

**JOB DESCRIPTION
CITY OF SPRINGFIELD**

**HUMAN RESOURCES DEPARTMENT
EMPLOYMENT AND
COMPENSATION DIVISION**

Job Title	<u>Chemist</u>
Sch & Grade	<u>PAT-9</u>
Class Code	<u>BF15</u>
FLSA Status	<u>Non-Exempt</u>
Bargain Unit Elig.	<u>AFSCME</u>
Occupational Group	<u>Laboratory</u>

PRIMARY PURPOSE:

To perform professional chemical analytical work in accordance with City, State and Federal procedures and standards.

SUPERVISION:

Under the general supervision of the Chief of Environmental Laboratory or Laboratory Supervisor (Wastewater); supervises small number of laboratory workers as assigned.

DESCRIPTION OF WORK:

ESSENTIAL FUNCTIONS:

1. Performs both routine and technical chemical analysis on a wide variety of biological and other organic and inorganic specimens including, but not limited to, foods, water, milk, raw and/or treated wastewater, etc.
2. Performs extractions and trace substance analyses utilizing advanced analytical instrumentation including, but not limited to, gas chromatograph, atomic absorption spectrophotometer, inductively coupled plasma spectrometer, and gas chromatograph/mass spectrometer.
3. Maintains and records data and prepares technical reports of tests completed.
4. Independently conducts assigned research on new analytical methodology.
5. Performs complex mathematical calculations associated with chemical analyses.
6. Maintains, calibrates and programs assigned instrumentation.
7. Provides expert instruction on laboratory procedures and protocol as required.
8. Maintains assigned quality control and instrument calibration records.
9. Provides testimony in a court of law regarding tests performed as required.
10. Provides assistance in assigned microbiological analyses.

IMPORTANT FUNCTIONS:

11. Conducts tours of plant and laboratory operations as necessary.
12. Monitors the work of less experienced laboratory personnel as required.
13. Cleans laboratory premises as required.
14. Performs minor office administration tasks such as copying, faxing and etc. as required.

Performs related work as required.

QUALIFICATIONS REQUIRED:

Any combination of training or experience providing the following knowledge, skills or abilities:

Knowledge

Advanced knowledge of organic and inorganic chemistry. Advanced knowledge of principles, methods and procedures involving chemical laboratory techniques and analysis. Thorough operational knowledge of advanced laboratory instrumentation. Working knowledge of laboratory operations including data handling, quality assurance/control, safety practices and method determination and development. Basic knowledge of biological testing methodology, Laboratory Information Systems (LIMS) and computer software systems including word processing, spreadsheet and database.

Abilities

Effectively apply chemical, biological and mathematical principals and practices in the analysis and quantification of various samples. Independently plan, prioritize and organize work in an efficient manner; read, interpret and apply a variety of scientific methods related to sample analysis; accurately operate advanced analytical instruments and interpret results; make accurate calculations for the quantification of desired analytes; follow oral and written instructions; communicate effectively both verbally and in writing; deal effectively and courteously with associates and the general public; perform the essential functions of the job without posing a direct threat to the health and safety of others; effectively welcome and embrace differences among employees and citizens; performs effectively as a member of the team in carrying out the City’s stated mission and philosophy.

Experience, Education, and Training

Graduation from an accredited four-year college or university with a Bachelor’s Degree in Chemistry plus at least two years experience as an analytical chemist. Masters degree in chemistry may be substituted for one year of the required experience. Professional work experience as an analytical chemist may be substituted for formal education requirement on a year for year basis. Work experience must include use and operational maintenance of analytical equipment such as gas chromatograph, atomic absorption spectrophotometer, inductively coupled plasma spectrometer, and mass spectrometer.

Physical Requirements

Performs bending, squatting, kneeling, and reaching from ground level to six feet in height; push and pull up to 50 pounds; hold and grip objects; may be subject to long periods of standing; must be able to distinguish colors relating to chemical and bacteriological test interpretations.

Working Environment

Primarily indoor with heating and cooling regulated; may be exposed to extreme weather conditions when traveling to and from sample collection sites; subject to chemical and toxic waste hazards as well as other safety hazards associated with testing and sampling treated wastewater.

Licensing/Certification

Miscellaneous Requirements

Last Revision:	February 8, 2012	GENERAL ORDINANCE NO. 2282
Comments:	Updated Abilities	Date: May, 1974

I have read the foregoing job description in its entirety and understand its contents. I can perform the essential functions outlined with or without reasonable accommodation under the Americans with Disabilities Act.

Signed: _____ **Date:** _____