



# CITY OF OMAHA CLASS SPECIFICATION

## CLASSIFICATION TITLE: LABORATORY TECHNICIAN I

**BARGAINING UNIT:** [CIV BARGAINING](#)

**CODE NUMBER:** 5570

**PAY RANGE CODE:** [03130](#)

**REVISION DATE:** 9/24/15

### **NATURE OF WORK:**

This is entry level technical laboratory work in the analysis of wastewater and sludge samples for proper wastewater treatment plant operation. Employees work independently; however, technical supervision may be given by a senior Laboratory Technician.

**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.)*

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.

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

Prepares and cleans glassware; cleans, calibrates and adjusts equipment.

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

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

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

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

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

**REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:**

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.

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.

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

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

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 understand oral or written instructions.

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

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

Ability to stand, reach, and walk 76-100% of the time; bend and stoop 51-75% of the time; push and pull 26-50% of the time; and climb and squat 0-25% of the time.

Ability to move objects weighing up to fifty (50) pounds 0-33% of the time, weighing up to twenty (20) pounds 34-66% of the time; and weighing up to ten (10) pounds 67-100% 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 equivalent

AND

At least 12 hours of college level courses in chemistry or biology, including experience performing laboratory tests and their analyses

OR

An equivalent combination of experience and education/training.

**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	Ion selective electrode	Copy Machine
Dissolved oxygen probe	Convection oven	Typewriter
Adjustable micro pipettes	Analytical balance	Computer
Soxhlet extraction cabinet	Muffle furnace	Steam bath
Pipettes and other glassware	Isothermal environmental cabinet	Calculator
Hand-held programmable calculator	Dessicators	
Reverse-osmosis water purification system		

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