

# CITY OF SIMI VALLEY

## LABORATORY CHEMIST

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.*

### **SUMMARY DESCRIPTION**

Under direction, performs chemical, biological, and physical tests in support of the wastewater treatment plant; analyzes and records test results; and assists with a variety of special laboratory projects.

### **REPRESENTATIVE DUTIES**

*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.*

1. Perform chemical, biological, and physical tests including nitrogen species, oil and grease, chemical and biochemical oxygen demand, colorimetric and volumetric analyses.
2. Utilize a wide variety of laboratory equipment including a nephelometer, spectrophotometer and ion chromatograph.
3. Monitor and review the results of the quality assurance/control program; analyze laboratory data and recommend treatment modifications; present data analysis in tabular and graphical forms.
4. Maintain accurate and thorough records of laboratory procedures and results; ensure compliance with government regulations; prepare analytical work sheets and reports.
5. Prepare and review monthly, quarterly and semiannual and annual compliance reports.
6. Respond to citizen inquiries and complaints; interview customers, collect samples, and report findings.
7. Oversee and participate in the preparation of chemical reagents.
8. Perform the most complex and difficult laboratory analysis; develop new methods and techniques of analysis.
9. Perform required fields of testing as listed in the "List of Approved Fields of Testing and Analytes" included in the Laboratory certification provided by Environmental Laboratory of Accreditation Program Department of Health Services.
10. Assess laboratory equipment needs and train laboratory personnel in new equipment operation.
11. Assist the Laboratory Supervisor in coordinating the activities and operations of the laboratory and overseeing lower level staff.
12. Collect samples from the wastewater treatment plant, collection system and receiving waters.
13. Troubleshoot, clean and maintain laboratory equipment and supplies.
14. Monitor laboratory supply levels.

15. Perform a variety of special projects as assigned.
16. Provide lab training to plant personnel on proper lab methods, procedures, and techniques.
17. Perform related duties as required.

### **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:**

Laboratory techniques, equipment, terminology and procedures.  
Principles and practices of qualitative and quantitative chemistry, biology and bacteriology.  
Principles of chemical, biological and physical analysis.  
Mathematical calculations used in chemical analyses.  
Proper sample collection procedures and techniques.  
Modern laboratory procedures, methods and computer equipment.  
Principles and procedures of record keeping.  
Basic mathematics.  
Advanced modern technology.  
Principles of lead supervision and training.  
Occupational hazards and standard safety practices.  
Pertinent federal, state, and local laws, codes and regulations.

#### **Ability to:**

Operate the most complex laboratory equipment including ion chromatography and spectrophotometer.  
Analyze and interpret test results.  
Conduct chemical, biological and physical tests.  
Effectively collect samples and specimens.  
Conduct mathematical calculations.  
Maintain laboratory equipment.  
Use computers and a variety of computer software programs.  
Prepare clear, concise and technical reports.  
Lead, organize and review the work of lower level staff.  
Respond to emergency situations.  
Communicate clearly and concisely, both orally and in writing.  
Establish and maintain effective working relationships with those contacted in the course of work.

**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:**

Equivalent to a Bachelor's degree from an accredited college or university with major course work in biology, microbiology, chemistry or a related field.

#### **Experience:**

Three years of experience conducting a variety of tests in a physical, chemical or biological laboratory.

#### **License or Certificate:**

Possession of, or ability to obtain, a valid CWEA Laboratory Technician III certification.

**PHYSICAL DEMANDS AND WORKING ENVIRONMENT**

*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.*

**Environment:** Treatment plant lab environment; work with water; exposure to hazardous chemicals, infectious waste, and inclement weather conditions.

**Physical:** Sufficient physical ability to work in an office setting and operate office equipment; stand, walk, bend and stoop for prolonged periods of time; heavy to moderate lifting; operate motorized vehicles.

**Vision:** See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents.

**Hearing:** Hear in the normal audio range with or without correction.

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*Johnson & Associates*

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