



CITY OF OMAHA CLASS SPECIFICATION

CLASSIFICATION TITLE: LABORATORY TECHNICIAN II

BARGAINING UNIT: [CIV BARGAINING](#)

CODE NUMBER: 5575

PAY RANGE CODE: [03135](#)

REVISION DATE: 8/31/17

NATURE OF WORK:

This is advanced technical laboratory work in the analysis of wastewater and sludge samples for proper wastewater treatment plant operation. Employees perform advanced instrumental analyses and may exercise technical supervision over subordinate laboratory personnel.

ESSENTIAL FUNCTIONS: *(Any one position may not perform all the duties listed, nor do the listed examples include all the duties that may be performed in positions allocated to this class.)*

Provides technical assistance and work direction to subordinate laboratory personnel.

Weighs, prepares, mixes, and standardizes chemicals or solutions for the analysis of industrial wastewater and treatment plant process control samples.

Calculates results of analyses and applies statistical principles; compiles results onto daily report logs which document compliance with federal, state and local regulations governing discharges to receiving streams.

Experiments with new laboratory procedures using analytical procedures to assess suitability of tests.

Prepares and cleans glassware; cleans, calibrates, adjusts, and makes minor repairs to equipment.

Maintains laboratory equipment and sufficient stock level of chemicals and other laboratory supplies.

Performs advanced instrumental analyses and method development for various analytical instruments.

Handles and stores scientific chemicals in oven, hoods, desiccators, and fireproof cabinets.

Quantitatively analyzes wastewater and sludge samples, at various stages of treatment, using established testing procedures for total and suspended solids, biochemical oxygen demand, grease and oil content, pH, volatile acids, and alkalinity.

Performs replicate analyses and/or analyzes in-house and commercial standard samples to verify analyst's testing methodology yields accurate and reproducible results.

Maintains regular job attendance in accordance with a schedule established for the position by the supervisor.

Performs other related duties as assigned or as the situation dictates within the scope of this classification.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of and ability to operate a computer or other technology using standard or customized computer or systems software applications appropriate to the assigned tasks.

Knowledge of laboratory equipment, terminology, and a wide variety of standard laboratory procedures.

Knowledge of chemistry and/or biology principles and fundamentals.

Knowledge of safety regulations and practices applicable to laboratory duties.

Knowledge of quality control procedures.

Skill in performing wet chemical tests and various routine laboratory tests involving samples.

Ability to learn and adapt to advances in computer and electronics device technology and software.

Ability to perform advanced instrumental analyses and method development for various analytical instruments.

Ability to use analytical procedures to experiment with new laboratory procedures.

Ability to calibrate delicate instruments and take accurate readings on fine gauges.

Ability to interpret results of laboratory tests.

Ability to recognize color, odor, texture, and weight of samples.

Ability to provide technical work direction to subordinate laboratory personnel.

Ability to understand oral or written instructions.

Ability to communicate to provide technical supervision and assign work.

Ability to establish and maintain effective working relationships with fellow employees and members of the general public.

Ability to adhere to safety policies, procedures, and guidelines.

Ability to stand and sit 51 to 75% of the time; and reach, balance, bend, stoop, squat, kneel, crouch, walk, push and pull up to 25% of the time.

Ability to move objects weighing up to fifty (50) pounds up to 33% of the time, weighing up to twenty (20) pounds 34 to 66% of the time; and weighing up to ten (10) pounds 67 to 100% of the time.

EDUCATION AND EXPERIENCE: *(The knowledge, skills, and abilities above may be acquired through, but are not limited to, the following combination of education and/or experience.)*

High school graduation or its equivalent and twelve (12) hours of post-secondary coursework in chemistry or biology; post-secondary coursework in quantitative analysis preferred.

AND

One (1) year of experience performing advanced laboratory tests and their analyses.

WORKING CONDITIONS: *(The conditions herein are representative of those that must be met by the employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.)*

Work is performed in a laboratory setting. Incumbents are exposed to unpleasant odors from samples and chemicals. Work involves use of some caustic chemicals and wastewater samples that contain pathogens.

EQUIPMENT OPERATION: *(Any one position may not use all of the tools and equipment listed nor do the listed examples comprise all of the tools and equipment that may be used in positions allocated to this classification.)*

Electronic pH meter	Dissolved oxygen probe
Convection oven	Adjustable micro pipettes
Reverse-osmosis water purification system	Desiccators
Ion selective electrode	Pipettes and other glassware
Vacuum filtration equipment	Hand-held programmable calculator
Analytical balance	Muffle furnace
Soxhlet extraction cabinet	Steam bath
Isothermal environmental cabinet	Computer
Calculator	Typewriter
Copier	Printer

Previous Revision Date(s): 3/25/93