

**CLASS SPECIFICATION**  
**Laboratory Supervisor**

FLSA Status: Exempt  
Union Representation: Nonrepresented

**GENERAL PURPOSE**

Under general direction, reviews, supervises and evaluates the work and activities of the Cryptosporidium and microbiology sections of the laboratory; supervises, verifies and may perform the processing, analysis and microscopy in the laboratory sections, verifies that all Cryptosporidium and microbiology analysis meets the required quality assurance and regulatory criteria; and performs related duties as assigned.

**DISTINGUISHING CHARACTERISTICS**

A Laboratory Supervisor is responsible for supervising and coordinating staff engaged in processing and analyzing Cryptosporidium and other microbiological samples. Incumbents develop and implement improvements to bureau operations, assign personnel to meet the demands of bureau workload and ensure employees conform to standards and procedures.

Laboratory Supervisor is distinguished from Laboratory Manager in that the incumbent in the latter class is responsible for managing all laboratory operations, as well as that incumbent's greater responsibility for developing and implementing policies and procedures to ensure that all laboratory services provided are consistent with overall goals of the bureau. The Laboratory Supervisor classification is also distinguished by its responsibility for reviewing and administering progressive discipline beyond written reprimands and for its focus on performing and overseeing Cryptosporidium analysis.

**ESSENTIAL DUTIES AND RESPONSIBILITIES**

Any one position in this class may not perform all the duties listed below, nor do the listed examples of duties include all similar and related duties that may be assigned to this class.

1. Plans, supervises and evaluates the work of assigned staff; with staff, develops, implements and monitors work plans to achieve bureau mission, goals and performance measures; supervises, participates in developing, recommends and implements plans, policies, systems and procedures applicable to unit responsibilities; determines improvements to bureau operations by investigating deficiencies and problem areas; develops, recommends and implements changes to operational policies and procedures.
2. Plans and evaluates the performance of assigned staff; establishes performance requirements and personal development targets; regularly monitors performance and provides input for performance improvement and development; prepares recommendations for awards and other rewards to recognize performance; recommends disciplinary action, up to and including termination, to address performance deficiencies, in accordance with the City Charter, Code, human resources policies and labor contract provisions.

3. Provides leadership and works with staff to create a high performance, service-oriented work environment that supports the City's and bureau's mission, objectives and service expectations; provides leadership and participates in programs and activities that promote workplace diversity and a positive employee relations environment.
4. Develops requests for proposals, reviews proposals and selects consultants; manages outside lab contracts, reviewing work products and managing budgets.
5. Serves as the Principal Analyst for Cryptosporidium and Giardia analysis as defined by the Environmental Protection Agency and state certification programs. May conduct all steps of EPA Method 1623/1623.1 including filtration, elution, concentration, immunomagnetic separation, and specializes in identification and enumeration by FA/DAPI/DIC microscopy.
6. Conducts technical investigations and lead research on Cryptosporidium methodology, both through experimentation within the lab and through literature review and collaboration with industry leaders and other utilities; design and lead experimental trials.
7. Obtains and maintains state accreditation for Cryptosporidium and Giardia analysis; establishes a quality control system within the Cryptosporidium section that is compliant with the NELAC institute standards; trains personnel on quality assurance procedures; reviews and validates compliance data.
8. Provides technical expertise and advises the bureau on microbiological topics such as water borne pathogens, biofilms, algae, zooplankton and speciation of coliform bacteria.
9. Supervises and may conduct analysis of algae, zooplankton, bacteria and other chemical or physical parameters.

## **MINIMUM QUALIFICATIONS**

### **Knowledge of:**

1. Federal and state laws, procedures and regulations governing drinking water systems and Cryptosporidium and bacteriological treatment, monitoring and analysis.
2. Theory, principles, practices and methods used in complex microbiological, chemical and physical analysis and testing of water and environmental samples including fluorescence assay microscopy.
3. Methods and processes used in drinking water treatment.
4. Applicable chemical and microbiological analysis, including Cryptosporidium, Giardia, bacteria, phytoplankton and zooplankton.
5. Safe laboratory practices and procedures.
6. Principles and practices of effective management and supervision.

**Ability to:**

1. Analyze, evaluate, interpret, explain and apply complex federal and state environmental law and regulations as they apply to laboratory practices and reporting.
2. Use, maintain, and troubleshoot complex laboratory equipment, including microscopes, in the analyses of samples.
3. Apply applicable scientific principles towards experimental trials, obtaining and interpreting results.
4. Accurately identify and characterize *Cryptosporidium* and *Giardia* by specialized microscopy techniques.
5. Develop and write standard operating procedures compliant with accreditation requirements
6. Prepare clear and accurate reports
7. Communicate clearly, accurately and concisely, orally and in writing.
8. Organize, set priorities and exercise sound independent judgment within areas of responsibility.
9. Maintain records and files on testing, analysis, quality assurance and control in conformance with regulatory requirements.
10. Establish and maintain effective working relationships with staff and others encountered in the course of work.

**Training and Experience:**

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from a college or university with a major in microbiology or a closely related field; and five years of increasingly responsible laboratory experience involving *Cryptosporidium* and other microbiological analysis typically performed in a water quality laboratory; or an equivalent combination of training and experience.

**Licenses; Certificates; Special Requirements:**

A valid state driver's license.

Appropriate state-required certification.

Must be able to obtain EPA Principal Analyst credentials for *Cryptosporidium* within one year of hire.

Must be able to obtain or qualify according to TNI standard 4.1.7.2 as the technical manager for microbiology.

**PHYSICAL AND MENTAL DEMANDS**

Persons with disabilities may be able to perform the essential duties of this class with reasonable accommodation. Reasonable accommodation will be evaluated on an individual basis and depends, in

part, on the specific requirements for the job, the limitations related to disability and the ability of the hiring bureau to accommodate the limitation.



**Class History:**

Adopted: July 1, 2016