

**LABORATORY ASSISTANT I/II**

*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 supervision (Laboratory Assistant I) or general supervision (Laboratory Assistant II), collects various types of water samples for daily analysis; performs a variety of routine physical, chemical, and bacterial analyses of water; operates laboratory equipment and supplies; picks up and cleans laboratory samples, supplies, and equipment; and maintains a variety of records and logs.

**DISTINGUISHING CHARACTERISTICS**

**Laboratory Assistant I** - This is the entry level class in the Laboratory Assistant series performing routine and less complex laboratory duties while learning City policies and procedures. Positions at this level are not expected to function with the same amount of program knowledge or skill level as positions allocated to the Laboratory Assistant II level and exercise less independent discretion and judgment in matters related to work procedures and methods. Work is usually supervised while in progress and fits an established structure or pattern. Exceptions or changes in procedures are explained in detail as they arise. As experience is acquired, the employee performs with increasing independence and responsibility and is expected to be performing at the "II" or journey level within the prescribed time frame. Advancement to the "II" level is based on demonstrated proficiency in performing the full range of assigned duties, possession of required licenses and/or certifications, and is at the discretion of higher level supervisory or management staff.

**Laboratory Assistant II** - This is the full journey level class within the Laboratory Assistant series. Employees within this class are distinguished from the Laboratory Assistant I by the performance of the full range of duties as assigned. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the work unit. Work is normally reviewed only on completion and for overall results. Positions in this class are flexibly staffed and are generally filled by advancement from the Laboratory Assistant I level, or when filled from the outside, require prior experience. Advancement to the "II" level is based on management judgment and/or license/certification or testing that validates the performance of the full range of job duties.

**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. Collect various types of water samples necessary for daily analyses, both at the plant and in the distribution system, according to standard procedures.
2. Perform routine physical, chemical, and bacteriological analyses of water; maintain proper quality assurance in performing analytical work.
3. Prepare standard solutions and bacteriological media for testing and quality control; record data on results and report results to operators and supervisors.
4. Keep reagents filled for testing; prepare standard solutions as necessary.

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5. Wash, clean, sterilize, calibrate, and maintain equipment apparatus, and glassware used in all tests and analysis; keep laboratory facilities in a clean and orderly condition.
6. Maintain and locate a variety of work records, data sheets, and logs; communicate effectively with plant operators.
7. Operate and maintain a variety of lab equipment including but not limited to pH meter, analytical and top-loading balances, and field test kits.
8. Ensure adherence to safe work practices and procedures as well as federal and state laws, rules, and regulations.
9. Participate in special projects as assigned.
10. 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:**

- Fundamental principles of chemistry and standard laboratory equipment, instruments and procedures.
- Mathematics as used to analyze test results.
- Principles of water treatment and distribution.
- Safety precautions in a laboratory setting.
- Methods and procedures for collection and storage of samples.
- Media preparation and quality control.
- Sampling procedures and field equipment.
- Pertinent federal, state, and local laws, codes, and regulations.

**Ability to:**

- Perform a variety of physical, chemical, and bacteriological tests according to standard procedures.
- Correlate laboratory results with plant operation and system water quality.
- Use laboratory equipment and materials safely.
- Conduct routine mathematical calculations.
- Successfully operate various software programs as required using computers or other types of hand-held devices.
- Maintain accurate records and retrieve them upon request.
- Learn to recognize water treatment problems during analysis of test results.
- Work independently and exercise good judgment.
- Take coaching, instruction, and feedback with a cooperative and positive attitude.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain cooperative working relationships with those contacted in the course of work, including the ability to interact effectively and courteously with the public, coworkers and vendors.

## **Education and Experience Guidelines**

### **Laboratory Assistant I**

#### **Education/Training:**

Equivalent to the completion of the twelfth grade supplemented by college level course work in chemistry, biology, microbiology, or a related field. Associates degree in related field is desirable.

#### **Experience:**

One year of experience conducting physical, chemical, or bacteriological tests in a water or wastewater laboratory setting.

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

Possession of, or ability to obtain, Distribution System Operator Grade I and Water Treatment Plant Operator Grade I certificates issued by the State of California within one year of employment.

Possession of an appropriate, valid driver's license.

### **Laboratory Assistant II**

#### **Education/Training:**

Equivalent to the completion of the twelfth grade supplemented by college level course work in chemistry, biology, microbiology, or a related field. Bachelors degree in related field is desirable.

#### **Experience:**

Two years of prior water quality laboratory experience comparable to a Laboratory Assistant I with the City of Antioch. Employees must demonstrate proficiency on a variety of skills/tasks to the satisfaction of the Division Manager prior to a recommendation being made to flex to the Assistant II classification.

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

Possession of Distribution System Operator Grade I and Water Treatment Plant Operator Grade I certificates issued by the State of California.

Possession of a Water Quality Analyst Grade I certificate issued by Cal/NV AWWA.

Must obtain Water Quality Analyst Grade 2 certificate by Cal/NV AWWA within 2 years of becoming a Laboratory Assistant II.

Possession of an appropriate, valid driver's license.

**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:** Work is performed in a water treatment plant and outdoor environment; travel from site to site; exposure to noise, dust, grease, fumes, electrical energy, and all types of weather and temperature conditions; work and/or walk on various surfaces including slippery or uneven surfaces; work in or with water.

**Physical:** Primary functions require sufficient physical ability and mobility to work in a water treatment plant and field environment; to travel to various locations to take samples; to walk, stand, and sit for prolonged periods of time; to frequently stoop, bend, kneel, crouch, reach, and twist; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate assigned equipment and vehicle; and to verbally communicate to exchange information.

FLSA: Non-Exempt

Revised: February 2005; September 2013, May 2020

This class specification identifies the essential functions typically assigned to positions in this class. Other duties not described may be assigned to employees in order to meet changing business needs or staffing levels but will be reasonably related to an employee's position and qualifications. Other duties outside of an individual's skill level may also be assigned on a short term basis in order to provide job enrichment opportunities or to address emergency situations.