

CITY OF CHATTANOOGA

Classification Specification Title: Laboratory Analyst 1 (Wastewater)

Department: Wastewater

Pay Grade: WWFG.09E

Supervision Received From: Manager Laboratory Services

FLSA Status: Exempt

Supervisory Responsibility For: None

Established: 6/29/07

Revision Dates: 4/2/25;

12/11/23; 10/20/23; 10/3/22

CLASSIFICATION SUMMARY:

Incumbents in this classification are responsible for performing qualitative and quantitative analysis on a variety of wastewater, industrial and plant samples, including more complex analysis requiring knowledge and experience in operating the atomic absorption spectrophotometer, mercury analyzer, and inductively-coupled plasma spectrophotometer (ICP-OES).

Duties include collecting and analyzing samples, preparing samples for analysis, assisting with managing laboratory databases, preparing and maintaining a variety of records, preparing reports, calibrating laboratory equipment and monitoring laboratory supplies and inventory. Works under limited supervision.

SERIES LEVEL: Laboratory Analyst 1 is the second level of a five-level laboratory series.

ESSENTIAL FUNCTIONS:

(The following duties ARE NOT intended to serve as a comprehensive list of all duties performed by all employees in this classification, only a representative summary of the primary duties and responsibilities. Incumbent(s) may not be required to perform all duties listed and may be required to perform additional, position-specific duties.)

May analyze wastewater samples by performing a variety of standard chemical, bacteriological and physical examinations requiring knowledge of and experience with EPA-approved test methods. Routine analysis includes total organic carbon and metals analysis.

May analyze prescribed quality control samples and evaluate the results to ensure they are within required control limits. Investigates out-of-control data to determine, if possible, the cause.

Takes corrective action to reduce or eliminate future occurrences of aberrant quality control data.

May operate, calibrate, and maintain complex equipment and instruments, including the atomic absorption spectrophotometer, mercury analyzer, and inductively-coupled plasma spectrophotometer (ICP-OES).

Maintains the laboratory water purification systems.

Is responsible for contacting the manufacturer for technical support, as needed, for complex problems and keeping instrument maintenance logs up-to-date.

May collect and/or receive wastewater samples, industrial waste samples, stormwater samples, landfill samples, and chemical samples; verifies and maintains chain-of-custody for samples in a way that maintains the legal defensibility of the records.

May be on-call, as needed, to initiate water quality testing after normal business hours.

May be required to work even during trying times such as epidemics or pandemics and during times of emergency declarations, since much of the data generated is essential to regulatory requirements and for operational purposes.

May work with and around hazardous chemicals and wastewater, which may impose a risk of personal injury or contracting of infectious disease.

May be primarily responsible for generating data used to determine compliance with State and Federal regulations and applicable environmental permits issued to the City.

Signs an affidavit each month attesting to the truth, accuracy, and completeness of data produced with penalty of discipline up to and including termination.

May be primarily responsible for generating data used to determine efficient operation of the City's wastewater treatment plant.

Data produced are used to make adjustments to wastewater operations, as needed.

This includes testing of chemicals used in treating wastewater to ensure they meet the specifications required by City contracts.

May be required to pass an EPA-mandated proficiency study of blind samples annually; document any issues; make corrections and retest any parameters that are not within study acceptance limits.

May sign documents and keep records in such a way that these may be used in a court of law, if necessary.

May immediately notify interested parties of permit violations or other aberrant results requiring attention, reporting to regulatory authorities, or correction.

May enter testing results directly into the laboratory database; or enters raw data into spreadsheets and imports calculated values into the laboratory database for review.

Exports data to operational databases, as necessary, for use by other groups within the City.

Reviews for completeness and accuracy data entered by other employees.

May prepare and review reports of laboratory results to be sent to end users for use in monitoring and permit compliance.

Assists in preparing the monthly EPA Discharge Monitoring Reports required by the City's National Pollutant Discharge Elimination System permit.

May prepare standard solutions and reagent solutions for use in daily analytical testing in accordance with quality control procedures and standard operating procedures.

May review for accuracy and update standard operating procedures required for laboratory analysis.

May assist with sample log-in and managing laboratory databases, which may include correcting problems, routine maintenance, set-up functions and communicating with outside vendors to resolve technical issues.

May record quantities of lab supplies and chemicals taken from the stockroom to assist in maintaining an adequate supply at all times.

May check in laboratory supplies as they are received and place them in the appropriate location in the stockroom or chemical cabinet.

May assist senior staff with assignments, as needed.

Must meet regular attendance requirements.

Must be able to maintain good interpersonal relationships with staff, co-workers, managers and citizens.

Must accomplish the essential functions of the job, with or without reasonable accommodations, in a timely manner.

Perform other duties as assigned.

This position is deemed essential during inclement weather situations, and must report to or remain at work, even when administrative closings are announced, as determined by the Department Head.

DEPARTMENT SPECIFIC DUTIES (if any):

MINIMUM QUALIFICATIONS: Bachelor's Degree with coursework in Chemistry, Biology, Environmental Science and three (3) years prior laboratory analysis experience, including atomic absorption analysis; or any combination of equivalent experience and education. Must have some experience using spreadsheet software and databases to compile and process numerical or statistical data.

LICENSING AND CERTIFICATIONS: Valid Driver's License.

SUPPLEMENTAL INFORMATION:

Knowledge of chemistry and biology theory and concepts; laboratory equipment, machinery, tools, and materials; data analysis techniques; database management and advanced spreadsheet concepts; total organic carbon and atomic absorption analysis techniques; mathematical concepts and chain of custody principles.

Skill in performing total organic carbon and atomic absorption analysis; operating, maneuvering and controlling the actions of applicable laboratory equipment, tools and materials; evaluating, auditing, deducing and assessing data utilizing established guidelines; performing mathematical calculations, including linear regression; interpreting diagrams; managing databases, programming spreadsheets and communication and interpersonal skills as applied to interaction with coworkers, supervisor, and the general public, sufficient to exchange or convey information and to receive work direction.

PHYSICAL DEMANDS: Positions in this class typically require reaching, standing, walking, lifting, fingering, grasping, feeling, talking, hearing, seeing and repetitive motions.

WORK ENVIRONMENT: 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 force constantly to move objects. Incumbents may be subjected to fumes, odors, gasses, poor ventilation, chemicals, and infectious diseases.

SPECIAL REQUIREMENTS:

Safety Sensitive: N

Department of Transportation - CDL: N

Child Sensitive: N

The City of Chattanooga, Tennessee is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City will provide reasonable accommodations to qualified individuals with disabilities and encourage both prospective and current employees to discuss potential accommodations with the employer.