SAUSALITO-MARIN CITY SANITARY DISTRICT

LABORATORY TECHNICIAN I / II

DEFINITION

Under direct supervision, performs standard and moderately complex physical, chemical and bacteriological analyses and data interpretation of surface and ground water, wastewater for NPDES permit monitoring and sludge for process control; conducts field sampling as necessary, and computer data entry and analysis; performs related work as assigned.

SUPERVISION RECEIVED AND EXERCISED

Direct supervision is provided by the Laboratory Director or Operations Superintendent. No direct supervision of staff is exercised.

CLASS CHARACTERISTICS

Laboratory Technician I is the entry-level position for the Laboratory Technician series. Initially, under direct supervision, the incumbent learns the knowledge and skill to perform water analyses, including using the appropriate instrumentation. As experience and certification are gained, the incumbent will assume more responsibility and use more independent judgment in carrying out assigned laboratory activities. This class is alternately staffed with the Laboratory Technician II and incumbents may advance to the higher level after gaining experience, obtaining the required level of certification, meeting the qualifications of and consistently performing work of the higher-level class.

Laboratory Technician II is the full journey level in this class series. Incumbents are required to possess knowledge and skill in performing a wide variety of water analyses. The incumbent must use independent judgment in carrying out assigned laboratory activities. Successful performance of the work requires knowledge of applicable regulations, policies, analytical methods and quality control/quality assurance procedures associated with assigned responsibilities. The class is distinguished from the Laboratory Director or Operations Superintendent in that the latter is responsible for directing and managing the water quality program and supervises laboratory staff.

EXAMPLES OF DUTIES (Illustrative Only)

- Schedules, performs and interprets a variety of moderately complex and standard physical, chemical, and bacteriological tests and analysis on wastewater collection system and sludge samples, following approved procedures.
- Obtains samples of wastewater and sludge at various stages of the treatment process

according to a predetermined schedule; operates and maintains automatic sampling equipment.

- Assures adherence to Federal, State and County laws, rules, regulations and guidelines on sampling, testing and record keeping.
- Performs analyses to confirm the effective operations of the wastewater treatment plant, collection system, and related facilities and to assure quality of treatment.
- Collects, ensures proper preservation, and prepares samples for laboratory analysis and delivery to commercial laboratories for additional testing.
- Compiles, maintains and enters accurate water quality data of on-site laboratory test results using word processing, spreadsheet, and specialized computer applications.
- Recognizes potential or actual problems that may occur in an analytical procedure; recommends corrective action or confers with supervisor to find solutions.
- Assists and confers with other District staff on matters pertaining to laboratory issues.
- Prepares and standardizes chemical reagents, prepares and sterilizes bacteriological media.
- Sets up, calibrates, operates and performs routine maintenance on a variety of complex laboratory equipment and instruments.
- Practices proper safety methods, procedures, and practices and precautions related to conducting inspections, handling of wastewater samples and personal protection equipment.
- Performs laboratory work, quality control and quality assurance evaluation in accordance with Environmental Laboratory Accreditation standards for laboratory accreditation and certification.
- As directed, reviews, provides input and prepares reports and summaries to the Laboratory Director or Operations Superintendent.
- Reviews industry journals, articles, books and attends seminars and training in order to remain current on developments in the water quality field.
- Maintains and updates periodic inventories of laboratory chemicals, equipment and supplies and assists in procuring necessary supplies.
- Maintains the laboratory facilities in a clean and orderly condition; washes glassware; cleans and maintains other laboratory instruments and equipment, makes minor adjustments as necessary.
- Performs related duties as assigned.

QUALIFICATIONS

Knowledge of:

- Principles of statistical, quantitative and qualitative analysis.
- Principles of chemistry, microbiology and closely related sciences.
- Principles and methods used in physical, chemical and bacteriological testing of water and wastewater samples including quality control/quality assurance practices.
- Principles and techniques of laboratory, plant and field safety methods and practices.

- Applicable state, federal and county regulations.
- Chemical laboratory methods, equipment, facilities and materials.
- Sampling techniques and methods.
- Computer systems, applications and automated equipment related to the work.
- Techniques for providing a high level of customer service to the public and District staff, in person and over the telephone, including dealing with irate and/or abusive customers and difficult situations involving conflict with third parties.

Skill in:

- Working with the chemicals and equipment used in wastewater and recycled water analysis.
- Maintaining accurate and up-to-date records using automated and manual systems.
- Performing standard physical, chemical and microbiological analysis of water.
- Evaluating the outcome of laboratory results in order to detect errors and recommend solutions.
- Set up, operate, calibrate and perform routine maintenance on complex analytical instruments.
- Using sound independent judgment.
- Preparing clear, complete and accurate records and reports. Assists in the submittal of data to regional, state and federal stakeholders.
- Establishing and maintaining effective working relationships with those contacted in the course of the work.

EDUCATION AND EXPERIENCE

One year of experience in any combination of the following: as a laboratory technician in a wastewater treatment plant or related laboratory, as an operator in a secondary or tertiary wastewater treatment plant, or any combination of training and experience which would provide the required knowledge, skills and abilities is qualifying.

All: Equivalent to an Associate's degree with major coursework in chemistry, microbiology or a closely related physical science.

Laboratory Technician I: No experience required.

Laboratory Technician II: Three years of experience in a municipal wastewater treatment plant laboratory, or closely related field.

LICENSE AND CERTIFICATIONS

Laboratory Technician I: Must possess a valid California class C driver's license, have a

satisfactory driving record and continue to meet CSRMA driving standards. Must possess a California Grade I Laboratory Analyst Certificate or the ability to obtain within 12 months of employment.

Laboratory Technician II: Must possess a valid California class C driver's license, have a satisfactory driving record and continue to meet CSRMA driving standards. Must possess a California Grade II Laboratory Analyst Certificate.

INTERPERSONAL SKILLS

Ability to interact with others (co-workers, supervisors, subordinates, vendors, members of the public) in a professional manner; ability to accept constructive criticism from supervisors, co-workers, and subordinate employees; to recognize the need for, and to seek assistance or clarification as needed; to work independently; to prioritize assignments and meet deadlines; to prevent personal problems form adversely impacting work for self or others; to arrive as scheduled and to work the hours as agreed upon and scheduled.

LANGUAGE SKILLS

Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence. Ability to speak effectively before groups or customers or employees of organizations.

MATHEMATICAL AND REASONING SKILLS

Ability to calculate figures and amounts such as concentrations, molecular weight, discounts, interest, commissions, proportions, percentages, area, circumference, and volume. Ability to apply concepts of basic algebra and geometry. Ability to apply common sense understanding to carry out instructions furnished in written, oral, or diagram form. Ability to deal with problems involving several concrete variables in standardized situations.

PHYSICAL DEMANDS

Mobility to work in a standard wastewater treatment plant and laboratory setting, and use specialized test equipment and instrumentation; physical stamina to lift and/or move up to 25 pounds above the head, carry materials and equipment weighing up to 60 pounds to waist height, and up to 100 lbs. up to 9" off the ground (such as for a manhole cover); vision to identify color changes encountered in routine chemical analysis, read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone. The employee is occasionally required to climb or balance, and stoop, kneel, crouch or crawl.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

While performing the duties of this job, the employee is frequently exposed to: wet or humid conditions, outdoor weather conditions, and toxic or caustic chemicals. The employee is occasionally exposed to: moving mechanical parts, fumes or airborne particles, high, precarious places, risk of electrical shock, or to vibration.

SPECIAL REQUIREMENTS

Positions in this class shall be offered the Hepatitis B Vaccination

OTHER REQUIREMENTS

When necessary, ability to work unusual shifts, weekends, and holidays.

RIGHT TO WORK DOCUMENTATION

Before being hired, all new employees will be required to show documentation as proof of authorization to work in the United States.

Job Title:	Laboratory Technician I/II	
Department:	Laboratory	
Reports to:	Lab Director or Operations Superintendent	
FLSA Status:	Non-Exempt	
Revision Dates:	June 2017	
Salary Range:	Lab Tech I	5513 - 6701
	Lab Tech II	6701 - 8145

Effective Date: July 1, 2017