



CLASS SPECIFICATION FOR:

Laboratory Analyst Senior

General Statement of Duties:

Assigned to a County laboratory with primary responsibilities for accurately performing the full range of sampling, testing, tracking, analysis, quality control, and peer review, equipment calibration and maintenance duties; identifying equipment, sampling and testing issues; accurately identifying and troubleshooting issues and taking appropriate corrective measures; adhering to strict prescribed guidelines, processes, permit requirements, and other State and Federal mandates and regulations; training and assisting other Lab and County staff; and maintaining strict chain-of-custody; does related work as required.

Distinguishing Features of Class:

This is the senior level in an approved career development series. In addition to the duties and responsibilities required of Laboratory Analyst I, II and III, a Laboratory Analyst Senior demonstrates consistent accuracy and advanced proficiency in sampling, testing, tracking, analysis, quality control and reporting findings for solids, ammonia, BOD/CBOD as well as all other mandated tests; accurately interprets and trends QA/QC charts for data failures; serves as lead worker by training and assisting other lab analysts and County staff; assists with audits; assists with reporting; and works on-call as assigned. Work is performed under minimal supervision with unusual problems referred to supervisor for guidance.

Examples of Assigned Duties (*illustrative of the types and scope of duties and responsibilities assigned to positions in this class*):

- Accurately logs samples and ensures proper chain-of-custody for sample receipt;
- Runs analysis of samples strictly adhering to all applicable SOP, protocols, policies and procedural requirements;
- Consistently demonstrates accuracy and advanced proficiency in sampling, testing, tracking, analysis, quality control and reporting findings for solids, ammonia, turbidity, and all other types of mandated and complex tests which may include but not be limited to BOD/CBOD, IC, Microbiology, TKN/TP, NOx, Metals, Mercury;
- Serves as lead-worker by training and providing guidance to other lab analysts, serving as back-up to and assisting the supervisor;
- Creates and maintains all required documentation documenting training procedures and trainee's ability to pass Demonstration of Capability requirements;
- Assists with, or may be responsible for, reviewing the lab's SOP periodically to ensure ongoing compliance with method and accreditation requirements;
- Accurately troubleshoots data analysis and instrumentation issues and deciphers issues based on test and instrument feedback;
- Accurately recommends viable solutions to identified issues with sampling, testing, analysis and equipment;
- Serves as a resource to other lab analysts in identifying and resolving issues;
- Troubleshoots and makes accurate determinations about how to best resolve analyte issues from difficult and varied matrices using own thorough understanding of possible sources of interference and how best to mitigate those interferences;
- May be required to provide back-up coverage at the Water Treatment Plant (WTP) and accurately perform the full spectrum of required sampling, testing, analysis, and reporting, includes recognizing and notifying WTP of deviations;
- Proficiently performs testing, analysis and reporting at prescribed frequencies for the Water Treatment Plant (WTP) laboratory as needed for all types of required testing which may include but not be limited to pH, turbidity, chlorine, alkalinity, hardness, conductivity, iron, manganese, phosphate, fluoride, monochloramine/free ammonia, UV254, color, ammonia, and solids;
- Ensures analysis is complete and error free using quality control sample interpretation and results analysis;
- Takes appropriate corrective action to ensure analysis run is reportable and legally defensible;
- Accurately creates and maintains detailed data, records, inventories, logs, reports and other required paper and electronic documentation typically considered legal documents/records in accordance with strict requirements to be legally defensible;
- Interprets QA/QC charts for trending and QC data failure;
- Peer reviews other analysts' data to ensure compliance with regulations and data is legally defensible;
- Performs internal system and bench audits and assists with other types of audits;
- Strictly adheres to all SOP, policies and procedures as mandated by permit, local, state and federal codes, regulations and requirements as well as all chain-of-custody protocols;
- Ensures own work meets traceability requirements by maintaining reagent receipt logs, standard preparation logs, reagent preparation logs and by properly labeling all chemicals and solutions prepared;
- Accurately calibrates and maintains all lab equipment and keeps detailed logs and labels to ensure traceability requirements;
- Accurately reports any corrective actions or data qualifiers on data reported to state agencies;
- Adheres to proper handling and disposal protocols for hazardous waste generated during testing;
- Successfully passes all mandatory proficiency testing and Demonstration of Capability requirements;



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- Observes all safety protocols when handling samples and using lab equipment, including utilizing all required personal protection equipment (PPE) and other required safety equipment/measures at all times;
- Maintains a thorough working knowledge and understanding of the relationship between test results and plant operations and appropriately notifies operations when action on their part is required;
- Develops and maintains a thorough up-to-date working knowledge and understanding of the assigned facility's mandated testing requirements, including related policies, procedures and reporting, and all equipment used in the sampling, testing, analysis and reporting processes;
- Actively participates in all scheduled meetings, trainings and audits;
- May be required to work a flexible schedule or an on-call rotation;
- Performs other duties as assigned.

Required Knowledge, Skills and Abilities:

Extensive working knowledge of laboratory equipment and testing protocols; proper sample collection and preservation skills; accurate testing and analysis skills; advanced working knowledge of Biochemical Oxygen Demand testing and analysis; advanced working knowledge of the aseptic technique used for analysis of permitted samples from drinking water, wastewater, and bio-solids; ability to accurately determine what constitutes a positive colony growth and an interfering plate growth using a variety of microscopes and plate readers; sound quality controls skills; ability to accurately and safely calibrate, use and maintain all equipment used for testing and analysis performed at the lab; ability to safely handle, test and preserve a wide variety of hazardous materials following all safety protocols and using all required personal protective equipment; develops and maintains a thorough understanding of sampling and holding time requirements to ensure sample compliance and appropriately prioritizes workload; sound inventory management skills; excellent attention to detail and organization skills with the demonstrated ability to plan and execute work accurately and to successfully complete assigned tasks accurately and in a timely manner within established deadlines, specifications and regulations; ability to accurately multi-task; personal accountability and professional integrity; ability to read, and consistently comprehend, interpret, apply and communicate findings accurately; sound judgement, critical thinking and problem solving skills with the ability to appropriately troubleshoot, analyze and resolve a wide variety of questions and issues with minimal guidance; ability to accurately synthesize data, consider and weigh a variety of relevant factors and make accurate determinations, decisions and recommendations; thorough working knowledge of relevant safety rules/regulations and accident-prevention practices; manual dexterity, visual and hearing acuity sufficient to enable accurate testing, analysis, data collection, and reporting and to work safely in laboratory conditions handling hazardous materials; sound interpersonal skills, including good written and verbal communication skills, with the ability to interact professionally with diverse audiences of internal and external personnel, regulators and other stakeholders and maintain effective working relationships; ability to work independently and as part of a team; basic supervisory skills with the ability to train other lab staff, assist with workload management, provide guidance and assistance to other lab and County staff; ability to collaborate effectively to establish and maintain good working relationships with relevant internal and external stakeholders; sound computer skills with the ability to use typical business software, proprietary software and applications to complete assigned tasks; sound math skills necessary to perform accurate calculations. May require the ability to work a flexible schedule or on-call rotation.

Minimum Education and Experience:

Education: Four (4) year degree in biology, chemistry, or other relevant field;

Experience: Six (6) years of previous relevant work experience required;

OR: Any equivalent combination of education, experience and training which provides the required knowledge, skills and abilities.

Additional Requirements:

NOTE: Effective 4/1/2009 County Ordinance 1128 requires a criminal history record check and fingerprinting of all employees in authorized and hourly safety sensitive positions.

NOTE: All employees are required to successfully complete National Incident Management System (NIMS) Incident Command System (ICS) 700 (Introduction) training. Successful completion of additional NIMS ICS training courses may be required based on the job classification, level of responsibility, and department. Please refer to Fire's Intranet site for a list of NIMS ICS requirements by job classification.

- May require a valid driver's license to perform assigned duties at various locations Countywide.
- May be required to work a rotating on-call schedule.