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 the Environmental Services Supervisor.

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.

Calibrate lab instruments as needed.

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.

Maintain and update routine records and logs.

Follow oral and written directions.

Communicate effectively, 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.
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 from an accredited college or university with major coursework in chemistry, microbiology, or a closely 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.

**Licenses/Certificates:**

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 with a satisfactory driving record is required.

**Additional Requirement:**

Must be willing to work outside normal working hours when necessary.

Established: 12/15/08
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Department: Water Resources and Conservation
FLSA Status: Non-Exempt