

SENIOR LABORATORY CHEMIST
Code Number: 29473

*Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specifications **may not include all** duties performed by individuals within a classification. In addition, specifications are intended to outline the **minimum** qualifications necessary for entry into the class and do not necessarily convey the final qualifications of incumbents within the position.*

SUMMARY DESCRIPTION

Under direction, leads, oversees, and participates in the more complex and difficult work of staff responsible for performing a variety of tests on potable water, wastewater and receiving water to determine biological, physical and chemical conditions basis and to ensure wastewater treatment plant and water system regulatory compliance; ensures that laboratory data is complete and accurate; provides information for plant process control; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

This is the advanced journey level class in the Laboratory Chemist series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed and the complexity of duties assigned including overseeing, leading, assigning, and scheduling laboratory activities. Employees perform the more difficult and responsible types of duties assigned to classes within this series including performing the more complex analytical procedures. Employees at this level are required to be fully trained in all procedures related to assigned area of responsibility.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

- Leads, plans, trains, organizes, schedules, and reviews the work of staff responsible for performing a variety of tests on potable water, wastewater and receiving water to determine biological, physical and chemical conditions basis and to ensure wastewater treatment plant and water system regulatory compliance; participates in performing the more complex work of the unit including performing non-routine and specialized testing.
- Trains assigned employees in their areas of work including routine chemical and physical analytical methods, procedures and techniques.
- Supervises the use, care and operation of laboratory equipment and instruments.
- Verifies the work of assigned employees for accuracy, proper work methods, techniques, and compliance with applicable standards and specifications; ensures adherence to safe work practices and procedures.
- Participates in increasing laboratory efficiency by developing and establishing new laboratory procedures and standards.
- Oversees and participates in performing tests and analyses on water and wastewater samples as necessary to control treatment processes, determine plant efficiencies, and ensure compliance with NPDES and DHS regulatory requirements; performs stream sampling and analysis to determine impact of discharge on receiving waters.

CITY OF THOUSAND OAKS
Senior Laboratory Chemist (Continued)

- Oversees and participates in collecting, preserving, and preparing plant samples for laboratory analysis; performs sample analysis and reports findings.
- Oversees and participates in performing bacteriological tests on potable water and wastewater to assure safety, quality, and regulatory compliance; conducts special tests and analyses as needed.
- Oversees and participates in preparing reagents, standards and other solutions used in daily lab operations.
- Maintains detailed records of tests and analyses conducted; posts analytical results on appropriate forms; prepares a variety of technical reports.
- Maintains, monitors, and reviews the Quality Assurance/Control Program, including related reporting requirements; maintains MSDS Program for the treatment plant.
- Monitors the hazardous waste disposal program for the laboratory.
- Sterilizes laboratory equipment and various media for bacteriological examination; utilizes a wide variety of laboratory equipment and instruments including Ion Chromatograph, pH and DO meters, Ion selective electrode, Autoclave, Buret, Pipettor, and atomic absorption spectrophotometer; develops testing methods to widen the scope of analyses performed.
- Oversees and participates in preparing federal and state reports regarding laboratory methods and operations; oversees performance evaluation testing for state certification.
- Maintains, calibrates and repairs laboratory and sampling equipment; coordinates lab equipment maintenance as necessary.
- Maintains an inventory of chemicals, glassware, and instruments and prepares annual inventory reports; writes purchase requisitions for laboratory equipment, supplies, and chemicals as necessary; orders equipment, supplies, and chemicals as necessary.
- Serves as liaison between the laboratory and other sections of the wastewater treatment plant; responds to questions and inquiries as necessary.
- Responds to public inquiries in a courteous manner; provides information within the area of assignment; resolves complaints in an efficient and timely manner.
- Acts as the Laboratory Supervisor in his/her absence.
- Performs related duties as required.

DESIRED MINIMUM QUALIFICATIONS

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Knowledge of:

Operations, services, and activities of a water and wastewater treatment plant laboratory.

Principles of lead supervision and training.

MSDS and confined space environmental regulations applicable to the operations of a wastewater treatment plant.

Advanced laboratory techniques, equipment, terminology, and procedures.

CITY OF THOUSAND OAKS
Senior Laboratory Chemist (Continued)

Theory, principles, practices, methods and chemicals used in complex chemical, bacteriological and physical analysis and testing of water, wastewater, biosolids and compost.
Proper sample collection procedures and techniques, including operation of automatic samplers.
Principles and practices of qualitative and quantitative chemistry, biology and bacteriology.
Methods and processes used in wastewater treatment.
Advanced principles of microbiology, analytical chemistry and biology applicable to wastewater treatment plant laboratory analyses.
Common laboratory chemicals, reactions, and precautions.
Quality assurance/control procedures.
Advanced mathematical calculations used in chemical analyses.
Principles and procedures of record keeping.
City purchasing practices and procedures.
Occupational hazards and standard safety practices.
Office procedures, methods, and equipment including computers and applicable software applications.
Principles and procedures of record keeping.
Pertinent federal, state, and local codes, laws, and regulations.

Ability to:

Lead, organize, and review the work of staff.
Independently perform the more complex laboratory tests and analysis.
Interpret, explain, and enforce department policies and procedures.
Understand, interpret, explain and apply the provisions of the City's Quality Assurance Program.
Perform complex statistical calculations for quality assurance and quality control studies.
Analyze and interpret test results.
Read and interpret regulatory agency quality assurance studies.
Operate complex laboratory equipment, such as an atomic absorption spectrophotometer, in the analyses of liquid, semisolid, and solid samples.
Calibrate, repair and maintain laboratory equipment.
Organize, set priorities and exercise sound independent judgment within areas of responsibility.
Prepare clear, accurate and concise records of test results and technical reports.
Maintain records and files on testing, analysis and quality assurance in conformance with regulatory requirements.
Provide clear and concise oral and written work instructions to other laboratory personnel.
Operate office equipment including computers and supporting software applications.
Learn and apply new information or skills
Communicate clearly and concisely, both orally and in writing.
Establish and maintain effective working relationships with those contacted in the course of work.
Respond and perform assigned duties in the event of a City-declared emergency.

Education and Experience Guidelines - *Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:*

Education/Training:

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

Experience:

Three years of increasingly responsible chemical or biological laboratory experience in the chemical, bacteriological and physical analyses typically used in a wastewater treatment plant laboratory.

Licenses; Certificates; Special Requirements:

A valid class C California driver's license.

A California Water Environmental Association Laboratory Analyst II Certificate.

CWEA/AWWA Laboratory certification.

PHYSICAL AND ENVIRONMENTAL CONDITIONS

The conditions herein 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 disabilities to perform the essential job functions.

Physical: Sufficient physical ability to work indoors and outdoors in all weather conditions; sit, stand, walk on level and slippery surfaces, reach, twist, turn, kneel, bend, stoop, squat, crouch, grasp and making repetitive hand movement; lift, carry and push tools, equipment and supplies weighing 25 pounds or more; climb ladders, use power and noise producing tools and equipment, drive motorized vehicles. **Vision:** See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment. **Hearing:** Hear in the normal audio range with or without correction.

Environment: Wastewater treatment plant and field environment; exposure to noise, dust, grease, fumes, gases, potentially hazardous chemicals, and inclement weather conditions including wet and/or humid conditions; work with or around water or wastewater; work on slippery surfaces; interacts with vendors.

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Pursuant to California Government Code Section 3100, all public employees are required to serve as disaster service workers subject to such disaster service activities as may be assigned to them by their superiors or by law.