

**CITY OF SALEM
LABORATORY TECHNICIAN II**

00546

NATURE OF WORK

This is technical lead 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 that is accredited for Drinking Water Testing by the Oregon Environmental Laboratory Accreditation Program, ORELAP.

Duties involve responsibility for planning, directing, coordinating, and participating in the work of a number of skilled technicians engaged in preparing, conducting and evaluating standard and specialized laboratory tests for potable water and wastewater.

The position requires a comprehensive understanding of laboratory techniques, procedures, and coordination of multiple testing methods and the use of complex analytical equipment such as automated chemical analyzers, personal computers, and Laboratory Information Management Systems (LIMS).

Work involves providing work direction and is performed with considerable independence.

Work performance is evaluated through review of test results and reports and observation.

The work of this classification is distinguished from that of the Laboratory Technician I by the higher responsibility to direct the work of others, schedule assignments, and may be assigned to approve leave or contribute to laboratory employee performance appraisals.

The work of this classification is distinguished from that of the Laboratory Supervisor by the absence of full supervisory authority over laboratory staff, budget authority and responsibility for the overall management of laboratory services.

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.)

Coordinates assignments of laboratory personnel to complete required timely analysis in such areas as: plant operations, biogro, industrial accounts, potable water and special studies.

Utilizes technical knowledge to implement new laboratory procedures and resolve routine analysis problems of other laboratory technicians.

Oversees quality assurance and quality control programs in their laboratory area.

Writes new or revises existing Quality Assurance Program Plans for new testing programs as needed.

Instigates corrective action when analytical problems arise.

Oversees the operation of the LIMS including log-in, worksheet approval, review and reporting of results, and proper functioning and archiving.

Schedules, inspects, and participates in the work of laboratory personnel; assists in determination of training needs and implementation of training programs.

Contributes to the performance appraisals of other technicians and participates as needed in the selection processes for other laboratory personnel.

Must be capable of fulfilling duties as Out of Class Lab Supervisor when supervisor is absent.

Directs other laboratory personnel in performing laboratory tests to ensure accurate uniform testing methods are utilized; completes records and reports; inventories laboratory equipment and supplies.

Conducts, coordinates, and ensures completion and recording of routine daily analysis of dissolved oxygen, biochemical and chemical oxygen demand, suspended, total and volatile solids, pH, alkalinity, bacteriological examination of potable water and other periodic tests for plant operations.

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 and automated chemical analyzers; uses membrane filter techniques, personal computers and data bases, and other equipment as required.

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

Assures all laboratory work is performed using standard safety procedures.

Performs annual Demonstrations of Capability (DOC's) as required by NELAP.

Oversees and evaluates Demonstrations of Capability (DOC's) done by technicians on an annual basis.

Performs other related work as required.

WORK QUALIFICATIONS

Considerable experience in a water, wastewater laboratory with some experience as a supervisor or lead worker; associate degree in chemistry, biology, laboratory science or completion of two years of college or university with major course work in chemistry and water bacteriology or wastewater technology; or any equivalent combination of experience and training which provides the following knowledges, skills, and abilities:

Considerable knowledge of laboratory tests, methods and equipment used in the operation of an environmental analytical laboratory that tests water or wastewater.

Comprehensive knowledge of chemistry (including automated analysis procedures) and water bacteriology; knowledge of the sources of literature in the field of analytical methods.

Knowledge of National Environmental Laboratory Accreditation Program (NELAP) standards.

Knowledge of Quality Assurance and Quality Control practices used in an analytical laboratory.

Knowledge of Federal and State Environmental Testing regulations as they pertain to Safe Drinking Water Act and Clean Water Act programs.

Knowledge of water and wastewater treatment, laboratory hazards, safety precautions and sample collection.

Knowledge of supervisory techniques and the ability to effectively utilize that knowledge.

Skill in the use and care of laboratory and office equipment including personal computers.

Skill in compiling historical data for operational controls or expansions, including the use and operation of a LIMS or other operational databases.

Ability to operate an environmental analytical laboratory without direct supervision; coordinate the work of others; understand and follow complex oral and written directions, formulas, and charts.

Ability to maintain records, hand record legible test results, prepare timely reports accurately and interpret results.

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

Ability to plan, organize, and direct the work of others.

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.

Human Resources Director

Revised 09/05

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