



NUCLEAR WASTE SOCIÉTÉ DE GESTION
MANAGEMENT DES DÉCHETS
ORGANIZATION NUCLÉAIRES

The ***Nuclear Waste Management Organization (NWMO)*** is responsible for the safe, long-term management of used nuclear fuel in Canada. The approach it is implementing, known as Adaptive Phased Management (APM), involves developing a centralized underground repository, supported by a robust social and technical research program in collaboration with Canadian universities, consultants and international waste management organizations.

Join our growing team of scientists, engineers and other professionals to work collaboratively with Canadians in implementing our management approach in a manner that safeguards people and respects the environment, now and in the future.

TECHNICAL EXPERT - Microbiology

General Accountabilities:

Reporting to the Manager, Engineered Barrier Science, the Technical Expert - Microbiology will provide support to the Adaptive Phased Management Technical Program to improve the reference conceptual design and confidence in the safety case for a deep geological repository for Canada's used nuclear fuel.

The individual will also guide research and international collaborations in the area of underground microbial communities and assist in the definition of research priorities and business planning.

The individual will also co-ordinate efforts to integrate indigenous knowledge into the engineering and science fields identified by NWMO.

Specific Accountabilities:

Perform as a technical expert in underground microbiology. This expertise includes the ability to:

- Prepare microbiological research plans, studies and activities with a primary focus on subsurface microbiological communities and their effects on barrier materials associated with a deep geological repository. This includes used nuclear fuel containers (e.g., copper and carbon steel), bentonite clay, and various potential host rock formations;
- Provide microbiological input to the development of the design requirements and specifications for a used fuel container and related systems in a deep geological repository;
- Support models and codes describing subsurface processes, including for chemical changes, groundwater flow and gas production;
- Prepare microbiological reports, papers and presentations;

- Identify, define, evaluate, secure and manager external contracts with consultants, universities and other national radioactive waste management organizations related to microbiological research and development;
- Keep abreast of developments in microbiological research through technical publications, contacts with internal and external experts in the field, and conference papers and presentations;
- Present microbiological material results to technical groups, government authorities and other national waste management organizations;

Lead efforts to integrate indigenous knowledge with NWMO Science and Engineering.

This expertise includes the ability to:

- With support from identified subject matter experts, develop a program to integrate indigenous knowledge into ongoing and newly initiated microbial programs;
- Engage with aboriginal elders and experts in other applicable fields to identify areas of strength that can lead to co-ordinated research and development efforts;
- Co-ordinate interactions among NWMO staff and identified experts/elders to develop an ongoing interaction on research and development.

In addition:

- Carry out work activities in compliance with legislated and corporate requirements and programs.
- Perform other related duties as required.

Qualifications and Experience:

The successful candidate will have:

A University degree in a discipline directly related to the accountabilities of this position.
Over 4 years' experience in microbiology.

- A knowledge of integrating indigenous knowledge into science/engineering would be an asset.
- Experience in assuming responsibility for projects within the discipline, including work and resource planning, contract management, problem resolution and work monitoring.
- Demonstrated ability to work in a team environment across functional disciplines.
- Proficient oral and written communication skills.

Candidates with lesser qualifications will be considered.

You must be eligible to work in Canada and must be able to meet security clearance requirements.

We offer competitive base salary and comprehensive health care benefits package.

The NWMO supports the principles and practices of diversity and is committed to providing a respectful, accessible, and inclusive environment for all persons with disabilities in a way that is respectful of the dignity and independence of people with disabilities and in a manner which takes into account the person's disability and embodies the principles of integration and equal opportunity. The NWMO will provide accommodation to applicants with disabilities. If you require accommodation, please **Contact Us**.

Please submit your application via e-mail quoting **Technical Expert - Microbiology**, to: Employment@nwmo.ca.