

## **LABORATORY TECHNICIAN I, II**

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### **DEFINITION**

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Under general supervision performs a variety of physical, chemical, biological and bacteriological analyses of potable water, wastewater, industrial wastewater, and storm water according to standard methods and procedures; collects samples; and performs related duties as required.

### **DISTINGUISHING CHARACTERISTICS**

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*The Laboratory Technician I-* this is the entry level class in which incumbents perform a limited variety of tests following standardized procedures or detailed instructions.

*The Laboratory Technician II-* This is the journey level class in the series. Incumbents perform a broad range of standardized and non-standardized testing. This class is distinguished from the Laboratory Technician III class in that the latter has lead responsibilities for other technicians in the laboratory and performs the most difficult technician work.

### **REPRESENTATIVE DUTIES**

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*The duties listed below are examples of the work typically performed by employees in this class. An employee may not be assigned all duties listed and may be assigned duties which are not listed below.*

1. Performs physical, chemical and bacteriological analyses of water, wastewater, storm water, industrial waste and related materials.
2. Prepares chemicals, bacteriological media, stains and standards test solutions; prepares samples for transport storage and laboratory testing; sets up, calibrates, operates and performs maintenance on a variety of laboratory equipment and instruments.
3. Compiles and records data onto standardized worksheets, logs and forms; performs mathematical calculations and statistical analysis for test results; transfers data to computer.
4. Collects varied samples for analysis from specific locations according to a predetermined schedule; collects special samples as conditions indicate; collects commercial or industrial waste samples as part of the wastewater treatment facility's pretreatment program.
5. Cleans and maintains laboratory, equipment and instruments; washes, cleans and sterilizes glassware and equipment; sterilizes bacteriological supplies.
6. Maintains inventory of laboratory supplies.
7. Assists in preparing technical reports.
8. May assist on special projects, such as laboratory safety programs.

## **EMPLOYMENT STANDARDS**

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### **Education and/or Experience**

*Laboratory Technician I-* Completion of twelve units of college coursework in biology, chemistry or other related laboratory science course or one year of analytical laboratory experience or any combination of training and experience that provides the desired knowledge and abilities.

*Laboratory Technician II-* Completion of twelve units of college coursework in biology, chemistry, or other related laboratory science course or two years of work experience in an analytical laboratory or a Bachelor's degree from an accredited college in chemistry, biology, or related field or any combination of training and experience that provides the desired knowledge and abilities.

### **Knowledge of:**

*Both Classes-* Arithmetic, including properties, percentages and decimals; standard and safe laboratory practices and techniques; care and maintenance of laboratory glassware, equipment and apparatus.

*Laboratory Technician II-* Principles and practices of modern chemistry, bacteriology, the physical sciences, mathematics and the metric systems; basic algebra.

### **Ability to:**

*Both Classes-* make arithmetic calculations; follow oral, written and graphic instruction; perform routine laboratory work; keep accurate records and complete forms; set up, adjust, clean and perform minor maintenance of laboratory equipment; use standard laboratory testing and analysis equipment; establish and maintain working relationships with laboratory staff.

*Laboratory Technician II-* Interpret and apply technical instructions.

### **Special Requirements**

Possession of or ability to obtain and maintain a valid California Drivers' License.

*Laboratory Technician II-* A Water Quality Analyst Grade I certificate from California Water Environmental Association (CWEA) or American Water Works Association, California/Nevada Section (AWWA-CA/NV) must be obtained within 18 months of employment.

### **Physical Demands**

Involves active work but not prolonged heavy exertion. On feet most of the time involving bending, stooping, squatting, twisting, reaching, working on irregular surfaces; frequent lifting of objects up to 25 lbs. with occasional lifting of objects weighing over 50 lbs.

## **WORKING CONDITIONS**

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Frequent exposure to unpleasant elements such as dust, fumes and odors, dampness, raw sewage, high noise levels, or outside weather conditions. Occasional use of a video display terminal. Works holidays and weekends, as assigned.

Date Adopted: August 6, 1996