

**CLASS SPECIFICATION**  
**SAN DIEGO CITY CIVIL SERVICE COMMISSION**  
**LABORATORY TECHNICIAN - 1580**

**DEFINITION:**

Under general supervision, to perform sub-professional chemical, bacteriological, or forensic evidence testing of average difficulty.

**\* EXAMPLES OF DUTIES:**

- Assists in the chemical analysis of water, sewage, and industrial waste streams;
- Reads culture tubes and agar plates to determine extent of bacterial growth;
- Performs non-standard media and culture preparation;
- Collects and classifies invertebrates, mosquito larvae, and other biological specimens;
- Collects and transports water, sewage, industrial, ocean, bay, estuary, river, watershed, and other environmental samples for chemical and microbiological analyses;
- Independently collects water, sewage, and industrial waste samples from appropriate sampling points while maintaining "chain of custody" requirements;
- Performs analyses of sewage, including total solids, suspended solids, pH values, sulfides, alkalinity, and biochemical oxygen demand, carbon oxygen demand, gravimetric analysis of grease and oil, and nitrogen analysis;
- Records the results of basic chemical, biological, or bacteriological tests and performs other chemical tests in the field or laboratory;
- Performs field investigations and chemical analyses of water supplies and industrial wastes;
- Assists in investigation of water treatment methods;
- Prepares solutions, and stains, sterilizes, washes, weighs, and maintains preserved specimens;
- Sets-up, calibrates, and troubleshoots the more complex testing equipment; enters test results in LIMS;
- Files and disposes of blood and urine specimens;
- Prepares microbiological media, chemical reagents, and narcotics testing;
- Picks-up and delivers specimens;
- Properly disposes of and/or coordinates the disposal of contaminated material, hazardous chemical waste, and bio-hazardous waste;
- Prepares and records QA/QC testing; maintains laboratory books and required reports for monitoring agencies;
- Maintains inventory and orders supplies and media for the labs;
- Staffs the Trucked Waste Monitoring Lab overseeing waste hauler discharge documents and screening/sampling tanker contents to enforce permit compliance;
- Performs related duties.

\* **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.

### **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>.

Successful completion of 14 semester/21 quarter college units in one or a combination of the following: Chemistry (which must include coursework in organic and/or inorganic Chemistry, and at least one laboratory course), Biology and/or Microbiology (including at least one laboratory course), and/or Entomology and/or Invertebrate Zoology; **OR** two years of full-time experience in a laboratory performing a variety of chemical and biological tests (e.g., pH, turbidity, metal analysis, alkalinity, and solids using spectrophotometric, titrimetric, gravimetric, or similar measurement techniques), conducting aquatic bioassays, performing microbiological preparatory work or analyses, and/or identifying aquatic invertebrates; **OR** two years of full-time experience collecting samples from marine or fresh water environmental, drinking water or wastewater facilities, drinking water distribution systems, industrial facilities, storm water drains, or other sites to fulfill environmental regulatory requirements, **AND** at least one college-level course in Biology or Chemistry which must have included laboratory work. Qualifying experience must include field testing such as pH, conductivity, temperature, proper sample preservation, and the use of chain-of-custody forms. Possession of a valid California Class C Driver's License.