

Mt. View Sanitary District

JOB TITLE: Laboratory Analyst

**FLSA: NON-EXEMPT
OCTOBER 2023**

LABORATORY ANALYST

DEFINITION

Under general supervision, performs a variety of standardized routine to complex chemical, physical, biological, and bacteriological analyses related to the District's wastewater, receiving water, and solids; maintains laboratory equipment; analyzes, interprets, and reports data; implements the quality assurance and quality control program; maintains laboratory standard operating procedures; maintains laboratory supplies; performs a variety of technical tasks relative to conducting and interpreting standard and complex laboratory analyses; provides technical and specialized assistance to the Operations Department.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the Deputy General Manager. Exercises no direct supervision over staff. Provides lead direction and training to operations, relative to laboratory functions operators occasionally perform.

CLASS CHARACTERISTICS

This is the journey-level class that performs the full range of routine to complex laboratory tests to ensure that the District is in compliance with all Federal and State requirements for the processing, distribution, and disposal of wastewater. Employees at this level perform a wide variety of laboratory analyses and associated technical tasks and conduct regulatory reporting with only occasional instruction or assistance as new or unusual situations arise.

EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative Only)

Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

- Performs wastewater, receiving water, and biosolids laboratory testing work.
- Plans, schedules, prioritizes, and performs laboratory testing work and assignments in consultation with the Deputy General Manager; communicates status of assignments to appropriate personnel, works cooperatively to schedule assignments in accordance with established and special operational priorities.
- Estimates costs of maintenance work, supplies, equipment, and materials; orders supplies and equipment; maintains records of purchase orders; assists in developing budget figures for the division; monitors expenditures.

- Inspects and evaluates work to assure that operations and project activities are performed in accordance with District standards and specifications.
- Performs and interprets chemical, biochemical, biological, bacteriological, and physical analyses of samples related to the treatment, quality control, and disposal of wastewater, following standard procedures and guidelines.
- Collects, transports, prepares, and preserves samples at various sites throughout the treatment plants and other District sites for testing to determine the effectiveness of each stage of the treatment process.
- Analyzes and interprets laboratory results, recognizing problems that may be occurring during the treatment process and disseminates information to management team and operations.
- Prepares samples for analysis by commercial laboratories; ensures that test results are reviewed, meet standards, are entered into the District database, and are reported.
- Sets up, calibrates, operates, and performs minor maintenance and repair to a variety of laboratory instruments and equipment; ensures preventative maintenance activities are completed and documented.
- Maintains quality control and quality assurance program and follows safe work procedures.
- Maintains laboratory Standard Operating Procedures to ensure they remain compliant with current standards.
- Maintains accurate records of work performed and analysis results.
- Prepares standard chemical solutions and reagents; disposes of outdated materials in a safe manner; cleans glassware and equipment and ensures that the laboratory is maintained in a clean and orderly condition.
- Drafts regulatory reports required by NPDES permit and other associated regulations.
- Administers the laboratory database.
- Trains operations staff in lab work procedures.
- Responds to emergency situations as required.
- Observes safe work methods and makes appropriate use of related safety equipment as required; administers laboratory chemical hygiene program.
- Standardize procedures and methods, develop Standard Operating Procedures (SOPs), and continuously monitor assigned programs and communicate opportunities for improvement.
- Performs related duties as assigned.

QUALIFICATIONS

Knowledge of:

- Chemical, biological, and physical characteristics of water and wastewater.
- Principles, practices, equipment, and materials required for the chemical, biochemical, biological, bacteriological, and physical analysis of samples of water and wastewater.
- Sampling techniques and related statistical analysis techniques.
- Good Laboratory Practices and treatment plant and laboratory safety procedures and equipment.
- Basic principles of water and wastewater treatment and distribution/disposal.
- Applicable Federal, State, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Technical report writing practices and procedures.
- Principles and procedures of record-keeping.
- Modern office practices, methods, and computer equipment and applications related to the work.
- Safe driving rules and practices.

- English usage, spelling, vocabulary, grammar, and punctuation.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and District staff.

Ability to:

- Inspect the work of others and maintain established quality assurance and quality control standards.
- Identify and implement effective course of action to complete assigned work.
- Oversee and perform chemical, biochemical, biological, bacteriological, and physical analyses of water and wastewater, solids, and receiving waters.
- Analyze the results of such tests and make appropriate recommendations for plant operations.
- Use and perform calibration and minor maintenance and repair on a variety of laboratory equipment.
- Maintain an inventory of supplies and equipment required for the performance of necessary analyses.
- Interpret, apply, and explain complex laws, codes, regulations, and ordinances; modify existing District or laboratory policies or practices to adhere to changes in such.
- Prepare and maintain clear and concise reports and accurate records and files.
- Utilize computer and related word processing, database, and spreadsheet software and applications.
- Maintain accurate logs, records, and basic written records of work performed.
- Operate a motor vehicle safely.
- Follow department policies and procedures related to assigned duties.
- Understand and follow, oral, and written instructions.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines while maintaining attention to detail and accuracy.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work, and actively support and implement the District's cultural values.
- Work in a team environment as a contributing team member.
- Understand and implement all appropriate safety precautions, as required by District safety policies and procedures, Cal/OSHA, and general industry standards.

Education and Experience:

Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

Equivalent to the completion of an associate degree with major coursework in chemistry, biology, microbiology, or a related field and three (3) years responsible experience in water/wastewater treatment or laboratory experience. A bachelor's degree in chemistry, biology, microbiology, or a related field is highly desirable.

Licenses and Certifications:

- Must possess and maintain a valid Class C California driver's license. Must continue to meet all of the provisions of the District to be insured with the terms and conditions of the District's insurance program as condition of employment.
- Possession of, or ability to obtain within 12 months of appointment, a Grade II Laboratory Analyst Certificate issued by the California Water Environment Association (CWEA).

PHYSICAL DEMANDS

Must possess mobility to work in a wastewater treatment plant laboratory; operate a motor vehicle; vision to read printed materials and a computer screen; color vision to identify chemical and biological solvents and substances; and hearing and speech to communicate in person and over the telephone and radio. Employees primarily work indoors but frequently walk within treatment plants to take samples. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to handle laboratory equipment. Employees must possess the ability to lift laboratory instruments, sample trays, chemical and waste containers as well as boxes with files and reports or office furniture or equipment up to 50 pounds.

ENVIRONMENTAL ELEMENTS

Employees work primarily indoors but are occasionally exposed to loud noise levels, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances, odors, and fumes. Employees may interact with upset staff and/or public and private representatives, and contractors in interpreting and enforcing departmental policies and procedures.

OTHER REQUIREMENTS

Employees of Mt. View Sanitary District are, by State and Federal law, Disaster Service Workers. In the event of a declaration of emergency, any employee may be assigned activities which promote the protection of public health and safety or the preservation of lives and property either at the District or within the local area, or their own community.