



Office of Human Resources
Chemist - CE0377
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General Statement of Duties

Performs full performance laboratory analysis of water samples to determine compliance with water quality standards and provides technical analytic support for governmental agencies responsible for enforcement of standards.

Distinguishing Characteristics

This classification performs full performance laboratory analysis of water samples to determine compliance with water quality standards and provides technical analytic support for governmental agencies responsible for enforcement of standards. This class is distinguished from the Wastewater Quality Control Manager, which performs management-level work planning and directing the activities of the Quality Control and Laboratory Sections of Wastewater Management, which includes the Industrial Pretreatment, Sampling, and Investigation units.

Essential Duties

Performs qualitative and quantitative analysis of water, wastewater, sludge, and industrial effluents using laboratory equipment and standardized procedures.

Calculates the chemical and biological oxygen demands, alkalinity, suspended solids, volatile solids, the presence of and identification of microorganisms, chemicals, or other contaminants constituting a public health hazard.

Performs tasks which may require familiarity with a variety of laboratory techniques and equipment including oxygen analyzers, pH/selective ion systems, total organic carbon analyzer, spectrophotometer, conductivity analyzers, turbid meter, atomic absorption systems (furnace and flame), gas chromatographs, high performance liquid chromatography, and fluorimeter.

Provides information on water sampling and preservation techniques,

Performs water quality analysis for governmental agencies.

Testifies in court regarding laboratory test procedures and results.

Restocks supplies and maintains supply inventories.

Assists in training and checking the work of other employees on various projects.

Maintains established departmental policies and procedures, objectives, recordkeeping in laboratory notebooks, reports and data charts, quality assurance program, safety, environment and infection control standards.

Performs other related duties as assigned.

Employees may be re-deployed to work in other capacities in their own agencies or in other City agencies to support core functions of the City during a City-wide emergency declared by the Mayor.

Any one position may not include all of the duties listed. However, the allocation of positions will be determined by the amount of time spent in performing the essential duties listed above.

Competencies

Attention to Detail - Is thorough when performing work and conscientious about attending to detail.

Decision Making - Specifies goals and obstacles to achieving those goals, generates alternatives, considers risks, and evaluates and chooses the best alternative in order to make a determination, draw conclusions, or solve a problem.

Oral Communication - Expresses information to individuals or groups effectively; taking into account the audience and nature of the information; makes clear and convincing oral presentations; listens to others, attends to nonverbal cues and responds appropriately.

Problem Solving - Identifies problems; determines accuracy and relevance of information; uses sound judgment to generate and evaluate alternatives, and to make recommendations.

Reasoning - Identifies rules, principles, or relationships that explain facts, data, or other information; analyzes information and makes correct inferences or draws accurate conclusions.

Writing - Writes in a clear, concise, organized, and convincing manner for the intended audience.

Knowledge & Skills

Knowledge of the concepts, principles, and theories of the composition, structure, and properties of substances, and of the chemical processes and transformations, including uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.

Level of Supervision Exercised

By position, performs lead work.

Education Requirement

Bachelor's Degree in Chemistry, or in a related science with a minor in Chemistry.

Experience Requirement

Three (3) years of experience in a laboratory performing quantitative analysis and testing.

Education & Experience Equivalency

No substitution of experience for education is permitted.

Additional appropriate education may be substituted for experience requirements.

Licensure & Certification

None

Working Environment

Extreme Heat: temperature hot enough to cause marked bodily discomfort.

Wet: Frequent contact with water or other liquid.

Hazards: conditions where there is danger to life, body, and/or health.

Atmospheric Conditions: conditions that affect the skin or respiratory system.

Potential exposure to hazardous chemicals.

Potential exposure to hazardous anesthetic agents, body fluids and wastes.

Potential exposure to infection from disease-bearing specimens

Potential exposure to odorous chemical and specimens
Potential exposure to toxic chemicals
Potential exposure to infections and contagious disease.
Subject to burns and cuts
Subject to electrical and radiant energy hazards.

Level of Physical Demand

1-Sedentary (0-10 lbs.)

Physical Demands

(Physical Demands are a general guide and specific positions will vary based on working conditions, locations, and agency/department needs.):

Carrying: Transporting or moving an object.

Color vision: Ability to distinguish and identify different colors.

Eye/Hand/Foot Coordination: Performing work through using two or more body parts or other devices.

Feeling: Perceiving attributes of objects by means of skin receptors, communication, or otherwise.

Fingering: Picking and pinching, through use of fingers or otherwise.

Handling: Seizing, holding, grasping, through use of hands, fingers, or other means.

Hearing: Perceiving and comprehending the nature and direction of sounds.

Lifting: Moving objects weighing no more than 10 pounds from one level to another.

Reaching: Extending the hands and arms or other device in any direction.

Sitting: Remaining in a stationary position.

Stooping: Positioning oneself low to the ground.

Talking: Communicating ideas or exchanging information.

Vision Near Acuity: Ability to perceive or detect objects at 20 inches or less.

Background Check Requirement

Criminal Check

Education Check

Employment Verification

By position, Motor Vehicle Record

Assessment Requirement

None

Probation Period

Six (6) months.

Class Detail

Pay Grade: EX-11

FLSA Code: Y

Established Date: 9/21/2018

Established By: LS

Revised Date:

Revised By:

Class History: