

**CITY OF SCOTTS VALLEY
CLASS SPECIFICATION**

SENIOR WASTEWATER LABORATORY ANALYST

JOB PURPOSE

Under general supervision, perform chemical and microbiological analyses and prepare reports in accordance with the wastewater treatment plant's NPDES permit and reclamation order. Conduct laboratory operations to maintain lab certification by the California Department of Health Environmental Laboratory Accreditation Program. Assist plant operations staff with operating data and troubleshooting of processes.

EXAMPLES OF DUTIES

Essential Duties:

- Plans, coordinates, and performs chemical and microbiological analyses to satisfy regulatory requirements;
- Develop and implements the Laboratory Quality Assurance Program to maintain laboratory certification;
- Prepares NPDES and other reports for wastewater and reclaimed water;
- Manages data collection and all laboratory records including chain-of-custody records;
- Collects samples for chemical, physical, and bacteriological testing;
- Prepares chemical reagents and bacteriological media;
- Trains plant personnel in standard laboratory methods and procedures;
- Orders laboratory supplies and keeps inventory;
- Prepares budget for laboratory supplies, equipment and contract laboratory work;
- Maintains laboratory and laboratory equipment;
- Plans and performs analyses to aid operations staff in troubleshooting plant performance;
- Maintains electronic records of plant performance and compliance;
- Reviews regulatory permits and federal and State requirements to ensure compliance with monitoring, reporting and laboratory operations regulations;
- May assist with pretreatment program oversight and implementation.

Marginal Duties:

- Assists plant personnel in the performance of process control tests;
- Performs related work as required.

EMPLOYMENT STANDARDS

- 1) Possession of at least a bachelor's degree in chemistry, biochemistry, biology, microbiology or environmental, chemical, or public health engineering, or natural or physical science; and
- 2) At least three years work experience in microbiological and inorganic chemical analysis of water, wastewater, solid waste, hazardous waste or other environmental samples. Post-graduate degrees may be substituted for part of the required experience.
- 3) In lieu of meeting requirements (1) and (2) above, possession of a Grade 2 Laboratory Analyst/Water Quality Analyst Certificate from the California Water Environment Association or the California-Nevada Section of the American Water Works Association (or a Grade 1 Certificate with the ability to obtain a Grade 2 Certificate within 12 months of employment with the City).
- 4) Possession of a valid California motor vehicle operator's license.

Ability to: Perform chemical and bacteriological tests upon wastewater and other samples; use equipment required for laboratory analyses; prepare chemical solutions and bacteriological media; follow standard laboratory procedures and record accurate observations of results; organize and verify data using statistical methods; evaluate and prioritize laboratory functions; write clearly; plan and organize own work; accurately perform mathematical calculations; maintain accurate records; develop and perform needed laboratory procedures; operate a networked personal computer and use installed software (knowledge of Excel and Access desirable); understand and apply complex regulatory documents; follow oral and written instructions; work independently with creativity and initiative; and to communicate effectively with those contacted in the course of work.

Knowledge of: Basic bacteriology; principles of inorganic and organic chemistry; basic statistics; methods, materials, and instrumentation for analyzing wastewater; sampling, sample preservation, and chain of custody handling; general wastewater treatment, especially the activated sludge process; general NPDES reporting and discharge requirements; basic laboratory and plant safety procedures.

CITY COUNCIL APPROVAL DATE: September 17, 2008