City of Bellingham
Classification Specification

CLASS TITLE	**Laboratory Technician**
DEPARTMENT	**Public Works\Operations**
UNION:	**1937**
SG:	**111**
CS:	**Entry**
FLSA:	**Y**
EE04/SOC CODE:	**TE/19-4042**

NATURE OF WORK:

The Laboratory Technician has the primary responsibility of collecting and testing surface water, drinking water and wastewater samples for regulatory compliance, plant process control, and the monitoring of environmental programs as they apply to water and wastewater compliance. Positions in this class are accountable for quality control procedures in the laboratory. Additional duties include assisting in information gathering and initial preparation of compliance reports, in implementation of new laboratory procedures, in the training of new employees in standard laboratory operating procedures, and special project assignments. Positions in this class are accountable for quality control procedures in the laboratory, including analyzing performance evaluation samples to ensure state certification of both laboratories. Additional duties include working with lab and process control instrumentation. Responsible for monitoring, calibrating, maintaining, troubleshooting, and repairing PROCESS instruments and lab-related instruments. Maintains an inventory of lab supplies and procures equipment and supplies as needed. Communicates and coordinates with coworkers to ensure proper sequence of events for sampling and analysis. Coordinates with reference laboratory personnel to ensure proper supplies are obtained, sample is properly prepared and delivered, and chain of custody is maintained.

Error or negligence in performance may have serious detrimental consequences for the City's water/wastewater and secondary treatment systems.

DISTINGUISHING CHARACTERISTICS:

Positions in this class require the performance of technical level laboratory work, procedures and quality control practices as required by state and federal compliance regulations for both the water and wastewater laboratories. This includes the successful completion of required performance evaluation check standards. Knowledge and skills are usually acquired through college coursework and experience.

SUPERVISORY RELATIONSHIP:

The Laboratory Technician reports directly to the Technical Supervisor. May receive special assignments and direction from the Laboratory Analyst. Daily tasks are expected to be carried out independent of supervisory oversight. May act as lead to extra help employees and student interns.

ESSENTIAL FUNCTIONS:

1. Collects samples from various sites for quality control purposes and compliance monitoring using a variety of technical methods and equipment.

2. Prepares reagents and standardized chemical solutions needed to test collected samples.

3. Performs a variety of chemical and microbiological tests for water and wastewater samples including, but not limited to bio-chemical oxygen demand; chemical oxygen demand; solids; pH; chlorine residual; hardness; alkalinity; coliforms; heterotrophic plate count; grease and oil; iron; turbidity.

4. Performs testing required for secondary wastewater treatment including, but not limited to nutrient analyses, microbiological screening and extended solids testing.

5. Performs laboratory quality control testing and procedures and maintains standard reports in compliance with state requirements.

6. Performs algebraic calculations on laboratory raw data, enters results into computer; compiles and maintains computerized records for quality control and compliance purposes.

7. Calibrates, maintains and performs minor repairs on laboratory equipment and laboratory-related plant instrumentation. Coordinate with Maintenance staff on troubleshooting and more involved repairs.

8. Performs sample collection and testing for special project assignments; assists in information gathering for research done by Technical Supervisor and Laboratory Analyst. Included here are such duties as evaluating new instruments and procedures under the advice of the Technical Supervisor or Lab Analyst, for the purpose of making lab procedural or purchase recommendations.

9. Responds to citizen inquiries regarding general health concerns and drinking water. Handles complaints on specific water quality problems such as tastes, odors, etc.; contacts customers regarding test results.

10. Maintains an inventory of routine lab supplies and procures equipment and supplies as needed. Prepares requisitions for warehouse purchase of equipment and supplies.

ADDITIONAL WORK PERFORMED:

1. Assists in the instruction and training of personnel in laboratory related tasks.

2. Performs Plant Operator equipment checks during weekend/holiday duty.

3. Performs related duties as assigned.

KNOWLEDGE AND SKILLS:

- Knowledge and skill in laboratory techniques and testing methods used in the analyses of water and wastewater.
- Knowledge of laboratory hazards and ability to apply safety precautions applicable to work environment, such as safe storage and handling of equipment, supplies and use of safety clothing.
- Familiarity with analytical instruments and an understanding of how to properly maintain, monitor, calibrate and troubleshoot process control instruments.
- Ability to inventory and procure laboratory and instrumentation equipment and supplies.
- Ability to read and follow technical written and oral instructions.
- Ability to perform data entry and to utilize associated computer software in a computerized recordkeeping system.
- Ability to perform algebraic calculations of test results.
- Working knowledge of quality assurance and quality control principles and techniques in a laboratory setting.
- Ability to acquire knowledge of technical standards, procedures and regulations of water and wastewater testing in compliance with laboratory certification requirements.
- Ability to independently problem solve using good judgement in performing assigned duties.
- Ability to calibrate, use and troubleshoot a variety of laboratory and process control equipment.
- Good oral communication skills to courteously and tactfully interact with coworkers and citizens.
- Good technical writing skills, sufficient to write detailed procedural instructions to be understood by lab staff; legible handwriting.
- Physical ability necessary to perform job duties: visual acuity and color differentiation; fine finger dexterity to manipulate laboratory equipment and computer keyboard; adequate hearing for telephone and radio communications; standing for long periods of time; ability to move over and through rough terrain on a regular basis; frequent lifting up to 25 lbs.

WORKING ENVIRONMENT:

The position works a majority of time in a laboratory environment which is designed to optimize safe and efficient working conditions. However, a number of hazards are present when working with chemical agents, biological samples and laboratory testing equipment. Employees must be constantly aware of safety requirements. Some work is conducted out-of-doors in all types of weather and on irregular terrain.

EXPERIENCE AND TRAINING REQUIREMENTS:

- BA/BS degree in chemistry, biology, microbiology, environmental science or related field.
- One year of related laboratory work experience required excluding laboratory work performed for academic credit. Internships, assistantships and volunteer experience may be used as work experience.
- Valid Washington State drivers license at time of hire. Must submit a three-year driving record abstract prior to hire.

NECESSARY SPECIAL REQUIREMENT:

- Work weekends, holidays and swing shift on a rotating basis.

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