DISTINGUISHING FEATURES OF THE ASSIGNMENT:

The Chemist II Specialty assignment includes three areas of specialty:

**Organics/Volatiles/Semi-Volatiles Section** incumbents are responsible for planning, assigning and supervising the day-to-day laboratory activities in the semi-volatile testing of water/wastewater samples in the organics section. Incumbents in this assignment train laboratory technicians and Chemists I, monitor compliance with established laboratory policies, review data and associated documents, interpret test results, and write comprehensive analytical reports. Incumbents ensure all methodologies conform to Federal and State regulations; Clean Water Act (CWA), Safe Drinking Water Act (SWDA), Industrial Waste, and Pollution Prevention programs.

**Inorganic/Metals Section** incumbents are responsible for planning, assigning, and supervising the chemical analyses and method development in support of the operation of drinking water production and the wastewater treatment process, ensuring all methodologies conform to Federal and State regulations; Clean Water Act (CWA), Safe Drinking Water Act (SDWA), Industrial Waste, and Pollution Prevention programs. Incumbents monitor compliance with established laboratory policies, review data and associated documents, interpret test results, and write comprehensive analytical reports.

**Biology/Microbiology Section** incumbents are responsible for planning, assigning, and supervising the testing for microorganisms per EPA standard methods and method development in support of various regulatory programs and special studies for the Water Services Department. The Microbiology group regularly engages in the microbiological (total and fecal coliform) parasitology (cryptosporidium and giardia), and molecular biology (polymerase chain reaction) analyses of water and wastewater samples in accordance with federal and state laboratory requirements and internal quality assurance/quality control (QA/QC) policies and procedures.

This assignment differs from the base classification of Chemist II due to the increased responsibility to maintain quality control and develop scientifically sound, legally
defensible processes, while keeping current with all new methods, rules, and regulations.

The fundamental reason this classification exists is to provide first line supervision of laboratory personnel involved in the chemical and microbiological examination of water and wastewater in a water or wastewater treatment plant laboratory, or to supervise a unit of employees responsible for accurate and timely testing for compliance with state and federal regulations. Chemists II are responsible for the analysis of water or wastewater samples to determine efficiency of treatment plant operations, and to determine whether results meet federal and state requirements. While the routine laboratory procedures are conducted by Chemists I or Laboratory Technicians, Chemists II do participate in laboratory procedures. Chemists II work under the general supervision of the Wastewater Treatment Superintendent, the Water Production Superintendent, or the Water Quality Chemist III.

ESSENTIAL FUNCTIONS:
• Plans, assigns, and supervises the work of laboratory personnel involved in the collecting and testing of water and wastewater samples;
• Supervises and participates in chemical and microbiological examinations of water and wastewater;
• Conducts special chemical and microbiological studies and evaluations;
• Trains Laboratory Technicians and Chemists I;
• Interprets test results and writes comprehensive analytical reports;
• Ensures that all treatment plant laboratories meet Occupational Safety Health Administration (OSHA) safety standards, and that the laboratories meet the criteria required to maintain certification for the Arizona Department of Health Services;
• Coordinates the reporting of analysis results;
• Keeps records of all laboratory testing;
• Plans research and development of new uses for treatment process chemicals;
• Coordinates the reporting of analysis results to the regulatory agencies on a schedule that complies with Safe Drinking Water Act (SDWA) and the Clean Water Act requirements;
• Evaluates instrumentation needs and includes such items in the annual and 3+9 budgets;
• Maintains regular and reliable attendance.
• Demonstrates superior seamless customer service, integrity, and commitment to innovation, efficiency, and fiscally responsible activity.
• Works more than forty hours in a workweek without additional compensation to perform assigned job duties, including weekends, evenings, early morning hours, and holidays as required.

Required Knowledge, Skills and Abilities:
Knowledge of:
• Laboratory manipulative techniques and scientific methods and procedures.
• The principles, practices, and techniques of the operation and care of specialized laboratory equipment.

Ability to:
• Perform a broad range of supervisory responsibilities over others.
• Produce written documents with clearly organized thoughts using proper sentence construction, punctuation, and grammar.
• Communicate orally with other City employees, consultants and the public in face-to-face one-to-one settings.
• Comprehend and make inferences from written materials.
• Work with chemicals, effluent, and other similar solutions using only normal protective equipment to conduct laboratory analyses of water or wastewater samples.
• Perform a broad range of laboratory tests of water and sewage samples.
• Work safely without presenting a direct threat to self or others.
• Work cooperatively with other City employees and the public.
• Reviews and checks the work product of others to ensure conformance to standards.

Additional Requirements:
• Some positions require the use of personal or City vehicles on City business. Individuals must be physically capable of operating the vehicles safely, possess a valid driver's license and have an acceptable driving record. Use of a personal vehicle for City business will be prohibited if the employee is not authorized to drive a City vehicle or if the employee does not have personal insurance coverage.
• Some positions will require the performance of other essential and marginal functions depending upon work location, assignment, or shift.

ACCEPTABLE EXPERIENCE AND TRAINING:
Three years of supervisory work in the public health or chemical laboratory field, and a bachelor's degree in chemistry, microbiology, or a related field. Other combinations of experience and education that meet the minimum requirements may be substituted.