

Highlights of the job

We are hiring one (1) FT Permanent Senior Microbiologist, Environmental and Scientific Services, working out of Rosssdale Water Treatment Plant in Edmonton, AB!

Are you a passionate and dedicated Microbiologist looking for the next great challenge in your career? Do you want to be part of an innovative company that is a growing, industry-leader in the area of water and wastewater treatment? If so, EPCOR Water Canada has a great opportunity for you!

What you'd be responsible for

The Senior Microbiologist, Environmental and Scientific Services, is recognized as a thought leader and senior-level subject matter expert in microbiology within the company, providing subject matter expertise on water microbiology and monitoring to the water business. This position is accountable for all scientific aspects of microbiological analyses for EPCOR's water and wastewater operations. This includes ensuring that appropriate analytical methodology, biosafety practices and technical support for microbiological analyses are in place to meet current and anticipated future business and regulatory requirements.

Reporting to the Senior Manager, Environmental and Scientific Services, specific accountabilities of the position include, but are not limited to:

- Developing, implementing and reviewing the Water and Wastewater Labs' microbiological analytical processes to ensure:
 - Compliance to policies, standards, regulatory requirements and ensure mitigation of biohazards.
 - Continual improvement and upgrades to microbiological analytical methodology and/or equipment in response to new regulatory or business requirements in order to achieve increased efficiency, reliability and/or biosafety.
 - Identification of appropriate corrective actions with Analytical Operations when deviations from standard protocols occur.
- Support Management in the oversight of the microbiology laboratories at Rosssdale and Gold Bar, which involves
 - Readily available for analytical troubleshooting and support.
 - Regular and timely review of analytical methodology and Standard Operating Procedures to ensure compliance with Standard Methods for the Examination of Water and Wastewater, US EPA methods or other reference methods.
 - Designing proficiency packages for staff in collaboration with quality assurance that outline training requirements.
 - Participating in investigations of method non-conformances with the overall goal of reducing the number and severity of corrective actions resulting from internal and/or external assessments.
 - Conducting inspections and observations to ensure compliance with best management practices, Canadian Biosafety Standards and EPCOR H&S policies.
 - Preparing staff for regular CALA assessments and other audit activities.

- Method validation and upgrade requirements:
 - Anticipating new developments in analytical requirements
 - Having a broad understanding method validation steps and calculation of precision and uncertainty, limits of detection and other relevant variables.
 - Conducting method development studies and developing recommendations and implementation plans for consideration by Senior Management.
 - Developing and delivering the content of a technical training program on microbiological analytical methods for Water and Wastewater technical staff after method validation.
 - Identifying the necessary budget requirements for the provision of new or improved analytical methodology or equipment.
 - Working closely with analysts to troubleshoot and refine method if matrix interference or unacceptable results are produced.
- Research-based competencies:
 - Continually maintaining current knowledge of technical advances in water and wastewater monitoring, sampling and analytical techniques.
 - Having a solid grounding in bench, pilot and full-scale experimental design and statistical analyses for microbiological analyses.
- Increasing the awareness of microbiological issues related to water and wastewater testing both internal and external to EPCOR.
- Providing sound professional interpretations and opinions on microbiological-related issues with EPCOR Utilities Inc. and to appropriate external sources.
- Demonstrating a high-performance, high-discipline, safe, accountable, focused, innovative and achievement-oriented, easy to do business with manner of working.

What's required to be successful

The successful candidate will possess the following qualifications:

- A Bachelor of Science degree in biological sciences from a recognized university is required. Ph.D. or M.Sc. graduate degrees in the field of Microbiology with extensive applicable experience are considered assets.
- Completion of university courses in environmental microbiology is required. Applicants should be knowledgeable in waterborne pathogens, microbial ecology, and microbial risk assessment.
- Professional designation (e.g. P. Bio. or CCM Registration) or eligible for designation within three (3) years.
- 7-10 years of directly related experience working in a water, wastewater and/or environmental/analytical laboratory involving ISO quality management systems such as ISO/IEC 17025, 9001 and/or 14001.
- Experience with culture-based monitoring, including Colilert and membrane filtrations.
- Experience with *Giardia* and *Cryptosporidium* analyses, which include USEPA Method 1623 and molecular assays and risk assessments.
- Experience with the following:
 - Interpretation of whole effluent toxicity testing methods.
 - non-incubation based methods, such as flow cytometry, adenosine triphosphate assays.

- Immunoassays, such as ELISAs.
- Teaching and assessment of competence is an asset.
- Applied and published research in water/wastewater treatment and analyses.
- Advanced knowledge of Microsoft Office Programs, including Word and Excel.
- Ability to perform and interpret complex mathematical and statistical calculations.
- Valid Class 5 Alberta Motor Vehicle Operator's License (with 6 demerits or less).
Some local travel will be required. A Driver Abstract will be required.

Successful candidates must be independent, critical thinkers with the ability apply a high level of initiative and motivation to ensure that the results produced are highly reliable and scientifically sound. As our best candidate, you possess the ability to apply analytical skills to solve different technical problems that may require a consideration of different approaches and possible solutions. As a trusted thought leader, you will also possess excellent communication skills with the ability to write and effectively communicate technical information to both technical and non-technical audiences.

Our best candidate will maintain knowledge and expertise in microbiological analysis of water and wastewater, stay up-to-date with the industry best practices and with current and anticipated future regulatory requirements through self-directed learning, review of current literature and maintenance of contacts with experts in the field.

Other important facts about this job

Jurisdiction: CSU52

Class: P4

Wage: Starting at \$57.14 (*Final Wage and Step will be determined at the time of selection and is based on a combination of factors as outlined in the CA that may be found online.*)

Hours of work: 75 hours bi-weekly

Commencing on the first day of employment, EPCOR employees enjoy a variety of benefits, including:

- Competitive salary
- Annual incentive (bonus) pay program
- Paid vacation
- Flexible benefits plan
- Five paid personal days off each year
- Access to internal and external career development programs
- Financial support for personal development
- Pension Plan
- Financial support for employee wellness
- Career opportunities in a wide variety of disciplines and operational areas
- Financial support for charitable organizations that employees contribute to

Application deadline: July 6, 2021

Learn more about [Working at EPCOR!](#)

Please note the following information:

- A requirement of working for EPCOR is that you are at least 18 years of age and legally entitled to work in Canada. (A copy of a valid work permit may be required.)
- If you are considered for the position, clearance on all applicable background checks (which may include criminal, identity, educational, and/or credit) and professional reference checks is required. Some EPCOR positions require an enhanced level of background assessment, which is dictated by law. These positions require advanced criminal record checks that must also be conducted from time to time after commencement of employment.
- A technical/practical assessment may be administered during the selection process and this exercise will be used as a part of the selection criterion.
- To meet the physical demands required of some positions, candidates must be in good physical condition and willing to work in all weather conditions. Clearance on pre-placement medical and drug and alcohol testing may be required.