

**City of Dallas
Classification Specification**

Title:	Chemist	Class Code:	04203
Application:	Career Series	Pay Grade:	H
Supplemental/Code:	Professional/2	Established:	10/01/94
FLSA Status:	Non-Exempt	Revised:	10/01/14

Position Purpose:

Perform organic, inorganic, biological, and physical analyses of samples (e.g., water, wastewater, soil, sludge, air) submitted by various departments using prescribed scientific methods to ensure compliance with federal, state, and local environmental and health regulations.

Essential Functions:

1. Performs chemical, biological and physical tests of water, air pollutants, soil, sludge, and wastewater to ensure compliance with federal, state and local regulations, monitor chemical treatment processes, and ensure water and wastewater quality parameters are met.
2. Maintains and troubleshoots laboratory instruments and equipment and calibrates on-line instrumentation to ensure accurate test results and QA/QC requirements are met for laboratory certification.
3. Analyzes incoming chemicals used in water/wastewater treatment processes to ensure they meet quality standards.
4. Prepares reagents for use in testing procedures to ensure consistent quality of test results; sterilizes glassware used in lab analyses.
5. Develops, updates and recommends methods for the analysis and treatment of various pollutants in water, wastewater, industrial waste, storm water, and air to provide high-quality results at the lowest possible cost.
6. Inputs analysis results into computer data files in order to maintain a permanent record; prepares reports as required.
7. Trains new personnel in City laboratory methods to ensure consistency in testing results; may assume lab supervisor's duties in supervisor's absence.
8. Performs analyses which are used to monitor lakes, streams, and watersheds to protect the City's water supply; performs special analyses as required by City departments.
9. Occasionally conducts plant tours to inform the public of the processes involved in making safe drinking water and answers the public's questions regarding water quality and processing.
10. Audits and evaluates test data produced by City labs and contract labs to ensure that they meet minimum quality assurance and quality control standards.
11. Regular, reliable and punctual attendance is an essential function of the job.

Knowledge, Skills and Abilities Required to Perform Work:

Knowledge of chemical, physical and biological analysis, testing, and the principles and practices applied to the water or wastewater laboratory.

Basic knowledge of federal and state regulations associated with chemical treatment standards.

Basic knowledge of the water treatment process.

Basic knowledge of micro and macro biological factors which contribute to water resources quality.

Basic knowledge of advanced analytical instruments technology.

Ability to establish and maintain an effective rapport with all levels of management, city officials, vendors, other government agencies, other employees and the general public.

Knowledge of basic chemistry and material safety data sheet (MSDS).

Ability to communicate effectively both orally and in writing.

Ability to perform standardized chemical analyses.

Ability to read and comprehend various chemical, biological, and physical testing procedures.

Ability to prepare and present scientific records and reports.

Basic microcomputer skills.

Working Conditions and Hazards:

The major activities of the job are performed in a laboratory with some duties performed outdoors, at a plant site, and sludge lagoon.

Extensive walking and standing.

Exposed to chemical and biological hazards from reagents, acids, treatment chemicals, sludge and wastewater.

Ability to carry 40-60 lbs. of reagent and samples.

The above statements are intended to describe the general nature and level of work performed by personnel assigned to this classification and is not necessarily an exhaustive list of all responsibilities, duties and skills required.