

## **LABORATORY TECHNICIAN III**

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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; leads the work of other technicians and performs the more difficult work; performs related work as required.

### **DISINGUISHING CHARACTERISTICS**

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This class is the specialist or lead level class in the series and differs from the Laboratory Technician II class by the lead duties performed and/or the independence of action performing chemical analyses utilizing non-standardized methods or tests. This class differs from the Chemist class by the limited scope of nonstandard assignments, the greater degree of supervision received and the limited troubleshooting, report preparations and method analyses performed.

### **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. Conducts and participates in routine, complex and nonstandard chemical, biological and microbiological analyses.
2. Maintain testing schedule; instructs other technicians in the specific procedures of the work; reviews test results.
3. Compiles and records data onto standardized worksheets, logs and forms; performs mathematical calculations and statistical analysis for test results; transfers data to computer, assists in preparing technical reports.
4. Prepares standard chemical solutions, reagents, stains and bacteriological media.
5. Operates and maintains intricate laboratory equipment; performs routine operation of complex instrumentation.
6. Collects varied samples for analyses from specific locations according to a predetermined schedule; collects special samples as conditions indicate; assists in planning sample collection programs; collects commercial or industrial waste samples as part of the wastewater treatment facility's pretreatment program; prepares samples for transport, storage and laboratory testing.
7. Assists on special projects and development of new procedures; serves on committees with the laboratory or utilities divisions and for special projects.
8. Maintains inventory of laboratory supplies.

## **EMPLOYMENT STANDARDS**

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

Completion of twenty semester unit of chemistry, biology or related laboratory science college course work and two years of experience in a wastewater treatment facility laboratory performing microbiology analysis of drinking water and wastewater; three years of experience working in a analytical laboratory or any combination of training and experience that provides the desired knowledge and abilities.

A Bachelor's degree in laboratory science can substitute for two years of the required experience.

### **Knowledge of:**

Principles and practices of modern chemistry, bacteriology, the physical sciences, mathematics and the metric system; care and maintenance of laboratory glassware, equipment and apparatus; standard and safe laboratory practices and techniques; basic algebra; principles of data analysis, statistical inference, and report writing; general principles and procedures of water systems and of wastewater collection and treatment; methods for collection and storage of samples; standard and safe laboratory practices and techniques.

### **Ability to:**

Use standard laboratory testing and analysis equipment; learn to operate and use complex instruments; independently conduct non-routine chemical analyses; assemble data and prepare detailed records and reports; lead the work of others.

### **Special Requirements**

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

A Water Quality Analyst Grade II certificate from California Water Environment 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, and 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