

## **SENIOR 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.*

### **DEFINITION**

Under general direction, directs and oversees the daily work activities within the water/wastewater laboratory, including preparing work schedules, assigning duties to laboratory personnel and maintaining appropriate inventories and requisitions of necessary supplies and equipment; trains and participates in the work of laboratory personnel in process control and related research; to perform professional chemist duties; and to perform related work as assigned.

**EXAMPLES OF DUTIES** - *Examples of duties performed by employees in this class may not include all required duties, nor are all listed tasks necessarily performed by everyone in this class.*

Supervises process control testing in the wastewater and/or water treatment processes; analyzes process methods and recommends improvements; devises and supervises experiments designed to provide solutions to water treatment and sewage treatment problems; oversees and maintains laboratory quality assurance programs to meet Environmental Protection Agency and other regulatory requirements; develops performance standards for work activities; administers policies, rules and procedures of the department; maintains laboratory accreditations and conforms to good laboratory practices; oversees preparation of sampling schedules for National Pollutant Discharge Elimination System (NPDES) and process control samples; prioritizes laboratory workload and assigns specific tasks to laboratory staff; compiles, records and manages laboratory data and records; relates test data to established standards of acceptance, and makes appropriate reports of conditions found; trains and rates the work performance of subordinates; and acts as Laboratory Supervisor during the supervisor's absence.

### **MINIMUM QUALIFICATIONS:**

#### **Knowledge of:**

- Chemistry, math, statistical, and analytical techniques utilized in water/wastewater laboratories.
- Laboratory certification procedures and governmental water/ wastewater regulatory standards.
- Principles and techniques of supervision.
- Safety rules, codes, and regulations pertaining to the work.
- Methods of handling, storing and disposal of hazardous chemicals and wastes.
- Environmental Protection Agency-approved analytical chemical and microbiological methods of analysis of water and wastewater.

#### **Ability to:**

- Perform a broad range of routine and non-standardized bench tests utilizing a variety of laboratory instruments.

- Adapt standard methods and techniques to different sample types.
- Read and follow complex instrument manuals.
- Plan, schedule and train subordinates, and coordinate work with other City staff;
- Write logical, well-organized reports and a variety of correspondence; and
- Establish and maintain effective working relationships with those contacted in the course of work.

### **Experience and Training Qualifications**

**Experience:** Three years of experience in a water or wastewater laboratory performing instrumental, gravimetric, and volumetric analyses and interpretations. Additional experience in performing chemical analysis of samples, instrumentation work, chemical calculations, and the evaluation of laboratory data may be substituted for each year of college lacking on a year-for-year basis.

**Training:** A Bachelor's degree in the physical, chemical, biological sciences, or a closely related field.

**License/Certificates:** A current, valid, California driver's license. Laboratory Analyst, Grade III Certificate issued by the American Waterworks Association (AWWA) or California Water Pollution Control Association (CWPCA) must be obtained within 24 months of appointment.

### **WORKING CONDITIONS**

**Environmental Conditions:** Laboratory environment; exposure to chemicals and microbiological organisms; exposure to computer screens.

**Physical Conditions:** Essential functions may require maintaining physical condition necessary for sitting and standing for prolonged periods of time; speaking and hearing to exchange information; lifting of laboratory materials; visual acuity to read and interpret information.

\*EXAMPLES are examples of duties performed by employees in this class. The list may not include all required duties, nor are all listed tasks necessarily performed by everyone in this class.

\*\*SUGGESTED EMPLOYMENT STANDARDS are a guide for determining the education, training, experience, special skills, and/or licenses which may be required for employment in the class. These are re-evaluated each time a recruitment is conducted.