



Laboratory Supervisor

Department: AWP

FLSA Status: Non-Exempt

Salary Grade: 34

SUMMARY DESCRIPTION

Incumbent is responsible for laboratory operations, oversight, and reporting for the Advanced Water Purification Facilities (AWPF) and Padre Dam MWD potable water quality monitoring and regulatory compliance. AWPF includes a 16 MGD Class 5 Water Reclamation Facility (WRF), associated Solids Handling Facility (SHF), Energy Recovery Facilities, a 12.5 MGD advanced treatment facility, appurtenant wastewater pump stations and conveyance facilities, a product water pump station, and a remote dechlorination facility. Under the general supervision of the Engineering and Compliance Manager, supervises and monitors work of the laboratory staff and QA/QC Specialist in full compliance with the California Code of Regulations' Title 22 Division 4, Chapter 19; conducts annual evaluations; establishes work schedules, assigns and prioritizes work, interprets and enforces policies and procedures; plans, organizes, and directs laboratory staff in the performance of complex chemical, physical and bacteriological analyses of wastewater, wastewater by-products, AWPF water, recycled water, and potable water to ensure compliance with a variety of regulatory requirements; coordinates laboratory analysis and special projects; prepares necessary documentation to complete regulatory reports and meet compliance deadlines; provides technical and professional support to operations, source control, and member agency staff; assistance in implementing emergency response action and any other duties as assigned.

ESSENTIAL DUTIES

1. Supervises, plans, organizes, controls, and evaluates the work of the laboratory and laboratory operations for the appropriate fields of accreditation and reporting of results in conformance with Title 22, Division 4, Chapter 19 of the California Code of Regulations.
2. Directly supervises staff to include: assisting with goal setting, assigning and monitoring work, conducting performance evaluations, creating staff schedules, coaching staff, interviewing applicants, ensuring training and making hiring and termination recommendations.
3. Under the direction of the Environmental Compliance and Engineering Manager, coordinates with the Operations, Maintenance, and EH&S Specialist to ensure compliance with safety, contractual and regulatory requirements that govern AWPF and Padre Dam MWD operations. Ensures collaboration with operations staff on compliance monitoring and reporting.
4. Assigns duties of Laboratory Supervisor to qualified personnel when absence exceeds 15 calendar days.

5. Appoints and assigns duties of QA/QC Specialist. In the absence of the QA/QC Specialist serves as and performs the duties or assigns them to other qualified personnel.
6. Regularly uses and maintains the Laboratory Information Management System (LIMS) to track and report analytical data.
7. Performs chemical, physical and bacteriological analyses of wastewater, recycled, surface and potable waters in accordance with the regulatory requirements issued by the Department of Health Services and the California Water Resources Control Board.
8. Support operations and compliance monitoring for Padre Dam potable water distribution system.
9. Monitors standards of performance in quality control and quality assurance.
10. Monitors the validity of laboratory analyses to assure reliable data is generated.
11. Monitors the effects of new and changing federal, state and local regulations and implements changes to maintain compliance.
12. Develops, approves, and documents standard operating procedures and associated updates for a variety of laboratory sampling, testing, and documentation to ensure compliance with pertinent state and/or federal codes and regulations. Oversees audits to ensure SOPs are being implemented and adhered to.
13. Oversees development of the laboratory's Quality Assurance Program Manual and policies that address all quality assurance and quality control practices employed by the laboratory.
14. Maintains calibrates, adjusts and repairs laboratory equipment; arranges for instrumentation repairs and/or annual certification provided by outside contractors.
15. Researches new analytical methods, equipment and technologies and implements in the laboratory as necessary.
16. Manages the laboratory service contracts. Develops scopes of work and purchase orders for laboratory service contracts.
17. Collaborates with and supports AWP Compliance team in NPDES, DDW SWA, Title 22 Recycled Water, Biosolids, Stormwater, APCD, and Industrial Waste Source Control requirements. Reviews compliance monitoring reports and provides feedback to Compliance team.
18. Collaborates with and supports PDMWD Operations team in water quality monitoring and regulatory compliance. Reviews compliance monitoring reports and provides feedback to PDMWD Operations team.
19. Collaborates with and supports Padre Dam and AWP in stormwater compliance and Source Control programs as required.
20. Develops and oversees laboratory safety programs. Collaborates with EH&S Specialist to ensure safety training, procedures, and proper hazardous waste disposal.
21. Develops and administers AWP and Padre Dam Laboratory budget, performance metrics, and associated reporting.
22. Prepare monthly, quarterly, and annual compliance and other technical reports; maintain custody of records; compiles records and manages laboratory data and records.
23. Provide lab training to AWP and PDMWD personnel on proper lab methods, procedures, and techniques.
24. Prepare analytical and statistical reports on operations and activities.
25. Performs other duties as required.

QUALIFICATIONS

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Knowledge of:

1. Supervisory theories and principles;
2. Analytical theories and principles;
3. Chemistry and microbiology theories and principles;
4. Budgeting theories and principles;
5. AWWP and potable water permits and regulations;
6. Water quality standards;
7. Applicable laws and regulations;
8. Record keeping techniques;
9. Laboratory safety procedures and regulations;
10. California Code of Regulations, Title 22, Division 4, Chapter 19 as it relates to environmental laboratories, sampling techniques, and testing procedure and other pertinent state and federal regulations pertaining to certification of environmental laboratory operations.
11. Specialized computer operations and software including laboratory information; management systems (LIMS) utilized for data review and statistical analyses, and technical documentation and reporting, spreadsheets, word processing and databases;
12. Methods and applications of environmental laboratory quality assurance/quality control procedures and processes;
13. Chemical, microbiological, and physical characteristics of environmental samples;
14. Standard analytical methods for the analyses of environmental samples;
15. Advanced application of appropriate quality control parameters to ensure the accuracy, precision and validity of analytical data;
16. Advanced statistical analyses methods for environmental testing and reporting;
17. Basis of each laboratory test and understanding of how tests/analyses are used to monitor the treatment of wastewater, to determine the quality of drinking water and to distinguish between different water sources;
18. Methods and techniques of sample collection and sample preservation procedures;
19. Basic characteristics of common chemicals and their safe handling;
20. Operating characteristics of a variety of laboratory instrumentation and equipment;
21. Standard operating calibration procedure for laboratory instrumentation and equipment;

Skills/Abilities:

1. Monitoring and evaluating staff;
2. Preparing the divisional budget;
3. Prioritizing and coordinating laboratory activities;
4. Managing multiple tasks and responsibilities;
5. Administering contracts;
6. Understand, interpret, and apply applicable District and JPA policies, procedures and operational standards related to quality control/quality assurance in an environmental laboratory operation and its collection, testing and documentation processes;
7. Perform routine physical, chemical, and bacteriological analyses and laboratory calculations;
8. Utilize a LIMS in an effective manner;
9. Create and maintain policies, principles and procedures including Standard Operating Procedures;
10. Create and maintain statistical analytical tools;
11. Perform tests/analyses according to standard operating procedures using the appropriate quality controls and following the quality assurance plan;
12. Collect samples and wash glassware;

13. Assist with aspects of sampling requirements including chain of custody, preservation of samples, quality control of instrumentation, field test, recording of data and sampling procedures;
14. Prepare media, chemical reagents, standards, spikes and quality control solutions;
15. Analyze multiple samples in a short duration of time.
16. Operate, calibrate and maintain laboratory instrumentation and equipment in a safe and efficient manner;
17. Perform advanced statistical analyses of environmental laboratory data in an effective manner;
18. Using computers and related software applications;
19. Communication, interpersonal skills as applied to interaction with co-workers, supervisor, the general public, etc. sufficient to exchange or convey information and to receive work direction.
20. Regularly exercises discretion, independent judgment, and decision-making

Training/Experience Required:

1. High School Diploma or General Equivalency Diploma (G.E.D.);
2. Bachelor's Degree in Biology, Microbiology, Chemistry or related field and 5 years experience in a wastewater/water laboratory plus 5 years supervisory or management experience;
3. Experience in laboratory accreditation for relevant fields

Licensing Requirements:

1. Possession of a Valid California Driver's License.
2. Possession of a Grade 3 Laboratory Analyst Certification issued by the California Water Environment Association (CWEA) is required. Grade 4 Certification is highly desirable.

Safety Priorities:

1. Knowledge of general office and field safety.
2. Safety when working around traffic in the public right of way.
3. Use and care of Personal Protective Equipment specifically as it relates to hazardous chemical exposure.
4. Safe storage and handling of hazardous chemicals.
5. Defensive driving techniques.
6. Proper body mechanics when moving materials.
7. Understanding of Padre Dam's Safety Rules and Regulations, accident and injury reporting policies.
8. Padre Dam's Policy and Procedures for Violence in the Workplace.
9. Ability to complete safety training and work in a safe and efficient manner.

Physical Requirements:

1. Positions in this class typically require: climbing, balancing, stooping, kneeling, crouching, crawling, reaching, standing, walking, pushing, pulling, lifting, grasping, feeling, talking, hearing, and seeing.
2. Incumbents may be subjected to fumes, odors, dusts, infectious materials, gases and chemicals.
3. Medium Work: Exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of forces constantly to move objects.

Classification History:

New 4/2023