



January 2017
FLSA: NON-EXEMPT

LAB ANALYST I / ENVIRONMENTAL COMPLIANCE INSPECTOR

DEFINITION

Under general supervision, performs a variety of routine standardized chemical, biological, and bacteriological analysis on wastewater, reclaimed water, biosolids, and soil samples; performs a variety of tasks relative to conducting and interpreting standard laboratory analysis; 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; assists in implementing 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 the entry level in this classification series. Under supervision, analysts in this class perform routine analytical tasks, maintenance and field work. As experience and proficiency are gained, assignments become progressively more diversified and difficult with less supervision. Analysts in this class normally advance to the Lab Analyst II position after gaining experience and achieving proficiency.

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 routine physical, chemical, biological, and microbiological analysis of wastewater, industrial waste, biosolids, and related materials following standard procedures and guidelines.
- Sets up, calibrates, operates, and performs minor maintenance on a variety of laboratory equipment and instruments of a less technical nature.
- Recognizes problems which occur in an analytical procedure; applies known procedures or confers with others to find solutions; recommends changes to known procedures or confers with others to find solutions; recommends changes to procedures and forms.
- Collects and preserves a variety of samples; prepares field documentation and submits/receives samples for analysis; assists in planning sample collection programs; prepares samples for transport, storage, and laboratory testing.
- Prepares standard chemical solutions, reagents, stains, and bacteriological media; keep laboratory facilities in a clean or orderly condition.
- Analyze and interpret laboratory results, recognizing problems that may be occurring during the treatment process.

- Cleans and prepares glassware for sample collection; sterilizes bacteriological supplies; prepares sample kits for distribution.
- Complies and records data onto worksheets; enters reviewed data and results of analyses into the laboratory information management system (LIMS).
- Observes standard safety precautions related to the work; maintains proper quality assurance techniques in performing analytical work.
- Maintains proper QA/QC records and documentation.
- 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.
- Monitors the grease inspection program; tracks and schedules weekly grease inspections.
- Assists laboratory co-workers on specific analytical projects.
- Prepares accurate records and correspondence, including writing, updating, negotiating and maintain wastewater discharge permits.
- May collect wastewater samples from commercial users and District sanitary sewers and performs defined chemical and biological tests in the field.
- 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.
- Operates standard office equipment, including job-related computer hardware and software applications, facsimile equipment, and multi-line telephones; may operate other department-specific equipment.
- Research 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.
- Builds and maintains positive working relationships with co-workers, other District employees, and the public.
- Routinely adheres to and maintains a positive attitude toward CAWD department foals and performs other duties as required.

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 related programs and projects.
- Use of flame atomic absorption and ion chromatograph instrumentation.
- Principles, practices, and terminology of commercial wastewater source control.
- Sampling techniques and related statistical analysis techniques.
- Laboratory and wastewater plant safety procedures and equipment.
- Principles of operation of District treatment and collection systems.
- Applicable Federal and State laws; District, Department, and Division regulations, codes, policies, and procedures.
- Record keeping principles and procedures.
- Operating systems including SCADA, LIMS, and other computer applications related to the work.
- Knowledge of computers.
- Skills in communication, interpersonal skills as applied to interaction with co-workers, supervisor, general public, etc. sufficient to exchange or convey information and to provide and/or receive work direction.

Ability to:

- Perform chemical, biochemical, biological, bacteriological, and physical analyses of wastewater and reclaimed water
- 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.
- Read and interpret a variety of meters, gauges, and recording charts.
- General knowledge of laboratory terminology, equipment and procedures; arithmetic, including proportions, percentages and decimals, and college algebra. Make basic to complex arithmetic computations.
- Ability to follow oral, written and graphic instructions. Understand, interpret, follow, and successfully communicate both orally and in writing, pertinent department policies and procedures.
- Learn to perform routine laboratory work, set up, adjust, clean, and perform minor maintenance and calibration on laboratory equipment.
- Maintain attention to detail and accuracy while meeting critical deadlines.
- Work with or without minimal available supervision.
- Maintain manual and automated logs, records, reports, and charts.
- Follow department policies and procedures related to assigned duties.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner.
- Operate modern office equipment including computer equipment and specialized software applications programs.
- Effectively communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence, and independent judgment within general policy and legal guidelines.
- Establish and maintain effective working relationships with those contacted in the course of the work, both employees and the public.
- Perform work in confined spaces, following required confined space entry procedures.
- Plan, direct, and coordinate the work of staff in water/wastewater operations.
- Interpret and apply industry practices.
- Keep a variety of accurate records and reports and knowledge of LIMS (Computerized Maintenance Management Software).
- Work shifts, weekends, evenings, and holidays when required; mandatory weekend rotation.

Education and Experience:

Any combination of education and experience that has led to the acquisition of the knowledges, skills, and abilities as indicated above. Typical ways of acquiring these knowledges, skills, and abilities are:

Completion of the twelfth grade, or its equivalent. Experience is not required; however, any work in chemical, biological or bacteriological laboratory work would be preferred.

Licenses and Certifications:

- Possession of, or ability to obtain, an appropriate valid California's driver's license.
- Possession of, or ability to obtain, a California Water Environment Association Grade I Laboratory Analyst Certificate. If candidate does not possess Grade I Laboratory Analyst Certificate, he/she must be able to obtain within 18 months of hire.
- Possession of, or ability to obtain, California Water Environment Association Grade I Environmental Compliance Inspector Certificate. If candidate does not possess Grade I Environmental Compliance Inspector Certificate he/she must be able to obtain within 26 months of hire.

PHYSICAL DEMANDS

Must possess mobility to work in a standard wastewater treatment plants and related facilities; strength, stamina, and mobility to perform light to medium physical work, to work in confined spaces, around machines and to climb and descend ladders, and operate varied hand and power tools and equipment; vision to read printed materials and a computer screen; color vision to read gauges and identify appurtenances; and hearing and speech to communicate in person and over the telephone or radio. The job involves frequent walking in operational areas to identify problems or hazards. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate above-mentioned tools and equipment. Positions in this classification bend, stoop, kneel, reach, and climb to perform work and inspect work sites. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 50 pounds, or heavier weights with the use of proper equipment.

ENVIRONMENTAL ELEMENTS

Employees work inside a wastewater treatment plant and in the field and are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes.