

## CLASS SPECIFICATION

### SAN DIEGO CITY CIVIL SERVICE COMMISSION

#### BIOLOGIST I

##### DEFINITION:

Under immediate supervision, and in a training capacity, to perform professional level 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; to assist in more difficult microbiological and biological analyses; and to perform related work in a State-certified laboratory .

##### \* EXAMPLES OF DUTIES:

- Conducts 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;
- Assists in performing 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;
- 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 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 in 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.

- \* **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.