

## SENIOR LABORATORY TECHNICIAN

### Class Definition

Under general supervision, provides lead direction to an assigned shift; and performs chemical and biochemical analyses of water, raw and digested sludges, sewage and similar materials, in accordance with prescribed methods.

### Distinguishing Characteristics

Senior Laboratory Technician is the advanced working, lead class in the Laboratory Technician series. Work includes standardized organic and inorganic chemical analysis, bacteriological analysis, instrumentation, quality assurance, and preparation of reagents and media. Work effectiveness is determined through precision and accuracy of results and proficiency in performance of analysis. This class is distinguished from Wastewater Laboratory Supervisor in that the latter is the first-line supervisory class in the Wastewater Laboratory. This class is distinguished from Laboratory Technician II in that incumbents of the latter do not have lead supervisory responsibilities.

### Typical Tasks

(An incumbent may not be assigned all duties listed, nor do the examples cover all duties which may be assigned.)

Provides lead supervision to an assigned shift in the Wastewater Laboratory.

Performs routine qualitative and quantitative chemical and biochemical analyses of sewage, water, soil or other materials by standardized and predetermined methods, i.e., total cyanide, chemical oxygen demand, oil and grease, atomic absorption spectrophotometry, gas chromatography, volatile and suspended solids, volatile acids, alkalinity, chlorides, 'biochemical oxygen demand, coliform MPN, and other analysis.

Assists other laboratory personnel in the performance of more complex tests and analyses.

Assists in the development of, and maintains the laboratory Quality Control/Quality Assurance Program.

Trains Laboratory Technicians in the procedures and theory of chemical and microbiological testing processes.

Monitors the wastewater laboratory inventory system.

Operates, calibrates, and maintains various laboratory devices and equipment.

Performs more complex calculations in analysis determination and report

Records test data and keeps records pertaining to analysis using the Laboratory Information Management System.

Performs related duties as required.

**Knowledge, Abilities and Skills**

Knowledge of modern laboratory techniques and procedures as related to the analysis of sewage and water.

Knowledge of the care, maintenance and operational requirements of laboratory equipment and apparatus.

Knowledge of the principles of organic and inorganic chemistry.

Knowledge of microbiological techniques and equipment sterilization.

Knowledge of quality control/quality assurance procedures.

Ability to perform laboratory examinations in a safe and efficient manner.

Ability to assist in training and provide lead direction to subordinate employees.

Ability to establish and maintain effective working relationships. Ability to interpret laboratory data.

**Minimum Qualifications**

Graduation from an accredited college or university with a Bachelor's Degree in chemistry, biochemistry, biology or a natural or physical science, and one year of experience equivalent to that gained as a Laboratory Technician II with the City of Fresno.

**Necessary Special Requirements**

Valid California Water Pollution Control Association Grade III Laboratory Technologist certification is desirable.

Possession of a valid California Driver's License at time of appointment.

APPROVED: (Signature on file)  
Director of Personnel Services

DATE: 08/19/1988