

CITY OF SALEM
LABORATORY TECHNICIAN I

00547

NATURE OF WORK

This is technical work testing and analyzing samples of treatment plant and industrial wastewater, wastewater treatment sludge, biosolids, soils and potable water samples utilizing various analytical test techniques and equipment and recording test results for a municipal environmental laboratory.

Work involves setting up and performing standard and specialized tests for drinking water and wastewater. The classification requires a comprehensive understanding of laboratory techniques, procedures, use of specialized analytical equipment and of the physical/chemical reactions involved. An incumbent of this classification may be required to work independently, record test findings, and prepare a variety of reports based on test results. Work does not include lead responsibilities, but may include training of others or directing temporary employees with particular assignments. Work is reviewed by Laboratory Supervisor or lead technician.

The work of this classification is distinguished from that of the Laboratory Assistant by the greater expectation to perform advanced testing and analysis of laboratory samples and the production of reports. It is distinguished from the Laboratory Technician II by the absence of lead responsibilities as a routine aspect of the work.

ILLUSTRATIVE EXAMPLES OF WORK

(Any single position of a class will not usually involve all of the essential duties listed and many positions will involve essential duties which are not listed.)

Conducts periodic tests including ammonium, nitrite and nitrate nitrogen, total and ortho phosphorous, aluminum, calcium hardness, iron, manganese, sulfate, chlorides, chlorine, turbidity, minerals and metals and other related necessary tests. Operates and adjusts pH meters, analytical balances, colorimeters, spectrophotometer including atomic absorption; uses membrane filter techniques. Conducts daily tests of dissolved oxygen, chemical oxygen demand, suspended solids, biochemical oxygen demand, total solids, pH, alkalinity and bacteriological examination of potable water and plant effluent. Performs quality assurance/quality control activities.

Ensures cleanliness, maintains proper storage of glassware, instruments, supplies, and conducts tours of laboratory.

Conducts periodic chemical analysis of water, wastewater, sludge and soils as directed. Collects samples as directed from various points of the wastewater treatment plant or other locations. Assists in preparation of solutions and apparatus. Cleans, maintains and stores laboratory glassware, instruments and supplies. Tabulates data, maintains records. Performs data entry into computer systems. Performs custodial duties in laboratory.

Performs other related duties as directed.

WORK QUALIFICATIONS

Experience in wastewater treatment or related laboratory; completion of two years of college or university with major course in chemistry, bacteriology, or related subjects; or any equivalent combination of experience and training which provides the following knowledges, abilities, and skills:

Knowledge of laboratory tests, methods, and equipment.

Considerable knowledge of chemistry and bacteriology and of laboratory hazards and safety precautions.

Skill in the use and care of laboratory equipment.

Skill in the use of modern office equipment including personal computers.

Ability to conduct laboratory tests and analysis without direct supervision.

Ability to perform a variety of mathematical calculations.

Ability to analyze and interpret results obtained, record test results in a legible handwriting , maintain records and make reports.

Ability to establish and maintain an effective working relationship with other employees.

Some positions may require possession of a valid Oregon Driver's License or Class C License and the ability to meet the City's driving standards.

Work is performed in a laboratory setting and requires manual dexterity and visual acuity to safely manipulate delicate glassware and equipment, see calibrations and measurements, distinguish colors and odors and transport sample jugs containing water weighing up to 40 pounds.

Personnel Director