisory duties, and responsibilities in planning and budgeting. An employee of this classification may be required to work irregular hours (such as, but not limited to: evenings, weekends, holidays and other unusual schedules as needed to ensure compliance). An incumbent in this position is required to work safely with dangerous and toxic chemicals, infectious materials, and acids. This class is subject to the Occupational Safety and Health Administration (OSHA) CFR 1910.1450 guidelines regarding occupational exposure to hazardous chemicals in a laboratory. Work is supervised by the Assistant Director - Wastewater, and performance is evaluated through an analysis of work reports, conferences, and results achieved. This class is FLSA exempt-professional.

QUALIFICATIONS

Minimum Qualification(s) Required. Any combination of training, education, and experience equivalent to graduation from an accredited college or university with a Bachelor’s Degree in Chemistry, Microbiology, Biochemistry, or a closely related field. Considerable (3 - 5 years) full-time professional-level experience in an environmental laboratory with experience in Gas Chromatography/Mass Spectrometry, Ion Chromatography, Atomic Absorption analysis, Inductively Coupled Plasma with Mass Selective Detector analysis and water quality analysis. Previous good (1 - 3 years) supervisory experience with environmental laboratory staff.

Special Requirement(s). Must possess a valid Arizona Driver's License by hire date. Per CFR 1910.1200 the incumbent must attend Occupational Safety and Health Administration (OSHA) Hazardous Communication training and attend and refresher course annually.

Substance Abuse Testing. Due to the safety and/or security sensitive nature of this classification, individuals shall be subject to pre-employment or pre-placement alcohol, drug and/or controlled substance testing as outlined in City policy and procedures.
**Preferred/Desirable Qualification(s).** In addition to the stated professional-level experience and supervisory experience, graduation from an accredited college or university with a Master’s Degree in Chemistry, Microbiology, Biochemistry, or closely related field is preferred. Previous experience in a public health-oriented water or wastewater laboratory is strongly preferred. Possession of any Water or Wastewater Operator certification from Arizona Department of Environmental Quality (ADEQ) at the time of hire is preferred.

**ESSENTIAL FUNCTIONS**

**Communication:** Communicates with other City employees, members of the public, vendors, and management staff in order to explain treatment processes, provide technical data, and review technical specifications. Instructs subordinates or others in laboratory operations in safety and technical areas. Prepares written documents such as standard operating procedures (SOPs), memos, and water quality data to submit reports to federal, state, and county regulatory entities. Ensures compliance with all state laboratory licensure requirements and Occupational Safety and Health Administration (OSHA) standards.

**Manual/Physical:** Reviews the work products of others to ensure compliance with the Environmental Protection Agency (EPA) standards, Chemical Hygiene Plan, Arizona Department of Health Services (ADHS) Environmental Laboratory Standards, ADEQ, or other standard methods for water and wastewater. Distinguishes colors to complete analytical data. Uses specialized hand tools to install, maintain, calibrate, and repair on-line and laboratory analytical equipment. Operates a variety of standard office equipment (e.g., personal computer [PC], calculator, and related software) to communicate and receive information. Enters data into a Laboratory Information Management System (LIS), maintains a database, and reports analytical results. Performs physical inventories of spare parts, laboratory equipment, and chemicals. Moves material, chemicals, and water samples from one place to another using hand trucks, trays, or lab carts. Moves objects weighing up to 50 pounds using a cart or other aid to assist with lifting. Cleans work area and/or laboratory equipment to maintain proper working order. Works with hazardous chemicals such as standards, organic solvents, acids, and bases using personal protective equipment. Connects and disconnects high-pressure tanks of laboratory gasses, some of which are very flammable. Drives a vehicle requiring a standard Arizona Driver’s License to routinely pick up and deliver samples, materials, and supplies, and to attend meetings and training at off-site facilities. Meets scheduling and attendance requirements.

**Mental:** Plans, assigns, and directs the work of a technical staff engaged in performing a wide variety of chemical and microbiological analyses. Supervises all laboratory activities of a chemical and microbiological laboratory. Studies and adopts new and improved methods for the performance of chemical, microbiological, and physical analyses. Supervises the training of subordinate employees in modern methods of laboratory analyses and the use of sophisticated analytical equipment. Directs and performs research work to improve existing laboratory procedures water/wastewater treatment methods or procedures, and develops new and improved analytical techniques. Cooperates with other municipal departments and divisions in the improvement of laboratory services and practices. Prepares comprehensive and detailed reports on the work of the laboratory, including reports required by federal, state, and county agencies. Resolves procedural or operational problems related to laboratory analysis by writing guidelines and making technical recommendations. Performs mathematical calculations, statistical computations, and analytical quality control calculations for preparation of laboratory reports.
Prepares the budget by providing information on laboratory analytical equipment and costs for analysis completed by outside laboratories.

**Knowledge and Abilities:**

Knowledge of:

- chemical and microbiological principles;
- principles and practices applied in environmental laboratory technology;
- use, operations, and care of standard laboratory equipment;
- current research developments and literature associated with water and wastewater laboratory analysis;
- OSHA regulations as they apply to the use of hazardous chemicals in the laboratory setting;
- basic principles of chemistry, microbiology, physics, and related sciences as applied to water and wastewater analysis;
- techniques, equipment, and terminology used in water and/or wastewater treatment plant and laboratory;
- chemicals, safety precautions, and equipment used in water and wastewater facilities;
- PC and related software pertinent to laboratory equipment;
- principles and practices applied in laboratory administration; and
- principles and practices of employee supervision and training.

Ability to:

- maintain ADHS lab licensure by updating all lab records and SOPs;
- coordinate work activities, collection of samples, and conduct water and wastewater quality research;
- comprehend federal and state regulations, and technical data to maintain compliance and develop SOPs for the laboratory;
- perform water and wastewater analyses utilizing Atomic Absorption (AA), Gas Chromatograph/Mass Spectrometer (GC/MS), Independent Carrier (IC), Total Organic Carbon (TOC), and other equipment;
- establish and maintain effective working relationships with subordinates, management, coworkers, municipal officials, and the general public; and
- provide technical training in a classroom setting.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of this job change.