JOB DESCRIPTION
Laboratory Technician (Flex)
Laboratory Analyst I (Flex)
Laboratory Analyst II (Flex)
Laboratory Analyst III
Code Number: 30009, 30007, 30008, 30005

GENERAL PURPOSE

Under supervision, performs a variety of tests and analyses on water, wastewater, and biosolids to determine the presence of bacteria, trace metals, organic and inorganic substances in compliance with federal, state and local requirements; performs non-routine investigations and analyses as directed; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Laboratory Technician is the non-certified, entry level class leading to the professional Laboratory Analyst series. Initially under immediate supervision, incumbents perform the more routine duties while learning District policies and procedures and becoming familiar with the variety of departmental systems and practices. As experience is gained, duties become more diversified and complex. This class is alternately staff with Laboratory Analyst I, and incumbents may advance to the higher class upon receiving a Grade I CWEA Laboratory Analyst Certificate.

Laboratory Analyst I is the first certified level class in the professional Laboratory Analyst series. Incumbents perform the routine duties while learning District policies and procedures and becoming familiar with the variety of departmental systems and practices. As experience is gained, duties become more diversified and complex. This class is alternately staff with Laboratory Analyst II, and incumbents may advance to the higher class upon receiving a Grade II CWEA Laboratory Analyst Certificate.

Laboratory Analyst II is the first working level class in the series. Laboratory Analyst II is distinguished from Laboratory Analyst I in that the latter is the entry level class and is responsible for a more limited range of assignments. Laboratory Analyst II is further distinguished from Laboratory Analyst III in that the latter is the experienced/journey level class in the series fully competent to independently perform duties. Incumbents advance to Laboratory Analyst III upon receiving a Grade III CWEA Laboratory Analyst Certificate.

FLSA DETERMINATION: Non-exempt.
Laboratory Analyst III is further distinguished from Senior Laboratory Analyst in that the latter is the advanced journey/lead level class in the professional Laboratory Analyst series fully competent to independently perform the most complex duties.

**ESSENTIAL DUTIES AND RESPONSIBILITIES**

_The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the class._

Receives and logs samples into Laboratory Information Management System (LIMS) from field staff; splits, preserves, and prepares samples as required for laboratory analyses to include work sent to contract laboratories; records operational field data into LIMS; prepares bottles and coolers for sampling events; schedules pickup of sample bottles from operations and contract lab personnel; receives reports and inputs analytical data into LIMS from contract laboratories.

Receives, organizes and maintains the inventory of laboratory and sampling supplies.

Prepares and mixes standard reagents, titrants, and solutions used in chemical testing; prepares microbiological media for use in bacteriological testing/analysis.

Disposes daily process control samples; disposes autoclaved bacteriological samples; stores and maintains samples in walk-in refrigerator.

Assists with entering laboratory test results into LIMS; maintaining a written record of lab results and activities; compiling equipment maintenance logs and updating references materials; preparing various technical reports.

May assist in investigating, developing, perfecting and recommending new water and wastewater test methods and procedures to improve the laboratory’s versatility and efficiency.

Provides assistance and support to higher-level laboratory professional staff.

Performs a variety of standard laboratory tests, using basic to sophisticated equipment on water samples collected from various areas within the District’s water distribution and wastewater treatment systems; performs biological, chemical, microbiological and other physical analyses of water, wastewater and biosolids; calculates and interprets test results; conducts special tests and analyses as directed.

**FLSA DETERMINATION:** Non-exempt.
Summarizes data and checks for completeness of analysis; performs chemical balance and checks correctness of analysis; re-assigns testing as necessary; checks backlog to meet hold-time and turn-around time requirements.

Splits, preserves and prepares samples as required for laboratory analyses to include work sent to contract laboratories; records operations field data into LIMS; prepares bottles and coolers for sampling events; schedules pickup of bottles and/or samples from Operations and Contract Lab; receives and inputs analytical data into LIMS from contract laboratories.

Supports the Cal-Star safety program by participating on the Lab’s Safety Tech Team; ensures safe lab environment by performing lab safety checks; implements and closely adheres to the CHP, JSAs, SOPs, and MSDS programs.

Participates in the Laboratory Quality Assurance Program to ensure the methods, techniques and equipment used to analyze samples produce accurate, reliable results; participates in Environmental Laboratory Accreditation Program (ELAP) audits.

Performs routine calibration and analyses using field meters and field equipment; enters field data into LIMS; notifies operations staff of unusual field results; works with the public in matters concerning water quality; recognizes customer complaints and collects samples in a professional and tactful manner in order to enhance customer relations.

Oversees the disposal of organic, inorganic, and biohazard waste material.

Receives, organizes and maintains the inventory of laboratory sampling supplies.

Assists senior lab staff in the operation of sophisticated laboratory instruments such as TOC, IC, ICP, ICP-MS.

Works independently on weekend and holidays performing routine process control testing.

Calculates and compiles test data using spreadsheet applications; summarizes QC data utilizing District software; maintains a written record of laboratory results for review by senior staff; records data in an accurate manner that conforms with department procedures; enters laboratory and QC test results into LIMS; develops spreadsheet applications of calculating results; utilizes District and laboratory software to summarize, track, and report analytical results.

**FLSA DETERMINATION:** Non-exempt.
Enters laboratory test results into Laboratory Information Management System (LIMS); maintains a written record of lab results and activities; compiles equipment maintenance logs and updates references materials; prepares various technical reports.

Conducts research projects; investigates, develops, perfects, and recommends new water chemistry methods and procedures to improve the laboratory’s versatility and efficiency.

Performs related duties as assigned.

**DESIRED MINIMUM QUALIFICATIONS**

**Knowledge of:**

Theory, principles, practices, methods, chemicals and agents used in trace metals, chemical, and physical and biological analyses of environmental samples; water sampling techniques; laboratory procedures for water and wastewater analysis; methods and processes used in water and wastewater treatment; federal and state regulations; the operation and maintenance of standard chemistry laboratory equipment; the use of standard laboratory glassware; media used in microbiological/biological analysis; safe laboratory practices and procedures; quality control techniques.

**Ability to:**

Operate computer and automated laboratory equipment in the analysis of water and wastewater samples; calibrate, maintain and perform minor repairs on laboratory equipment; understand and carry out SOPs; prepare accurate reports and records of test results and special statistical analyses; present scientific data clearly and concisely, both orally and in writing; establish and maintain effective working relationships with those contacted in the course of work; follow and apply written and oral work instructions; communicate effectively, orally and in writing; make sound independent judgments within established guidelines.

**Training and Experience:**

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from an accredited college or university with a bachelor’s degree in chemistry, biology, microbiology or a closely related field; or an equivalent combination of training and experience.

**FLSA DETERMINATION:** Non-exempt.
A Laboratory Technician (Flex) may be considered for advancement to Laboratory Analyst I after demonstrating proficiency to perform all the major duties assigned to the class and after receiving a Grade I CWEA Laboratory Analyst Certificate.

A Laboratory Analyst I (Flex) may be considered for advancement to Laboratory Analyst II (Flex) after demonstrating proficiency to perform all the major duties assigned to the class and after receiving a Grade II CWEA Laboratory Analyst Certificate.

A Laboratory Analyst II (Flex) may be considered for advancement to Laboratory Analyst III after demonstrating proficiency to perform all the major duties assigned to the class and after receiving a Grade III CWEA Laboratory Analyst Certificate.

**Licenses; Certificates; Special Requirements:**

A valid California driver’s license and the ability to maintain insurability under the District’s Vehicle Insurance Policy.

CWEA Laboratory Analyst Grade I Certificate must be obtained in order to advance to the Laboratory Analyst I (Flex) level.

CWEA Laboratory Analyst Grade II Certificate must be obtained in order to advance to the Laboratory Analyst II (Flex) level.

CWEA Laboratory Analyst Grade III Certificate must be obtained in order to advance to the Laboratory Analyst III level.

**PHYSICAL AND MENTAL DEMANDS**

*The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

**Physical Demands**

While performing the duties of this job, the employee is regularly required to walk; talk or hear by telephone and in person; climb or balance; smell; use hands to finger, handle, feel or operate objects, tools or controls; reach with hands or arms; and lift or move up to 40 pounds. Employees are frequently required to sit and stand for extended periods of time.

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Specific vision abilities required by this job include close and distant vision, depth perception, and the ability to distinguish subtle colors and shades and adjust focus.

**Mental Demands**

While performing the duties of this class, employees are regularly required to use written and oral communication skills; read documents or instructions; analyze and solve problems; observe and interpret data or information; use math and mathematical reasoning; learn and apply new information or skills; perform highly detailed and precise work; and meet time-sensitive deadlines.

**WORK ENVIRONMENT**

*The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

Employees may be frequently exposed to biological hazards and may be required to wear appropriate personal protective equipment. Employees work near moving mechanical apparatus. The noise level in the laboratory work environment may frequently be loud.

**FLSA DETERMINATION:** Non-exempt.
FLEX REQUIREMENTS
Laboratory Technician (Flex)
Laboratory Analyst I (Flex)
Laboratory Analyst II (Flex)
Laboratory Analyst III

LENGTH OF TIME REQUIRED

A Laboratory Technician may advance or “flex” to the Laboratory Analyst I class upon receiving a *Grade I CWEA Laboratory Analyst Certificate.*

A Laboratory Analyst I may advance or “flex” to the Laboratory Analyst II class upon receiving a *Grade II CWEA Laboratory Analyst Certificate.*

Laboratory Analyst II may advance or “flex” to the Laboratory Analyst III class upon receiving a *Grade III CWEA Laboratory Analyst Certificate.*

PERFORMANCE RATING

The incumbents must receive an overall performance rating of “Meets Expectations” or better on their most recent annual performance evaluation in order to flex to the higher class.

COMMENTS

Incumbents of the Laboratory Technician and Laboratory Analyst classes must also demonstrate proficiency to perform the full range of duties expected of the higher level class.