

LABORATORY SUPERINTENDENT

DEFINITION

Under general direction, supervises and participates in the work of a centralized chemical laboratory to provide services in support of water and wastewater operations for the City potable water and wastewater treatment utilities; supervises the City's industrial pretreatment program; performs related work as required.

DISTINGUISHING CHARACTERISTICS

The Laboratory Superintendent is the principal laboratory analyst, responsible for supervision, training, technical advice, and guidance of laboratory employees. The incumbent performs professional laboratory work in research and quantitative physical and chemical testing of portable water, groundwater, wastewater, bio-solids, and soil analysis.

REPRESENTATIVE DUTIES

The duties listed below are examples of the work typically performed by the employee of this class. Not all assigned duties may be listed.

1. Plans, organizes, reviews, evaluates laboratory programs that support water and wastewater treatment operation, processes, and all related water quality activities.
2. Plans, organizes, supervises and reviews the work of staff engaged in laboratory sampling, testing and analysis of water, wastewater, and industrial waste inspection; assists in the hiring of laboratory personnel; trains or arranges for training; evaluates employee performance; initiates disciplinary action; ensure safe working conditions.
3. Performs laboratory testing as required; operates all laboratory instruments; develops or modifies instrumentation and lab procedures; troubleshoots instrument malfunctions and maintenance of equipment.
4. Ensures regulatory compliance and lab certification; implements and reviews quality assurance/quality control program to ensure reliability of test data.
5. Supervises the City's industrial waste pretreatment program; coordinates field investigations; investigates wastewater plant upsets related to industrial discharge; prepares code ordinance/ resolution revisions; reviews construction plans; recommends issuance of wastewater discharge permits.
6. Compiles and prepares correspondence and periodic and special reports covering laboratory activities; prepares and/or directs the preparation of extensive reports and records; coordinates the maintenance of the laboratory data management system.

7. Prepares and administers the laboratory budget; determines the cost of laboratory services; recommends outside laboratory services; administers contracts for laboratory services; monitors new development and equipment related to laboratory operations; recommends the purchase of equipment and services.
8. Provides technical consultation to engineering and operations staff in the evaluation and solution of problems where laboratory analysis is necessary; recommends changes in methods and operations as indicated by study findings and regulatory compliance monitoring.
9. Confers with the City staff as required, providing administrative assistance and project support; represent the City in meeting with governmental and industrial representatives, other customers, and members of professional and technical organizations.
10. Represents and supports the policies and procedures established by the City Council, City Manager, Department Heads and Division Chiefs;

EMPLOYMENT STANDARDS

Education and/or Experience

Graduation from an accredited college with a Bachelor's degree in organic or inorganic chemistry, biochemistry, bacteriology, environmental or sanitary engineering, or a closely related field, and three years of supervisory experience over a laboratory major functional unit engaged in chemical and bacteriological testing and analysis or any combination of training and experience that provides the desired knowledge and abilities. An advanced degree in one of the listed educational specialties may be substituted for one year of experience.

Knowledge of:

Standard analytical procedures and methods including the operation and maintenance of a Gas Chromatograph Spectrometer (GS&GC/MS), atomic absorption spectrophotometer, ICP, and UV/VIS spectrophotometer; administrative techniques, including planning, scheduling, training and budgetary control functions; State and Federal standards related to water pollution control and water quality; computer applications related laboratory and plant processing problems; principles and techniques of effective supervision; occupational hazards and safety precautions of the work performed; principles, laws and regulations regarding water and waste water treatment; principles and techniques of effective public relations in an enforcement setting; programmable laboratory equipment.

Ability to:

Supervise subordinate staff; design laboratory programs; develop and evaluate process control, regulatory compliance monitoring, and laboratory quality assurance programs; interpret laboratory and plant operating data and make sound recommendations for solving problems and increasing efficiency; write clear, complete comprehensive correspondence and reports of a technical nature; explain technical scientific data in layman terms to superiors; and to the public; organize and implement original research in a problem solving environment; perform analyses with detail and accuracy; establish and maintain working relationships with other employees and other agencies.

Skill in:

Isolating, identifying and quantifying organic compounds; synthesizing scientific findings into logical conclusions.

Special Requirements: Possession of or ability to obtain a valid California Driver's License.

Physical Demands

Dexterity and coordination to handle files; occasional lifting of objects weighting up to 40 lbs. such as laboratory equipment and other materials. Strength, dexterity, coordination and vision to use a keyboard and video display terminal for long periods of time. Moving from place to place within the laboratory; some reaching for items above and below desk level.

WORKING CONDITIONS

Occasional exposure to unpleasant elements such as fumes and odors, and raw sewage. Temperature fluctuations due to both seasonal extremes and working in and out of doors. Video display terminal is used on a daily basis.