**CITY OF BELLINGHAM**

**JOB DESCRIPTION**

**JOB TITLE:** **Water Quality Specialist** **UNION:231**
**SG:5**
**DEPARTMENT:** **Public Works, Operations Division** **CS:N**
**FLSA:N**
**EEO4CODE:PR**

## JOB SUMMARY:

The Water Quality Specialist evaluates water quality and plant process data; develops and implements laboratory and field projects; evaluates and audits laboratory practices; and prepares scientific and technical reports, including reports for local, state and federal compliance. This position assumes the duties of quality control for the City's accredited laboratories. Utilizes computer databases, hydrologic modeling software, and manages datasets. Performs laboratory work, conducts statistical analysis, performs fieldwork for regulatory and environmental monitoring programs and responds to citizen inquiries and complaints regarding water, stormwater, and wastewater. Position must work with a high degree of accuracy since error or negligence may compromise the City's water and wastewater treatment systems, its ability to meet regulatory obligations, as well as have an impact on its water, wastewater and storm water capital improvement programs.

## SUPERVISORY RELATIONSHIPS:

Reports to the Technical Supervisor - Water Quality. Serves in a supporting role to the Chief Operator Water Treatment and the Operations Supervisor Wastewater Treatment. Works under general supervision and the guidance of City and Departmental policies and procedures as well as applicable Federal, State and City regulations. Provides direction to and trains Laboratory Technicians, temporary workers and student interns.

## ESSENTIAL FUNCTIONS OF THE JOB:

1. Researches, develops, implements, monitors and evaluates laboratory and field-testing methods for storm and surface water environmental monitoring programs. Plans, coordinates, and conducts technical activities as assigned, such as analysis of water resources and operational data related to municipal drinking water, stormwater, and wastewater plant operation. Conducts statistical analysis and interprets as needed, including evaluating data trends.

2. Prepares work products, such as reports and technical reviews, for regulatory programs, as assigned, to comply with state and federal monitoring requirements for drinking water, stormwater and wastewater. Coordinates with other departments, contractors, and utility customers, to meet project needs. Writes reports resulting from special project work.

3. Coordinates and monitors laboratory quality assurance, including routine review of all laboratory tests performed, review of quality control data to determine acceptability and compliance with

local, state, and federal requirements, and internal laboratory audits to assist with maintaining state laboratory accreditation.

4. Interprets, and communicates standard operating procedures to laboratory and operations staff, adapting to City Operations as necessary. Provides technical assistance with air and water quality instrumentation and the implementation of work procedures into daily tasks. This may include sampling, analysis, calibration, and actions needed to ensure data quality.

5. Manages database records, including review of electronic records for quality and completeness, and correcting errors in electronic data used for compliance reporting. Synthesizes large and complex datasets. Investigates and identifies root causes of issues and implements or coordinates resolutions.

6. Conducts field monitoring and laboratory analysis for utility programs relating to drinking water, wastewater and surface water. Operates and maintains a variety of laboratory equipment and instrumentation; performs a variety of physical, chemical and biological analyses on wastewater, drinking water and surface water samples.

7. Performs duties in specialized technical areas, such as special monitoring programs for secondary wastewater treatment, storm water and drinking water as assigned. Collects wastewater, drinking water and surface water samples for laboratory testing from identified sites. Provides technical input on projects that may influence water quality.

8. Responds to citizen inquiries and concerns related to drinking water. Handles complaints on specific water quality problems such as taste, odors, etc., and contacts customers regarding test results. Responds to data requests utilizing automated report writing software to organize data to parse, compare, tabulate, and summarize data points. Participates in public information programs to educate customers.

9. Conducts laboratory risk communication, hazardous material management and chemical inventory.

## ADDITIONAL WORK PERFORMED:

1. Assists Technical Supervisor in training laboratory employees and has delegated oversight of their assignments and work product.

2. Performs other related work of a similar nature or level.

## PERFORMANCE REQUIREMENTS (Knowledge, Skills, and Abilities):

Knowledge of:
- Principles of chemistry and biology and the application of scientific methods.
- Appropriate laboratory techniques, testing methods and equipment and ability to develop and implement new laboratory methods and procedures.
- Knowledge and skill with computer applications and data analysis.
- Research methods, problem-solving, and decision-making models.
- Working knowledge of quality assurance and quality control principles and techniques in the laboratory environment.

- Laboratory hazards and necessary safety precautions applicable to work environment.
- Working knowledge of applicable state and federal regulations and standards.

Skill in:
- Good oral communication skills to work effectively with coworkers and the public.
- Good technical writing skills to produce a variety of reports.

Ability to:
- Read and interpret equipment specifications, technical manuals, and instructions.
- Compile, evaluate and analyze complex data and information and recommend actions.
- Provide written account in variety of formats of assigned projects and results of analysis.
- Independently plan and organize work assignments to meet deadlines.
- Maintain consistent and punctual attendance.
- Ability and willingness to demonstrate the Public Service Competencies of Service Orientation, Results Orientation, and Teamwork and Cooperation.
- Physically perform the essential functions of the position, including:
    - Visual acuity to differentiate color and computer screens;
    - Fine finger dexterity to manipulate laboratory equipment and computer keyboard;
    - Adequate hearing for telephone and radio communications;
    - Ability to stand for long periods of time;
    - Ability to traverse rough terrain on a regular basis;
    - Frequent lifting up to 25 lbs.

**WORKING ENVIRONMENT:**

Work is performed mostly in an office and laboratory environment in an industrial plant. May require working outdoors in all weather conditions and on irregular terrain. The treatment plants are high risk environments which require special safety precautions, i.e. working near heavy operating equipment, toxic or volatile chemicals, noxious gases, and with exposure to raw sewage. Employees may be required to wear protective clothing such as coveralls, rain gear, masks, boots, goggles, gloves, or shields and use respirator and self-contained breathing apparatus when appropriate.

**EXPERIENCE AND TRAINING REQUIREMENT:**

- Bachelor of Science degree in biology, chemistry, environmental science, natural resource management or related discipline.
- Minimum of two years related laboratory or field experience required.
- Experience working with external agencies and citizens preferred.
- A combination of education and experience sufficient to provide the applicant with the knowledge, skills and ability to successfully perform the essential functions of the job will be considered.

**NECESSARY SPECIAL REQUIREMENT:**

- Valid Washington State driver's license and good driving record. Candidates must submit a three-year driving abstract prior to hire.
- Employment contingent upon passing a criminal convictions and local background check.

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| **PREPARED BY:** | L. McGowan<br>S. Mahaffey<br>1/01 | **REVIEWED BY:** | Eric Johnston, Asst. Director<br>Public Works, Operations |
| **REVISED BY:** | P. Wendling<br>L. McGowan-Smith<br>12/01<br>P. Wendling/Rowlson<br>04/02<br>P. Wendling/L. Klemanski<br>10/07<br>P. Wendling/R. Johnson/ R. Delker<br>02/19 | **REVIEWED BY:** | Ted Carlson, Director<br>Public Works |