



January 2021
FLSA: NON-EXEMPT

LAB ANALYST II/ENVIRONMENTAL COMPLIANCE INSPECTOR II

DEFINITION

Under general supervision, performs a variety of routine to complex standardized chemical, biological, and bacteriological analysis on wastewater, reclaimed water, biosolids, and soil samples; performs a variety of technical tasks relative to conducting and interpreting standard and complex laboratory analysis; coordinates or performs sample collection activities; sets up testing procedures, records data, and analyzes results; assists with field investigations to determine and mitigate wastewater problems; performs the inspection of commercial discharge to the collection system; provides guidance and recommendations to local business owners to ensure compliance with the District's pre-treatment ordinance; assists in coordinating and implementing a source control program; ensures that discharge is in compliance with local regulations and ordinances; and performs related work as required.

SUPERVISION RECEIVED

Receives general supervision from the Laboratory Supervisor. No supervision of staff is exercised.

CLASS CHARACTERISTICS

This is a journey-level class that primary performs a variety of routine to complex laboratory tests and analyses with only occasional instruction or assistance, as well as inspections of commercial discharges to the sewer system including tactfully enforcing codes, ordinances, and other regulations. Adequate performance at this level requires the knowledge of divisional procedures and precedents and the ability to choose among alternatives in solving problems.

EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative only)

Management reserves the rights 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 and interprets complex chemical, biochemical, biological, bacteriological, and physical analyses of samples related to the treatment, quality control, and disposal of wastewater influent and effluent, following standard procedures and guidelines.

EXAMPLES OF ESSENTIAL FUNCTIONS (continued)

- Identifies and determines sampling procedures and programs; collects 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.
- Prepares standard chemical solutions and reagents; disposes of outdated materials in a safe manner and ensure that the laboratory is maintained in a clean and orderly condition.
- Analyzes and interprets laboratory results, recognizing problems that may be occurring during the treatment process.
- Sets up, calibrates, operates, and performs maintenance and repair to a variety of laboratory instruments and equipment.
- Maintains quality control and quality assurance and follow safe work procedures within standard operating procedures and protocols.
- Maintains accurate records of work performed and analysis results.
- Assists in the preparation of periodic and special reports for submission to appropriate regulatory agencies in a timely manner; develops methods and assembles data to ensure that laboratory certification is in compliance with regulatory requirements.
- Enters data into and retrieves data from an automated data control system.
- Meets and corresponds with commercial users to interpret and implement Federal, State, and local regulations, ordinances, and policies of the pretreatment and pollution prevention programs.
- Monitors the grease inspection program; receives, tracks and schedules weekly grease inspections.
- Prepares accurate records and correspondence, including writing, updating, negotiating, and maintaining wastewater discharge permits.
- May collect wastewater samples from commercial users and District sanitary sewers and performs well-defined chemical and biological tests in the field.
- Organizes, maintains, and documents all required information for enforcement of District code as directed by the federal requirements; analyzes lab data by comparing test results to requirements; prepares technical reports, evidence, and documentation; prepares and issues Notice of Violation when noncompliance is established.
- Writes and issues permits, and notices related to the Pollution Prevention program.
- Tracks new business entering District boundaries; research new business license requirements; collects pertinent data; updates and maintains records; enrolls in environmental compliance program as necessary.
- Responds to public inquiries on wastewater services, and other problem areas as related to compliance program.
- Reads, interprets, applies, and explains regulations and standards to customers.
- Participates in various technical projects related to process problems and improvement.
- Attends professional conferences and seminars to keep abreast of new developments in the industry; participates in various industry related groups and meetings; serves as a representative of the District.
- Operates standard office equipment, including job-related computer hardware and software applications, facsimile equipment, and multi-line telephones; may operate other department specific equipment.
- Researches and maintains awareness of current and proposed state and local regulations, ordinances, and legislation as it relates to District programs, services, and customer and community relations.

- Assists in training new staff as required.
- Builds and maintains positive working relationships with co-workers, other District employees, and the public.
- Drives motor vehicles.
- Performs other duties as assigned.

QUALIFICATIONS

Knowledge of:

- Chemical, biological, and physical characteristics of wastewater.
- Principles, practices, equipment, and materials required for the chemical, biochemical, biological, bacteriological, and physical analysis of samples of wastewater.
- Principles, practices, and programs for the District's wastewater pretreatment program, the waste inspection function, and permit application duties and projects.
- Use of laboratory and analytical equipment. (IC, TOC and Gallery)
- Principles, practices, and terminology of commercial wastewater source control.
- Sampling techniques and related statistical analysis techniques.
- Laboratory and wastewater plant safety procedures and equipment.
- Basic principles of wastewater treatment and disposal.
- Practices and techniques of performing facility and process inspections related to areas of assignment.
- Applicable Federal and State laws; District, Department, and Division regulations, codes, policies, and procedures.
- Principles of report writing and preparation.
- Principles and practices of safety management and application.
- Operating systems including SCADA and other computer applications related to the work.
- Laboratory Information Management Software (LIMS)
- Record keeping principles and procedures.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Techniques for providing a high level of customer service to public and District staff, in person and over the telephone.

Ability to:

- Perform complex chemical, biochemical, biological, bacteriological, and physical analyses of potable wastewater.
- Analyze the results of such test and make appropriate recommendations for plant operations.
- Research, analyze, and summarize data, and prepare and present accurate and reliable reports containing findings and recommendations.
- Perform in-depth inspections of commercial users.
- Assemble data and prepare reports and Notices of Violation and maintain records of testing and findings.
- Read and interpret a variety of meters, gauges, and recording charts.
- Use and perform calibration and minor maintenance and repair on a variety of laboratory equipment.

- Interpret, apply, and explain applicable federal, state, and local policies, laws, and regulations.
- Understand, interpret, follow, and successfully communicate both orally and in writing, pertinent department policies and procedures.
- Analyze data and information using established criteria to determine consequences and to identify and select alternatives.
- Make accurate arithmetic and statistical computations.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, maintain attention to detail and accuracy while meeting critical deadlines.
- Understand and follow oral and written instructions.
- Maintain attention to detail and accuracy while meeting critical deadlines.
- Operate modern office equipment including computer equipment and specialized software applications programs.
- Organize, maintain, and update office database and records systems.
- Identify and take appropriate action when unusual operating problems occur.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence, and independent judgement within general policy and legal guidelines.
- Establish and maintain effective working relationships with those contacted in the course of the work.
- Work unusual shifts, weekends, evenings, and holidays when required, mandatory weekend rotation.

EDUCATION AND EXPERIENCE:

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

Equivalent to a bachelor's degree from an accredited college with courses in chemistry, biology, environmental sciences, or a related field and three (3) year of related experience in a water/wastewater laboratory.

Required Qualifications:

- Possession of a Class C driver's license required by the State of California, Department of Motor Vehicles, to perform the duties of the position. Continued maintenance of said driver's license in compliance with established District vehicle operation standards, and the ability to be insured for the operation of a vehicle/District vehicle in accordance with the terms and conditions of the District's insurance program are conditions of continuing employment. The California Sanitation Risk Management Authority (CSRMA) driving standards.
- Possession of, or ability to obtain within 18 months of date of hire, a California Water Environment Association (CWEA) – Laboratory Analyst Grade II certificate.
- Possession of, or ability to obtain within 18 months of date of hire, a California Water Environment Association (CWEA) – Environmental Compliance Inspector Grade II certificate.
- 40-hour HAZWOPER certificate within one (1) year of employment (training provided).
- Any licenses and certifications must be maintained during employment.

Additional Requirements:

Employee must pass a respiratory fit test within 2 months of employment and adhere to District respiratory policy which specifies facial hair restrictions.

All Carmel Area Wastewater District employees are, by State and Federal law, **Disaster Service Workers**. The roles and responsibilities for Disaster Service Workers are authorized by the California Emergency Services Act and are defined in the California Labor Code. In the event of a declaration of emergency, any employee of the District may be assigned to perform activities which promote the protection of public health and safety or the preservation of lives and property. Such assignments may require service at locations, times, and under conditions that are significantly different than the normal work assignments and may continue into the recovery phase of the emergency.

If a "Local Emergency" is declared during the employee's shift, employees will be expected to remain at work to respond to the emergency needs of the community. If a "Local Emergency" is declared outside of the employee's shift, employees must make every effort to contact their direct supervisor or department head to obtain reporting instructions as Disaster Service Workers.

PHYSICAL DEMANDS

The physical demands and work environment described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions:

Standing:

- Average Frequency: 4 to 8 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Short (Less than 1 hour)
- Surfaces: Office - carpet, tile; field – concrete, asphalt, dirt, gravel, mud, metal grating, grass, sloped and uneven terrain
- Description: Performs while performing in-depth inspections of industrial and commercial users, setting samplers and collecting wastewater samples, investigating and tracing sources of lethal and industrial waste, removing or replacing manhole covers, inspecting grease traps.

Walking:

- Average Frequency: 4 to 8 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Long (2 to 8 hours)
- Surfaces: Office - carpet, tile; field – concrete, asphalt, dirt, gravel, mud, metal grating, grass, sloped and uneven terrain

- Description: Performs while walking within the office, building, walking to and from commercial or industrial sites, transporting tools, ice chests, samplers, etc.

Sitting:

- Average Frequency: 4 to 8 times per day
- Average Duration: Long (2 to 8 hours)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Long (2 to 8 hours)
- Surfaces: Cushioned vehicle seat, office chair
- Description: Performing various desk station activities including using a computer, reading and writing, driving a vehicle, during meetings and trainings, and performing other described job duties.

Kneeling/Crouching/Squatting:

- Average Frequency: 1 to 3 times per week
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: 4 to 8 times per day
- Maximum Duration: Short (Less than 1 hour)
- Surfaces: Concrete, asphalt, gravel dirt
- Description: Performs while retrieving and pouring samples, inspecting grease traps, retrieving or setting items on and off lower shelves or ground.

Crawling:

- Occasional crawling in tight locations.

Laying on Back/Stomach:

Not a job requirement.

Climbing/Balancing:

- Average Frequency: 1 to 3 times per month
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: 4 to 8 times per month
- Maximum Duration: Medium (1 to 2 hours)
- Surfaces: Stair or ladder steps, vehicle floorboard
- Description: Performs while ascending or descending 1 to 2 stair flights to access multiple floors, entering or exiting the vehicle cab, 1 step.

Reaching:

Above Shoulder Level:

- Average Frequency: 4 to 8 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Medium (1 to 2 hours)
- Description: Performs while accessing or placing files, paperwork or binders and related items on and off upper shelves. Unilateral or bilateral upper extremities from less than full-to-full extensions at each occurrence. A variable to reaching above shoulder level includes employee's height.

Between Waist and Shoulder Level:

- Average Frequency: 4 to 8 times per day
- Average Duration: Medium (1 to 2 hours)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Medium (1 to 2 hours)
- Description: Performs while driving in conjunction with maneuvering a steering wheel, handling office supplies, paperwork, telephone, utilizing a hook to remove or replace a manhole cover or meter box lid, relocating tools, ice chests, samples, operating a computer keyboard/mouse to enter or retrieve data. Unilateral or bilateral upper extremities from a less than full-to-full extensions on each occurrence. Computer keyboarding duties include positioning his/her arms at the side and placing fingers on the computer keyboard.

Below Waist Level:

- Average Frequency: 1 to 3 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: 4 to 8 times per day
- Maximum Duration: Medium (1 to 2 hours)
- Description: Performs while retrieving and pouring samples, inspecting grease traps, retrieving or setting items on and off lower shelves or ground. Unilateral or bilateral upper extremities from a less than full-to-full extensions on each occurrence.

Pushing/Pulling:

- Average Frequency: 1 to 3 times per week
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: 4 to 8 times per day
- Maximum Duration: Medium (1 to 2 hours)
- Description: Performs while utilizing a metal hook to remove or replace manhole covers or meter box lids – a combination of pushing, pulling lifting, relocating sampler, opening or closing file cabinet drawers, utilizing wrenches to assemble or disassemble a sampler, utilizing a hook to remove or replace grease traps, swinging a truck bed crane while loading or unloading a sampler. Unilateral or bilateral arm use.

Twisting/Rotating:

Waist:

- Average Frequency: 1 to 3 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: 4 to 8 times per day
- Maximum Duration: Short (Less than 1 hour)
- Description: Performs while driving, possibly during inspections. The motion is from center to right back to center or center to left back to center up to 20-degrees.

Neck:

- Average Frequency: Greater than 9 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Short (Less than 1 hour)
- Description: Performs while driving, aiding visually, during normal body mechanics. The motion is from center to right back to center or center to left back to center up to 45-degrees.

Wrists:

- Average Frequency: Greater than 9 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Short (Less than 1 hour)
- Description: Performs while utilizing a metal hook to remove or replace a manhole cover or lids, retrieving samples, as needed utilizing basic hand tools such as screwdrivers, wrenches to assemble or disassemble a sampler. Unilateral or bilateral hand use.

Bending:

Waist:

- Average Frequency: 1 to 3 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: 4 to 8 times per day
- Maximum Duration: Short (Less than 1 hour)
- Description: Performs while retrieving and pouring samples, inspecting grease traps, retrieving or setting items on and off lower shelves or the ground, assembling or disassembling samplers. The motion is in a forward direction up to 5 to 65-degrees.

Head/Neck:

- Average Frequency: Greater than 9 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Short (Less than 1 hour)

- Description: Performs while aiding visually, reading, writing, performing in-depth inspections, inspecting grease traps, during normal body mechanics.

Wrists:

- Average Frequency: Greater than 9 times per day
- Average Duration: Short (Less than 1 hour)
- Maximum Frequency: Greater than 9 times per day
- Maximum Duration: Short (Less than 1 hour)
- Description: Performs while driving in conjunction with maneuvering a steering wheel, retrieving and relocating samples, utilizing a metal hook to remove or replace manhole covers, lids or grease traps, utilizing basic hand tools including wrenches, screwdrivers, scissors to assemble or disassemble samples, utilizing a sledgehammer to strike manhole covers if the cover is stuck, during normal body mechanics. Unilateral or bilateral hand use.

Lifting/Carrying:

0 to 10 lbs.:

- Objects: Lab containers (flasks, beakers, pipettes,) microscope, instruments, chemical containers, telephone handset, writing utensil, paperwork, manuals, computer tablet
- Average Frequency: Ongoing - tasks performed throughout shift
- Average Duration: Seconds to less than 15 minutes at a time
- Maximum Frequency: Ongoing - tasks performed throughout shift
- Maximum Duration: Seconds to less than 15 minutes at a time
- Height: Ground to shoulder or above
- Description: Performs while handling samples, containers, flasks, pipette; handling paperwork, utilizing a writing utensil, telephone; handling instruments, supplies and lab tools; storing and retrieving these objects.

11 to 25 lbs.:

- Objects: Single carboys and sample containers up to 2.5 gallons, sample caddy with multiple sample containers, portable sampler lid
- Average Frequency: 4 times daily
- Average Duration: Seconds to less than 15 minutes at a time
- Maximum Frequency: 4 times daily
- Maximum Duration: Seconds to less than 15 minutes at a time
- Distance: 0 to 50 feet including ascending and descending stairs
- Height: Ground to waist level
- Description: Performs while retrieving, transporting sample containers from sampler to cart. Includes shaking carboy containers to stir contents.

26 to 50 lbs.:

- Objects: Full sample bottle, buffer solvent, full solution container, confined space equipment
- Average Frequency: 1 per day
- Average Duration: Seconds at a time

- Maximum Frequency: 4 times per day
- Maximum Duration: Seconds to less than 15 minutes at a time
- Distance: Less than 25 feet
- Height: Waist to ground and ground to waist
- Description: Performs while removing and replacing sampler lid and prying and lifting FOG hatches.

50+ lbs.:

Lifting objects over 50 lbs. is not a job requirement for this job classification.

Grasping:

Simple:

- Average Frequency: Ongoing - tasks performed throughout shift
- Average Duration: Seconds to less than 15 minutes at a time
- Maximum Frequency: Ongoing - tasks performed throughout shift
- Maximum Duration: Seconds to less than 15 minutes at a time
- Description: Handling samples, containers, flasks, pipette; handling paperwork, utilizing a writing utensil, telephone; handling instruments, supplies and lab tools; any grasping necessary to complete required lifts and carries below 50 lbs.

Power:

- Average Frequency: 4 times per day
- Average Duration: Seconds at a time
- Maximum Frequency: 4 times per day
- Maximum Duration: Less than 15 minutes at a time
- Description: Handling single carboys and sample containers up to 2.5 gallons, sample caddy with multiple sample containers, portable sampler lid, lifting grease trap lids.

Fine Manipulation:

- Average Frequency: 1 to 2 hours
- Average Duration: Seconds to less than 5 minutes at a time
- Maximum Frequency: 2 to 3 hours
- Maximum Duration: Seconds to less than 10 minutes at a time
- Description: Using pipettes, measuring small amounts of liquids, making equipment adjustments, using machine-user interfaces, utilizing a writing utensil; computer keyboards/tablets and/or computer mouse, cursor or touch screens; using telephone. Unilateral or bilateral hand use.

Machines/Tools:

The machines and tools listed here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions:

- Ion chromatography (IC), Gallery unit
- Titrator
- Centrifuge
- Drying oven
- Steam and water bath
- Composite sampler
- Distillation unit
- Digital readout
- pH meter
- Analytical and top loading balances
- Dissolved oxygen meter
- Incubator
- Autoclave
- District vehicle
- Computer keyboard, mouse, monitor
- Writing utensil
- Copier
- Fax machine
- Pipettes
- Scales
- SEE-Snake Camera

Weights and Measures:

The items listed here to be weighed or measured are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions:

Items Weighed:

- Buffer solvent container – 40 pounds
- 8-gallon solution container partially full – 40 pounds
- Source Control tool bag – 20 pounds

PERSONAL PROTECTIVE EQUIPMENT

Depending on the hazard, the employee is required to wear head, hearing, eye, foot, face, respiratory, body harness, and/or hand protection.

ENVIRONMENTAL ELEMENTS

- Employee is occasionally exposed to wet and/or humid conditions.
- Employee is exposed to moving parts.
- Employee is regularly exposed to toxic or caustic chemicals.
- Employee is occasionally exposed to fumes or airborne particles.
- Employee is exposed to outside weather conditions.
- The noise level in the work environment is usually moderate.
- Indoors, laboratory setting, climate controlled.

NOTICE: The examples of functions, responsibilities, work environment, physical demands etc. listed in this Job Analysis are representative only, and not exhaustive of the tasks that an employee may be required to perform.