

HRSD

Position Description: Lab Technician

Section I. Position Reference Information

a.	Department	Water Quality (WQ)
b.	Division	Central Environmental Laboratory
c.	Position Title	Lab Technician
d.	Immediate Supervisor	Lab Manager/Lab Supervising Chemist
e.	Work Center	Central Environmental Laboratory (CEL)
f.	Grade	5c-5

Section II. Position Summary

Under broad guidance, the Lab Technician:

- a. Performs a wide variety of chemical, biological and physical analyses of environmental samples in compliance with regulations and in support of HRSD operations and programs
- b. Conducts analysis to produce high quality, legally defensible results in a cost effective and safe manner
- c. Reports and validates analytical data and maintains sample integrity. Adheres to approved state and federal protocols, SOP's, Quality Assurance plan and Laboratory Chemical Hygiene Plan
- d. Participates in Laboratory Training program. Provides training to other staff members on analytical and QA protocols
- e. Provides support to CEL operation during weekend, holiday and emergency situations

Section III. Examples of Position Duties

- a. Performs analysis in a high quality, safe and efficient manner in various analytical sections including BOD, solids, microbiology, wet chemistry, automated chemistry, organics and metals. Analyzes a variety of environmental samples matrices including water, wastewater, groundwater, surface water and biosolids for various programs including VPDES, Part 503, Solid Waste, HRSD projects and Municipal Assistance Program. Adheres to SOP's, EPA and DEQ approved protocols, the Quality Assurance Plan and the Chemical Hygiene plan
- b. Plans and organizes daily work within given area of responsibility to maintain efficiency. Prepares reagents, organizes analytical supplies, and maintains inventory in assigned section
- c. Carries out quality control procedures including QC sample analysis, review of raw data and data validation. Participates in Virginia Environmental Laboratory Accreditation Program (VELAP) on-site assessments on technical and quality assurance procedures performed for regulatory monitoring and accreditation requirements. Participates in lab internal audit program.
- d. Utilizes complex instrumentation and equipment in several areas of the laboratory, performs maintenance and troubleshoots problems. Documents repair and maintenance to meet requirements. Monitors and documents operation of refrigerators, incubators and other equipment to assure sample integrity and analytical requirements are met. Takes appropriate corrective action to address problems
- e. Performs sample management duties. Receives samples from external and internal customers, verifies and maintains sample integrity based on preservation requirements and verifies and maintains sample chain of custody

- f. Performs administrative duties such as data reporting using established protocols and Laboratory Information Management System (LIMS); maintains required analytical documentation including bench sheets, logbooks reports and other documentation, tracks number of results and QA/QC data
- g. Adheres to all procedures to ensure reagents, chemicals and equipment are handled in a safe manner according to Chemical Hygiene plan, MSDS sheets, and Hazardous Waste procedures
- h. Provides support of CEL operations during weekends, holidays and emergency situations.
- i. Train other staff through detailed explanation of analytical procedures, techniques and theory according to laboratory training program. Maintains and increases level of knowledge on analysis, regulatory requirements and technological developments within analytical field
- j. Conducts all work activities in a safe and satisfactory manner and ensures efficient and effective use of resources.
- k. Performs other duties as assigned

Section IV. Position Contacts

a. Internal Contacts

<i>Contact</i>	<i>Purpose</i>	<i>Frequency</i>
Chemists, Lab Managers, QA Manager	Analytical Schedules, Analytical Issues and Corrective Action, CEL Operations, Project Information, Data Validation, VELAP requirements	Daily
CEL Specialists, Administrative Assistants and Lab Assistants	Schedules, Analytical Issues, Training, Problem Solving, Data Validation, VELAP requirements	Weekly
Treatment Plant	Analytical Results, Sample Verification	Weekly
TSD	Schedules, Analytical Results, Sample Verification, Chain of Custody	Weekly
P3	Schedules, Analytical Results, Sample Verification, Chain of Custody	Weekly
PPM Staff	CEL Facilities and Equipment	Monthly
Electricians	Instrumentation repair and CEL facilities	Monthly

b. External Contacts

<i>Contact</i>	<i>Purpose</i>	<i>Frequency</i>
DCLS	Bi-annual on-site assessment for VELAP Accreditation	Annually
Vendors, suppliers	New product information, procure supplies	Monthly
Instrument vendors	Instrument troubleshooting, maintenance and repair	Monthly
Couriers/FedEX, UPS	Receive samples and supplies, resolve delivery issues	Monthly
Environmental Labs-commercial and municipal	Coordinate subcontracting and sample delivery; discuss analytical protocols	Quarterly
Consultants	Analytical results, reports, QA/QC, schedules and procedures	Semi-annually
Municipal Assistance Clients	Schedules, sample issues, ,analytical results and reports	Monthly

Section V. Position Accountabilities and Expectations

- a. Promotes the Mission, Vision and Values of HRSD with a focus on team building and quality improvement
- b. Works in a team environment
- c. Recommends improvements in analytical processes to assure quality and improve efficiency and customer service
- d. Ensures that all decisions are in accordance with HRSD Values and CEL Ethics Policy
- e. Adheres to HRSD, State, and EPA approved policies, procedures, and programs
- f. Informs Lab Managers, QA Manager, Chemists, Specialists, and other HRSD personnel of special situations and problem areas
- g. Maintains professional manner when dealing with internal and external customers, vendors, suppliers, and the general public and works well with other HRSD personnel
- h. Follows instructions, shows initiative, and exhibits dependability

Section VI. Working Conditions

- a. Must be able to work overtime, and/or unusual hours as necessary
- b. Must be able to work in a complex, stressful, problem solving environment
- c. Nature of work requires employee to be accessible at home by telephone/cell phone in order to respond to emergencies according to a stand-by schedule or as announced
- d. Work environment exposes and requires employees to handle, with protection, wastewater products, hazardous materials and hazardous chemicals
- e. Work requires the use of protective clothing and personal protective equipment according to Chemical Hygiene plan

Section VII. Physical Requirements

- a. Must have the physical dexterity to accomplish the duties defined herein
- b. Must be able to identify colors used in work
- c. Works at time in OSHA designated noise environment (over 85 decibels)
- d. Work requires ability to lift moderate loads (25 – 50 pounds)
- e. Over 50% of work involves walking, climbing, standing or bending

Section VIII. Other

- a. Medical certification of physical requirements may be required
- b. Must be currently authorized to work for any U.S. employer
- c. Must be able to secure and maintain any security clearance required by any user of the HRSD system

Section IX. Qualification Standards

- a. Education
 - 1. Required
 - Associate's degree in Chemistry, Biology, or related science as approved
 - 2. Desired
 - Bachelor of Science degree in Chemistry, Biology or related science as approved

- b. Experience
 - 1. Required
 - a) Personnel are fully qualified with an Associate's degree in an approved field and three (3) years of applicable experience
 - 2. Training Levels

The following training levels and years of experience are established for personnel who are not fully qualified:

 - a) Grade 5a - Associate's Degree in appropriate field and 2 years applicable experience
 - b) Grade 5b - Associate's Degree in appropriate field and 1 year of applicable experience
 - c) Grade 5c - Associate's Degree in appropriate field and no applicable experience

Note: An appropriate degree requiring more college credits than an Associate's Degree and/or advanced degree(s) will be evaluated to determine if they satisfy some of the training level requirements.

- c. Job-specific Technical Competencies
 - 1. Required
 - a) Must be able to follow technical instructions, analytical procedures and perform analyses independently
 - b) Independent problem solving abilities and critical thinking skills with application to biology and chemistry
 - c) Requires abilities to operate, troubleshoot and perform maintenance of complex analytical instrumentation
 - d) Must be proficient with computer, have knowledge of excel, word processing and database software
 - e) Must have effective communication skills (both oral and written) and the ability to work in a team setting
- d. Special Licenses
 - Required
 - Valid driver's license from state of residence
- e. [Water Quality Expectations](#)