



Laboratory Analyst

Summary

Perform collection of samples; assist in performing laboratory chemical and biological tests on water, wastewater, biosolids, recycled water, and industrial wastes; perform field investigations to determine and minimize wastewater problems; and perform other duties as assigned.

Class Characteristics

This is a single and specialized class for the laboratory function in the City's Water Resources and Conservation Department. An incumbent in this class performs a variety of standardized routine sanitary tests and chemical analyses of water, wastewater effluents, and works with other professional staff in the operation of a testing laboratory. An incumbent in this class works under the general supervision of a higher-level supervisor or manager.

Essential Duties, Skills, and Demands of the Position

The duties, skills, and demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with a disability to perform the essential duties, skills, and demands.

Duties:

Perform a variety of chemical and biological tests in the field and in the laboratory on samples collected.

Prepare and standardize chemical reagents and solutions.

Assist in the collection of wastewater samples from various sources within the wastewater treatment facility or other collection points.

Assist in the analysis and tracing of the sources of undesirable industrial wastes entering the City's wastewater treatment system.

Assemble and record test data, prepare draft charts, graphs, and written reports.

Clean and maintain laboratory and field equipment.

Perform routine maintenance and minor repairs on laboratory equipment.

Perform data verification and validation, as needed.

Calibrate lab instruments, as needed.

Conduct residential house calls for water conservation, checking for water leaks and advising City residents of conservation programs.

Perform related duties as assigned.

Skills/Abilities:

Perform basic standardized laboratory tests involving the chemical, biological, and physical analysis of water and wastewater.

Operate basic laboratory equipment and instruments.

Interpret routine test results.

Read and interpret a variety of meters, gauges, and recording charts.

Write and review standard operating procedures.

Maintain and update routine records and logs.

Follow oral and written directions.

Read and interpret method, analysis, and regulations documents.

Operate office equipment including computers and supporting word processing, spreadsheet, and database applications.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of the work.

Physical Demands and Work Environment:

While performing the duties of this job, the employee is frequently required to sit, stand, walk, talk, hear, and reach with hands and arms. The employee is frequently required to use hands to finger, handle, or feel objects, tools, or controls, and will frequently be required to enter data into a terminal, personal computer or keyboard device and operate office equipment requiring repetitive arm/hand movement. The employee is often required to climb, balance, stoop, kneel, crouch, or crawl or use the ability to smell. The employee must be able to perform a moderate amount of physical labor, including having sufficient strength to lift, carry and/or move items up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus. Must be able to hear alarms and respond to others without being able to see them performing the duties of this job, the employee is often exposed to outside weather and wet conditions. Other work conditions include exposure to unpleasant odors, mechanical parts, fumes, airborne particles and moderate noise levels. There is risk of exposure to hazardous fumes and substances.

Special Physical Requirement:

May be required wear respiratory protection or other safety equipment, and may be required to wear foot, eye, and hearing protection.

Qualifications

Knowledge of:

Basic principles of chemical, biological, and related sciences.

Basic practices and methods of chemical, biochemical, and bacteriological testing and analysis.

Chemicals and equipment used in water quality analysis.

Laboratory and field safety and equipment and material care and maintenance.

Effective techniques for dealing with the public and dealing with basic customer complaints.

Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.

Education and Experience

Any combination equivalent to the education and experience likely to provide the required knowledge and abilities would be qualifying. A typical way to gain such knowledge and abilities would be:

Education:

Equivalent to an Associate's degree with major course work in chemistry, microbiology, or a related field.

Experience:

One year of experience in an environmental laboratory, wastewater treatment plant laboratory, industrial waste inspection, and/or closely related experience.

Substitution:

Additional years of experience may substitute for the required education on a year for year basis.

Certifications/Licenses:

Possession of a California Water Environment Association Laboratory (CWEA) Laboratory Analyst Grade I certification within twelve months of appointment is required.

Possession of a valid California Class C driver's license.

Established: 12/15/08

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Department: Public Works and Utilities

FLSA Status: Non-Exempt