LABORATORY ANALYST I LABORATORY ANALYST II

DEFINITION

To perform physical, chemical, biological, and bacteriological analyses of wastewater, sludge, drinking water, industrial waste and related samples; perform related work as assigned.

DISTINGUISHING CHARACTERISTICS

<u>Laboratory Analyst I</u> - This is the entry level class in the Laboratory Analyst series. Positions in this class typically have little or no directly related work experience and work under immediate supervision while learning job tasks. The Laboratory Analyst I class is distinguished from the II level by the performance of less than the full range of duties assigned to the II level. Incumbents work under immediate supervision while learning job tasks, progressing to general supervision as procedures and processes of assigned area of responsibility are learned.

<u>Laboratory Analyst II</u> - This is the full journey level class in the Laboratory Analyst series and is distinguished from the I level by the ability to perform the full range of duties assigned with only occasional instruction or assistance as unusual or unique situations arise. Positions in this class are flexibly staffed and are normally filled by advancement from the I level.

SUPERVISION RECEIVED AND EXERCISED

Laboratory Analyst I

Receives immediate supervision from the Water Quality Laboratory Supervisor.

Laboratory Analyst II

Receives general supervision from the Water Quality Laboratory Supervisor and may receive technical and functional supervision from the Senior Laboratory Analyst.

May provide technical supervision over less experienced laboratory staff as assigned.

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

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.

Wash, clean, and sterilize glassware and other equipment; sterilize bacteriological supplies.

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

Laboratory Analyst I

Knowledge of:

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

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

Arithmetic, including proportions, percentages, and decimals.

Ability to:

Perform a variety of 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.

Learn to 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:

No experience is required.

AND

Training:

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

License or Certificate

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

Laboratory Analyst II

In addition to the qualifications for the Laboratory Analyst I:

Knowledge of:

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

Ability to:

Independently perform a variety of chemical, biochemical, and bacteriological tests.

Evaluate outcomes of laboratory results in order to detect errors.

Experience and Training

Experience:

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

AND

Training:

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

License or Certificate

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

Possession of, or ability to obtain within 18 months, a California Water Environment Association Grade 1 Laboratory Analyst certificate.

Laboratory Analyst I/II
Laboratory Technician I/II