

Definition: Under direction of the Laboratory / Source Control Supervisor, performs professional laboratory-related work including chemical and biological analysis of wastewater.

This is a noncompetitive upward mobility position. The responsibilities of the Laboratory Chemist are distinguished from those of the Laboratory Analyst (Technician) by the greater complexity of essential duties and assignments received and by additional experience and CWEA Technical certification that is required. (See additional requirements for noncompetitive advancement to the position of Laboratory Chemist below.)

Essential Duties: Depending upon assignment the duties of a Laboratory Analyst (Technician) include:

- Performing a variety of routine and special chemical, physical, bacteriological and related tests on sewage discharges and water system samples.
- Collecting periodic, representative grab and composite samples of sewage influent, processing products and final effluent.
- Providing assistance to other plant personnel regarding basic laboratory procedures; equipment maintenance and lab supplies.
- Maintenance and ordering of equipment and supplies and disposal of outdated chemicals.
- Interpreting laboratory analyses, making recommendations, maintaining logs and records, and preparing reports.
- Developing new test procedures and conducting special analytical studies relating to source control, process control, or other applicable matters; testing and evaluating new chemicals for use in the treatment process.
- Maintaining computerized monitoring, laboratory analysis, quality assurance, and operation records; entering data on a computer; evaluating and managing data from such programs which are related to laboratory operations.
- Maintain laboratory inventory of chemicals, analytical equipment, and data sheets.
- Weekend work may be required.

Special Requirements: Vision adequate to read and drive, ability to bend, stoop or crouch; speak clearly and understandably. Hearing adequate to conduct mechanical device maintenance. Ability to report to work at any hour of the day or night as required during a disaster or other emergency.

Minimum Qualifications:

Knowledge of: Principles, methods, and techniques of chemical, bacteriological, biological and physical testing and analysis; techniques, terminology and equipment used in chemical and related laboratory work; principles of record keeping, and of data collection, compilation and analysis; applicable federal and state regulations; and computer operations and applications.

Ability to: Acquire a working knowledge of plant operations and specific procedures related to the laboratory operation; effectively perform routine and special sampling, testing, and analyses; accurately interpret test results; train personnel; effectively apply computer techniques to laboratory operations; prepare complete and accurate reports and notices; communicate clearly and concisely in oral and written form; work protracted or irregular hours; understand and carry out oral and written directions; establish and maintain effective working relationships with those contacted in the course of work including peers, subordinates, and supervisors.

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Education: Equivalent to a two (2) year Associate of Arts Degree from an accredited college or university with a Major in Chemistry, Biology, Microbiology, or a closely related field.

Experience: One (1) year of work in an analytical laboratory. Additional education in Chemistry or an Environmental Science may be substituted for experience on a year for year basis.

License: Must possess and maintain a valid California Operator's License issued by the State Department of Motor Vehicles and a satisfactory driving record.

Certification: Must obtain a Grade I Laboratory Analyst Certificate issued by the California Water Environment Association within one (1) year of employment. Employee is responsible for obtaining and renewing required certification within the stated time to maintain employment with the City.

Additional Requirements for Noncompetitive Advancement to Laboratory Chemist:

With acceptable performance as a Laboratory Analyst (Technician), and upon approval by the Personnel Officer, the Laboratory Analyst (Technician) can be appointed to Laboratory Chemist. These qualifications include:

Essential Duties:

- Assist supervisor in planning of laboratory workload including providing technical assistance to other plant personnel regarding basic laboratory procedures.
- Ordering chemicals and supplies.
- Disposal of outdated chemicals.
- In-depth knowledge of the NPDES permit as it relates to effluent testing and compliance.
- Designing, programming, and updating computer software involving monitoring, laboratory analysis, and quality assurance/quality control.
- Compilation and output of monthly monitoring and other federal, state, and local reports.
- Working independently to solve Quality Assurance and instrumentation problems.
- Maintaining ELAP Accreditation and QA/QC program.

Experience: Minimum two years experience as a Laboratory Analyst (Technician).

Certification: Possession of a grade II-TCP Laboratory Analyst Certificate issued by the California Water Environment Association.