

# Lab Director

*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 of the Wastewater Treatment Plant Supervisor, plans, organizes, supervises, and reviews the programs and activities of the wastewater treatment plant laboratory; performs chemical, biological, mineral, and bacteriological tests of water and wastewater; ensures laboratory is in compliance with federal, state, and local regulations; prepares and submits a variety of reports; and maintains a variety of files.

## **IDENTIFYING CHARACTERISTICS**

This is a single position class responsible for overseeing the programs and activities of the City's laboratory. The incumbent is expected to exercise judgment and initiative in the performance of duties and provide supervision and training to staff working within the laboratory. The incumbent has considerable latitude for the exercise of independent judgment in carrying out assigned responsibilities.

## **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. Oversees the programs and activities of the City's laboratory; ensures laboratory is in compliance with federal, state, and local regulations including NPDES and DHS regulatory requirements.
2. Maintains a fully accredited laboratory as certified through the environmental laboratory accreditation program; reviews laboratory certifications and signs off as Laboratory Director.
3. Performs a variety of chemical, biological, and bacteriological analyses of samples taken to determine amounts and degree of pH, alkalinity, volatile acids, total solids, density, dissolved oxygen, organic material content, coliform bacteria, biochemical oxygen demand, residual chlorine and others.
4. Collects, preserves, and prepares samples for laboratory analysis; performs sample analysis and reports findings.
5. Operates a variety of laboratory equipment including pH meters, balances, furnaces, autoclaves, filtrators, incubators, computers, atomic unit, and ion analyzers; troubleshoots equipment malfunctions; cleans and sterilizes laboratory glassware and equipment.
6. Establishes, monitors and maintains quality assurance and quality control programs; coordinates annual requirements including radiological, inhibitory residue, water suitability, tests, and other necessary requirements.
7. Oversees and participates in the preparation of chemical reagents used in laboratory analysis.
8. Performs inspections, sampling, testing, and reporting associated with the industrial waste

pretreatment program.

9. Prepares and submits necessary monthly, quarterly, and annual reports to regulatory agencies.
10. Maintains accurate and thorough records of laboratory procedures and results; enters data into the computer; ensures compliance with government regulations; prepares analytical worksheets and reports.
11. Delivers and/or schedules necessary laboratory tests for pickup and analysis at outside laboratories; coordinates with labs for decontamination for tubir/bottles for special testing.
12. Trains employees in laboratory and sampling techniques including proper methods, procedures, and techniques; assures a safe working environment is maintained in the laboratory.
13. Participates in the preparation and administration of the laboratory program budget; oversees and maintains laboratory inventory; orders supplies and equipment as necessary.
14. Develops sewer spill response and trains assigned employees in proper procedures as necessary.
15. Assists in reviewing and updating existing analysis procedures; research, develop, and implement new analysis procedures.
16. Assists in implementation of regulations concerning water quality testing programs and insures compliance with the same.
17. Coordinates assigned activities with other departments, divisions, and outside agencies as necessary.
18. Respond to public inquiries in a courteous manner; provide information within the area of assignment; resolve complaints in an efficient and timely manner.
19. Performs a variety of special projects as assigned.
20. Provides back-up and performs other plant and maintenance duties as assigned.
21. Provides twenty-four hour standby when assigned.
22. Performs 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:**

1. Operations services, and activities of a laboratory program.
2. Chemical laboratory techniques, materials and equipment, emphasizing those used in standard analysis of water.
3. Principles of organic and inorganic chemistry.
4. Principles and practices of laboratory quality control and assurance, and laboratory safety. Advanced operational characteristics of modern laboratory instruments and equipment. Advanced procedures of sample collection, preparation, preservation, and analysis. Accreditation program requirements for laboratory certification.

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5. Occupational hazards and standard safety practices.
6. Basic principles and practices of municipal budget preparation and control.
7. Principles of business letter writing and basic report preparation.
8. Principles of data collection and record keeping.
9. Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.
10. Pertinent federal, state, and local laws, codes, and regulations.

**Ability to:**

1. Safely prepare reagents, assemble and operate testing apparatus and equipment, take samples, and perform biological, chemical, microbiological and physical analysis and related laboratory work accurately and precisely.
2. Analyze, interpret, apply and report results of laboratory data, analyses, and projects. Interpret and explain laboratory policies and procedures.
3. Maintain laboratory equipment.
4. Apply regulative requirements to applicable discharges and make decisions on compliance.
5. Maintain accurate records and documents.
6. Prepare clear and concise reports.
7. Apply federal, state, and local policies, laws, and regulations.
8. Observe proper safety precautions and procedures.
9. Assist in maintenance and calibration of lab equipment for performance at the level required to provide acceptable data.
10. Operate office equipment including computers and supporting word processing, spreadsheet, and database applications.
11. Work independently in the absence of supervision.
12. Understand and carry out oral and written instructions.
13. Communicate clearly and concisely, both orally and in writing.
14. 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 chemistry, biochemistry, biology, microbiology, or related field.

**Experience:**

Four years experience in laboratory analysis of water, wastewater, solid waste, hazardous waste, or other environmental samples.

**License or Certificate:**

Possession of, or ability to obtain, an appropriate driver's license.

Possession of the California Water Environment Association (CWEA) Laboratory Analyst Grade II certificate.

**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:**

Laboratory environment; some travel to various sites; exposure to noise, dust, grease, fumes, gases, potentially hazardous chemicals, electrical energy, and inclement weather conditions including wet and/or humid conditions; work around water or wastewater; work on slippery surfaces; regularly work near moving mechanical parts; and work around moderately loud noise levels.

**Physical:**

Primary functions require sufficient physical ability and mobility to work in a laboratory environment; walk, stand, and sit for prolonged periods of time; frequently stoop, bend, kneel, crouch, crawl, climb, reach, and twist; push, pull, lift, and/or carry moderate to heavy amounts of weights; operate assigned equipment and vehicles; ability to verbally communicate to exchange information.

**Vision:**

See in the normal visual range with or without correction.

**Hearing:**

Hear in the normal audio range with or without correction.

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Johnson & Associates