

Oro Loma Sanitary District
2655 Grant Avenue
San Lorenzo, CA 94580
(510) 276-4700

PLANT CHEMIST

DEFINITION

Under direction of the Director of Water Quality Services, to perform routine and technical chemical and bacteriological sampling, testing and qualitative and quantitative analyses of wastewater, sludge and related materials; to perform sophisticated analysis work; to maintain laboratory equipment, materials and records; and to prepare State, RWQCB, and other regulatory reports.

SUPERVISION EXERCISED

None.

IMPORTANT AND ESSENTIAL DUTIES

1. Assist in the planning and coordination of the NPDES program.
2. Develop new analytical techniques, specific to District requirements.
3. Work closely with operations staff to devise operational strategies which optimize plant performance.
4. Prepare a wide variety of detailed statistical and other reports regarding laboratory work.
5. Collect process control and compliance samples of wastewater, sludge, and related materials.
6. Perform various levels of chemical and bacteriological analyses on wastewater, sludge, and related materials.
7. Maintain the facility's ELAP Certification.
8. Organize and maintain general and specialized laboratory equipment.
9. Generate and maintain accurate records of work performed and results achieved, both electronically and in hard copies.
10. Conduct discharge surveys of receiving waters and industrial waste systems, establishing applied research projects for the purpose of improving process efficiencies.
11. Requisition supplies and materials, as needed.
12. Perform other related duties as assigned.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

- Chemical and bacteriological characteristics of sewage, and general chemical quantitative and qualitative analysis of organisms and micro-organisms common to sewage.
- Intricate laboratory equipment and its uses.
- Sources of information in fields related to sewage and industrial waste analyses, and of the standard methods for analysis of sewage.
- Sampling techniques, statistical analysis and quality control and assurance.
- Applicable local and State rules, regulations and other laboratory operations procedures and requirements.
- Basic safety practices and regulations.

Skill to:

- Safely perform laboratory analyses with a high level of precision and accuracy.
- Efficiently operate office equipment (computers, printers, scanners, copiers, etc.), and generate and maintain accurate and up-to-date records, reports, spreadsheets and databases.
- Operate a motor vehicle safely.
- Operate laboratory equipment and instrumentation, and perform routine laboratory work independently.

Ability to:

- Analyze physical, chemical and bacteriological problems and devise methods of solutions.
- Learn and apply new and existing State and Federal mandates and regulations.
- Prepare and maintain detailed records and reports.
- Train and oversee the work of technical subordinate personnel.
- Communicate clearly and concisely, both orally and in writing.
- Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.

Experience and Training Guidelines:

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Three years of laboratory experience involving the analysis of water, wastewater, solid waste, hazardous waste or other environmental samples.

Training:

Equivalent to a Bachelor's Degree from an accredited college or university, with emphasis on chemistry, biochemistry, biology, microbiology, or environmental, chemical or public health engineering, or natural or physical science.

License or Certificate:

Possession of a valid California driver's license, issued by the California Department of Motor Vehicles, and a driving record which meets the District's driving standards.

Possession of, or ability to obtain, within two years of employment, a Grade II Certificate as a Laboratory Technologist, issued by the California Water Environment Association. State Water Resources Control Board Wastewater Treatment Plant Operator certification desirable.

Special Requirements:

Essential duties require the following physical abilities and work environment:

The physical demands and work environment described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to stand, sit, walk, squat, reach, and twist; use hands to finger, handle or feel; reach with hands and arms; climb or balance; stoop, kneel, crouch or crawl; and talk or hear. The employee must occasionally lift and/or move up to 25 pounds. Occasionally, incumbents climb ladders. Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception, and ability to adjust focus.

The employee is occasionally exposed to confined spaces; fumes and airborne pathogens; toxic or caustic chemicals; extreme cold; extreme heat; and risk of electrical shock or mechanical hazards. Employees in this classification may perform duties that involve a potential risk of exposure to blood borne pathogens.

Effective Date: April 1993
Updated by: P. Zolfarelli, A. Simion
Updated on: March 9, 2009