#### SENIOR LABORATORY ANALYST

#### **DEFINITION**

To plan, assign and review the work of assigned personnel engaged in the performance of physical, chemical, biological, and bacteriological analyses of wastewater, sludge, drinking water, industrial waste and related samples; to assist in ensuring quality control and quality assurance; to perform duties requiring specialized knowledge; and to provide administrative support to an assigned supervisor.

## DISTINGUISHING CHARACTERISTICS

This is the advanced journey level in the Laboratory Analyst series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed, complexity of duties assigned, independence of action taken, by the amount of time spent performing the duties, and by the nature of the public contact made. Employees perform the most difficult and responsible types of duties assigned to classes within this series, including detailed analysis of financial transactions and forecasting and may provide direct supervision over assigned personnel. Employees at this level are required to be fully trained in all procedures related to assigned areas of responsibility.

#### SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Water Quality Laboratory Supervisor.

Exercises technical and functional supervision over less experienced laboratory staff as assigned.

EXAMPLES OF ESSENTIAL DUTIES—Duties may include, but are not limited to, the following:

Plan, prioritize, and review the work of staff assigned to perform a variety of physical, chemical, biological, and bacteriological analyses of wastewater treatment plant samples as well as samples of sludge, drinking water, industrial waste, and other water/wastewater products.

Develop schedules and methods to accomplish assignments ensuring work is completed in a timely and efficient manner.

Participate in the selection of staff; provide or coordinate staff training; work with employees to correct deficiencies; implement discipline procedures.

Assist with the implementation of new laboratory procedures and reporting requirements.

Perform a variety of physical, chemical, biological, and bacteriological analyses of wastewater treatment plant samples as well as samples of sludge, drinking water, industrial waste, and other water/wastewater products.

Set up, maintain, calibrate, and operate a variety of laboratory equipment and instruments; perform minor maintenance of laboratory equipment and instruments.

Recognize problems that may occur in an analytical procedure and troubleshoot known procedures or confer with others to identify possible problems affecting results; recommend changes to procedures, as appropriate.

Collect various samples for analysis from specific locations according to a predetermined schedule; may collect special samples as conditions warrant; prepare and preserve samples for transport, storage, and laboratory testing.

Prepare standard chemical solutions, reagents and bacteriological media; keep laboratory facilities clean and in an orderly condition; order supplies and make recommendations regarding equipment purchases.

Recommend and initiate laboratory procedures and techniques; perform routine quality control checks for reagents, media, and data generated; create and revise standard operating procedures.

Enter laboratory data into a computer system for further analysis and reporting purposes; maintain laboratory records and prepare required reports.

Perform the most difficult and complex work related to assigned area of responsibilities.

Build and maintain positive working relationships with co-workers, other City employees, and the public using principles of good customer service.

Perform related duties as assigned.

#### MINIMUM QUALIFICATIONS

# Knowledge of:

Principles and practices of technical and functional supervision and training.

Principles and practices of chemistry, bacteriology and the chemical sciences, including methods and techniques of laboratory testing and analysis.

Advanced laboratory procedures and equipment, including computer uses and applications as applied to laboratory operation and analysis.

Arithmetic, including proportions, percentages, and decimals.

Pertinent local, State and Federal laws, ordinances/rules, and department procedures.

#### Ability to:

Provide technical and functional supervision over assigned staff; effectively training staff.

Perform a variety of complex chemical, biochemical, and bacteriological tests.

On a continuous basis, know and understand operations, and observe safety rules; analyze problem equipment and/or procedures; know and apply techniques and terminology; communicate and explain test results to others.

Intermittently, sit while studying or preparing reports or stand at laboratory bench while performing laboratory tests; bend, squat, climb, kneel and twist when performing various field site sampling duties; stand while performing laboratory tests; perform simple and power grasping, pushing, pulling, and fine manipulation; use telephone, computer or communicate through written means; and lift or carry weight of 15 pounds or less.

Operate laboratory equipment and computer programs related to laboratory data analysis.

Evaluate outcomes of laboratory results in order to detect errors.

Communicate clearly and concisely, both orally and in writing.

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

## **Experience and Training**

### Experience:

Two years of increasingly responsible experience performing laboratory analysis duties similar to that of a Laboratory Analyst II with the City of Roseville.

# **Training:**

A Bachelor's degree from an accredited college or university preferably with major course work in chemistry, bacteriology, biology, or a related field.

### License or Certificate

Possession of a valid California driver's license by date of appointment.

Possession of a California Water Environment Association Grade 2 Laboratory Analyst certificate within 18 months of date of appointment.

## 10-07-23 Senior Laboratory Analyst