

CITY OF ST. LOUIS CLASSIFICATION SPECIFICATION

CLASSIFICATION

TITLE: Chemist I

CLASS CODE: 3551

GENERAL DESCRIPTION OF DUTIES:

Incumbents in this classification monitor water quality, make chemical changes, and perform chemical analysis to ensure compliance with applicable regulations; assist with bacteria analysis; and maintain required documentation for certification.

DISTINGUISHING CHARACTERISTICS:

This is an entry-level professional classification in the Water System Maintenance Series – Adjunct Group job family within the City of St. Louis. Incumbents in this classification perform moderately complex duties with a variety of related tasks. The distinguishing characteristics of this classification within the series include responsibility for performing analytical testing of the city's water system/supply, and adjusting chemical changes used in the water treatment process.

Incumbents work under general direction. They are generally in charge of an organizational unit, plan and carry out assignments with considerable independence, and have some latitude in developing procedures and methods. Supervision is given by occasional conferences.

EXAMPLES OF WORK (Illustrative Only):

(The list of duties is intended to be representative of the duties performed in positions within this classification. It does not include all the duties that may be assigned to a position and is not necessarily descriptive of any one position in this class.)

Establishes chemical feed rates; reviews and monitors control test results; determines required changes to dosage amounts; informs supervisor of treatment problems or emergency conditions.

Conducts Wet Analysis Tests on samples; interprets results and provides appropriate documentation.

Conducts Instrumental Analysis on samples; interprets results and provides appropriate documentation.

Performs bacteriological analyses on samples; interprets results and provides appropriate documentation.

Operates, calibrates, and maintains test equipment and instruments.

Ensures laboratory certification by following established policies and procedures.

Monitors test compliance with requirements.

Maintains quality assurance records and procedures.

Performs activities of technician in technician's absence.

Prepares standard solutions and reagents.

Performs special tests and investigations.

Maintains inventory of laboratory supplies.

Assumes responsibilities of supervisor in supervisor's absence.

Responds to customer inquiries and complaints.

Participates in plant tours.

Maintains communication within work group; communicates with other work groups.

Performs other duties as assigned.

KNOWLEDGE, SKILLS AND ABILITIES:

Data Utilization:

Requires the ability to perform mid-level data analysis including the ability to audit, deduce, assess, conclude and appraise. Requires discretion in determining and referencing such to established criteria to define consequences and develop alternatives.

Human Interaction:

Requires the ability to explain, demonstrate and clarify to others such as co-workers and the public within well-established policies, procedures and standards. Ability to follow specific instructions and respond to simple requests from others.

Equipment, Machinery, Tools and Materials Use:

Requires the ability to operate, maneuver and/or provide simple but continuous adjustment on equipment, machinery and tools such as a computer, and/or materials used in performing essential functions.

Verbal Aptitude:

Requires the ability to utilize reference, descriptive, consulting, design and advisory data and information such as log sheets, mineral analysis, compliance reports, and methods manuals.

Mathematical Aptitude:

Requires the ability to perform addition, subtraction, multiplication and division; calculate decimals, fractions and decimals; perform mathematical operations involving advanced algebra, integral calculus, statistical inference, and descriptive statistics.

Functional Reasoning:

Requires the ability to apply principles of logical or synthesis functions involving planning and directing of interrelated activities or multiple departments. Ability to deal with several concrete and abstract variables in working out approaches to major problems.

Situational Reasoning:

Requires the ability to exercise the judgment, decisiveness and creativity required in situations involving the evaluation of information against sensory, judgmental and/or subjective criteria, as opposed to criteria that are clearly measurable or verifiable.

Environmental Factors:

Tasks may risk exposure to adverse environmental conditions, such as electric currents, toxic/poisonous agents, disease, or pathogenic substances.

Physical Requirements:

Tasks involve the ability to exert light physical effort in sedentary to light work, but which may involve some lifting of light materials and objects, up to twenty (20) pounds.

Tasks may involve extended periods at a keyboard or workstation.

Sensory Requirements:

Requires the ability to recognize and identify degrees of similarities or differences between characteristics of colors, shapes, sounds, tastes, and odors associated with job-related objects, materials and tasks. Requires the ability to distinguish objects clearly at both near and far-range, such as analyzing bacteria.

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