

**CLASS SPECIFICATION**  
**SAN DIEGO CITY CIVIL SERVICE COMMISSION**  
**ENVIRONMENTAL SCIENTIST I – 1062**

**DEFINITION:**

Under immediate supervision, and in a training capacity, to perform professional level biological, chemical, physical, bacteriological, microbiological, biological, molecular, bioaccumulation, and toxicological monitoring, analysis, and reporting for regulatory compliance and special studies; and to perform related work.

**\* EXAMPLES OF DUTIES:**

- Collects samples from source water, drinking (potable) water, domestic and industrial wastewater, biosolids, recycled water, purified water, stormwater, ocean water, ocean sediments, and additional marine and freshwater environments;
- Prepares and verifies supplies, equipment, and datasheets for sample collection;
- Makes and records technical field observations;
- Conducts field fish and invertebrate community assessments;
- Participates in watershed and other water quality survey programs;
- Processes, prepares, stores, or preserves samples from source water, drinking (potable) water, domestic and industrial wastewater, biosolids, recycled water, purified water, stormwater, ocean water, ocean sediments, and additional marine and freshwater environments in preparation for subsequent analyses;
- Performs chemical, physical, bacteriological, microbiological, biological, molecular, bioaccumulation, and toxicological analyses of source water, drinking (potable) water, domestic and industrial wastewater, biosolids, recycled water, purified water, stormwater, ocean water, ocean sediments, and additional marine and freshwater samples in a State Environmental Laboratory Accreditation Program (ELAP) certified laboratory;
- Examines, taxonomically identifies, and enumerates aquatic (marine and freshwater) plant and animal species;
- Assists with air quality monitoring, analysis, and reporting;
- Calibrates, maintains, operates, and programs complex analytical or oceanographic equipment and instrumentation;
- Performs basic troubleshooting of analyses and instrumentation when necessary;
- Reviews, understands, and updates Standard Operating Procedures (SOPs) and associated technical guidance documents;
- Enters results of analyses into appropriate computer programs and databases;
- Performs quality assurance/quality control checks of data and associated reports;
- Interprets results of analyses;
- Prepares data and organizes information for reports;
- Writes and produces regulatory compliance or contractual reports;
- Assists with assessing regulatory compliance and permit requirements to meet City, State, and Federal standards and requirements;

**\* 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.**

- Assists in the design and performance optimization of special sampling procedures and analytical protocols;
- Writes and modifies routine application programs for computer systems, and assists in database and network administration;
- Identifies, reads, analyzes, and researches water and wastewater treatment methods and regulations;
- Assists with treatment facility regulatory compliance;
- Performs data reduction and reporting activities;
- Assists with ocean outfall inspections;
- Determines possible sources of water contamination by reviewing gate books, engineering maps, and other data;
- Maintains databases and manual and computerized technical logs and records;
- Assists with processes and documentation required for laboratory certifications;
- Assists with management of the Laboratory Information Management System (LIMS), including but not limited to, data input, data management, and report creation and upload to various databases and computer programs;
- Assists with data calculations and statistical analyses;
- Conducts GIS analysis and mapping;
- Works with scientists from other agencies to ensure that laboratory data are consistent and accurate;
- Works with technical and administrative staff in making procurements of laboratory and monitoring equipment, supplies, and services;
- Conducts tours of laboratories and facilities;
- Assists in training technical staff.

#### **MINIMUM QUALIFICATIONS:**

Please note: the minimum qualifications stated below are a guide for determining the education, training, experience, special skills, and/or license which may be required for employment in the class. These are re-evaluated each time the position is opened for recruitment. Please refer to the most recent Job Description for updated minimum qualifications: <https://www.governmentjobs.com/careers/sandiego/classspecs>.

College graduation with a Bachelor's Degree in Biology, Chemistry, Environmental Studies, Marine Biology, Microbiology, Molecular Biology, Oceanography, Zoology, or a closely related biological, chemical, or physical science.