

CLASS SPECIFICATION

SAN DIEGO CITY CIVIL SERVICE COMMISSION

BIOLOGIST II

DEFINITION:

Under general supervision, to perform journey-level professional microbiological and biological tests, analyses and interpretations of potable water, wastewater, ocean and freshwater samples; to examine, classify and count aquatic plant and animal specimens; and to perform related work in a State-certified laboratory .

*** EXAMPLES OF DUTIES:**

- Conducts a variety of bacteriological, parasitological and virological tests and analyses of water, wastewater and sewage sludge samples to identify and quantify organisms such as viruses, bacteria, algae and parasitic and other protozoa;
- Assists in the design and performance of special sampling procedures and analytical protocols;
- Performs tissue culture protocols involving growing animal cell lines and samples for analysis of viral populations;
- Reads culture tubes and agar plates to identify bacteria, viruses and other organisms, and determine extent of their growth;
- Identifies coliform bacteria using gram stain and differentiation techniques;
- Analyzes and counts plankton for phytoplankton and zooplankton;
- Performs bacteriological tests on the potability of water reclaimed from sewage;
- Conducts microscopic and bacteriological analyses of sludge compost;
- Performs applied research on water and wastewater treatment methods;
- Determines possible sources of water contamination by reviewing gate books engineering maps, and other data;
- Makes and records technical field observations;
- Maintains technical logs and records;
- Enters analytical data into computers;
- Conducts quality assurance checks;
- Assists in training professional and technical staff;
- Collects, classifies and counts mosquitos;
- Recommends appropriate methods of mosquito control;
- Traps, counts and inspects fish;
- Raises fish in a hatchery;
- May collect samples from a boat or ocean monitoring vessel;
- Participates watershed and other water quality survey programs.

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 Announcement for updated minimum qualifications.

College graduation with a Bachelor's degree in a biological science or a closely related field, **AND** one year of professional level biological experience in a microbiology or biology laboratory performing biology, bacteriology or virology analyses.

- * **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.