

QUALITY ASSURANCE OFFICER

I. Position Identification:

- A) Title: Quality Assurance Officer
- B) Bargaining Unit: Public Employees' Union, Local 1/AFSCME 57
- C) Customary Work Hours: 7:00 a.m. until 3:30 p.m.
- D) Customary Work Days: As scheduled
- E) Reports To: Laboratory Supervisor
- F) Directs the Work of: None
- G) Educational and/or Experience Requirements:

Any relevant combination of education and experience that would demonstrate the knowledge and skill outlined below is qualifying. A typical way of gaining the skills is:

Education: Equivalent to a bachelor's degree from an accredited college or university with major coursework in chemistry, biochemistry, biology, microbiology, natural or physical science, environmental engineering, sanitary engineering, chemical engineering, or a related field.

Experience: Three (3) years of increasingly responsible experience performing water and/or wastewater analyses, including training and/or experience in QA/QC procedures and laboratory quality systems.

H) Licenses and/or Certificates Required:

Possession of a valid California driver's license.

Possession of a California Water Environmental Association (CWEA) Laboratory Analyst Grade I certificate to be maintained throughout employment.

Possession of, or succession acquisition within 12 months of appointment, a CWEA Laboratory Analyst Grade II certificate to be maintained throughout employment.

II. FLSA Status: Non-Exempt

III. Position Summary:

Under direction, performs a variety of quality control/quality assurance (QA/QC) duties including reviewing, validating, implementing, and training staff in laboratory compliance and recordkeeping procedures related to physical, chemical, biological, and bacteriological water and wastewater analyses; develops, reviews, and monitors the implementation of and adherence to the laboratory's standard operating procedures, QA/QC, training, accreditation, safety, and chemical hygiene plans; and performs related duties, as assigned.

This journey-level classification is responsible for independently performing QA/QC duties in support of the City's water and wastewater laboratory. This position serves as the laboratory's Quality Manager as defined by the National Environmental Laboratory Accreditation Conference (NELAC or TNI). Positions at this level exercise judgment and initiative in their assigned tasks, receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the work unit. This class is distinguished from the Laboratory Analyst classification series in that the latter primarily perform routine and standard analyses of water, wastewater, sludge, industrial waste, and other samples related to process control and regulatory compliance.

Receives direction from the Laboratory Supervisor. Exercises no direct supervision over staff.

IV. Essential Functions:

Incumbents may be assigned to varying work schedules, weekend work and be called back to work as needed by the City.

1. Administer QA/QC program by performing a variety of QA/QC of qualitative and quantitative water and wastewater analyses, preparing or reviewing the preparation of calibration standards and QA check samples for internal laboratory use, and monitoring and evaluating laboratory test results to ensure reported data meets minimum acceptance criteria. Analyze, interpret, and validate data; recognize data abnormalities as they relate to process control and analytical testing; determine the causes of problems and make appropriate recommendations to take corrective action; prepare and submit corrective action and investigative reports as necessary.
2. Coordinate, monitor, and conduct independent and continuous QA system audits and management reviews as defined by TNI of laboratory performance, practices, and procedures using samples provided by regulatory or commercial agencies to ensure conformance and compliance with regulatory, Environmental Laboratory Accreditation Program (ELAP) requirements, and TNI standards.

3. Analyze, interpret, and validate laboratory data; recognize data abnormalities related to process control and analytical testing; determine causes of problems, make appropriate recommendations for, and monitor implementation of corrective actions; prepare and submit corrective action and investigative reports as necessary.
4. Develop, adhere to, ensure compliance with, and monitor laboratory QA/QC standards, sampling, recordkeeping, and safety procedures; make recommendations for changes to processes and procedures.
5. Maintain and review QC databases, charts, detection limits, and action levels for laboratory analyses; manage records retention and document control programs as required by TNI.
6. Develop, review, update, and maintain the laboratory's Standard Operating Procedures (SOPs), QA Manual, Quality Management System, training, accreditation, safety, and chemical hygiene plans, and other relevant plans and/or policies to ensure consistency and compliance with ELAP requirements and TNI standards; assist in developing approved state and federal testing methods and SOPs.
7. Research and monitor state and federal regulations pertaining to laboratory QA/QC; evaluate impact on laboratory practices and identify and recommend changes required to comply with regulations; assist with developing City response to state and federal agencies as appropriate.
8. Train employees in proper laboratory analyses, operation, use, and maintenance of equipment, and recordkeeping methods, TNI standards, ELAP requirements, safety procedures, and applicable federal, state, and local laws, rules, and regulations.
9. Collect field samples and perform field tests using established procedures and methods; analyze water, wastewater, sludge, industrial waste, seepage, and miscellaneous samples for process control, regulatory, and related studies utilizing sophisticated laboratory instrumentation.
10. Compile, maintain, and enter data into the Laboratory Information Management System (LIMS) and related databases; ensure data and records are current and complete; prepare and submit monitoring and related compliance reports and summaries for management review and/or to appropriate regulatory agencies.
11. Prepare media and bacteria cultures essential for microbiological testing.
12. Clean and maintain various laboratory equipment; clean and maintain the laboratory and work areas in a neat and orderly manner.
13. Develop and maintain positive public relations with an emphasis on customer service.

14. Observe and comply with all City and mandated safety rules, regulations, and protocols.
15. Perform related duties as required.

V. Job Related and Essential Qualifications:

Note: The required level and scope of the following knowledge and skills relate to the level of the position as defined in the class characteristics.

A. Knowledge of:

- Chemical, biological, and physical characteristics of various environmental matrices including water and wastewater.
- Methods and applications of TNI standards, environmental laboratory QA/QC procedures, and laboratory quality systems to ensure the accuracy, precision, validity, and compliance of laboratory data, analyses, recordkeeping, and reporting procedures.
- General chemical, biochemical, biological, microbiological, and physical laboratory testing methods and procedures of potable water and wastewater samples, including qualitative and quantitative analyses.
- Principles and practices of monitoring environmental laboratory SOPs, QA Manual, Quality Management System, training, accreditation, safety, and chemical hygiene plans, and other relevant plans.
- Basic principles of water and wastewater treatment, water distribution, and/or wastewater collection systems.
- Methods and techniques of research, data collection, and analysis and preparing technical, analytical, and compliance reports and general business correspondence.
- Mathematical principles and statistical techniques.
- Principles and procedures of recordkeeping.
- Principles of training and/or providing technical and functional direction to staff.
- Applicable federal, state, and local laws, codes, and regulations as well as industry standards and best practices pertinent to the assigned area of responsibility, including ELAP requirements and TNI standards.
- City, laboratory, and mandated safety rules, regulations, and protocols.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and City staff.

- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Modern equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

B. Skills in:

- Principles, practices, techniques, equipment, and materials required for basic chemical, biochemical, biological, microbiological, and physical analysis of samples of potable water and wastewater.
- Performing sampling techniques and related statistical analysis.
- Operating modern equipment and communication tools used for business functions and program, project, and task coordination.
- Effective use of computers, software, and government intranet/internet tools to research, generate, and submit relevant documentation.
- Maintaining needs of analytical instrumentation and equipment.
- Using computers, computer applications, and software programs including Laboratory Information Management System (LIMS), spreadsheets, and word processing.
- Making arithmetical calculations quickly and accurately.
- Coordinating multiple projects and meeting deadlines.
- Writing standard operating procedures.
- Safe driving and work practices, including common laboratory safety such as acid handling and the use of fume hoods.
- Meet the physical, mental, and environmental demands of the job.

C. Ability to:

- Perform QA/QC of chemical, biochemical, biological, microbiological, and physical analyses of various matrices including water and wastewater.
- Conduct independent and continuous QA system audits and management reviews.
- Ensure laboratory plans, processes, and policies are consistent and comply with ELAP requirements and TNI standards.
- Evaluate the outcomes and results of laboratory analyses in order to detect inconsistencies and errors and recommend corrective solutions.

- Train and direct employees in proper laboratory analyses, operation, use, and maintenance of analytical instruments and related laboratory equipment, and recordkeeping methods, TNI standards, ELAP requirements, safety procedures, and applicable federal, state, and local laws, rules, and regulations.
- Perform sampling techniques and related qualitative and quantitative analyses.
- Develop, monitor, and implement laboratory QA/QC practices, policies, procedures, and work standards.
- Read and interpret Safety Data Sheets (SDS) related to various chemicals used within the lab.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
- Effectively represent the department and the City in meetings with governmental agencies; community groups; various business, professional, and regulatory organizations; and in meetings with individuals.
- Make accurate mathematical and statistical computations.
- Prepare clear and concise reports, correspondence, documentation, and other written materials.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Independently organize work, set priorities, meet critical deadlines, and follow-up on assignments.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.
- Effectively use computer systems, software applications relevant to work performed, and modern business equipment to perform a variety of work tasks.

VI. Physical Demands/Qualifications:

1. Manual dexterity, fine hand coordination, and vision sufficient to operate standard office equipment and supplies for potentially long periods of time and perform repetitive routine laboratory tasks without experiencing abnormal hand, wrist, or eye strain.
2. The ability to distinguish color.

3. Hearing and speech sufficient to communicate and understand conversations, both in person and on the telephone, and acute hearing to distinguish audible alarms.
4. Exposure to chemicals, biohazards, hazards of water, weather exposure, trip/fall hazards, power tools and wild animals.
5. Able to work safely outdoors in all weather.
6. Stand, climb, and walk for extended periods.
7. Work on slippery and uneven surfaces including steep or rocky river banks.
8. Lift, push, pull, and/or carry equipment up to 25 pounds with assistance.
9. Frequently bend, stoop, kneel, and reach to perform assigned duties as well as push and pull drawers open and closed to retrieve and file information.

NOTE: Some accommodations may be made for some physical demands for otherwise qualified individuals who require and request such accommodations.

VII. Non-Physical Demands/Qualifications:

1. Communicate information clearly and effectively on a number of different levels, both verbal and written.
2. Demonstrate a high level of integrity.
3. Operate under deadlines.
4. Be organized and capable of managing projects to schedule.
5. Possess a valid California driver's license.

VIII. Environmental Conditions:

1. Working conditions in the office are clean, well-lit, and free from extremes of temperature and humidity with low to moderate noise levels.
2. Working conditions in the field are subject to variations in temperature and may include wind, rain and other elements.

IX. Other duties and requirements:

This class description lists the major duties and requirements of the job and is not all-inclusive. Not all duties are necessarily performed by each incumbent. Incumbents may be expected to perform job-related duties other than those contained in this document and may be required to have specific job-related knowledge and skills.