



**Written submission from
Moltex Energy**

**Mémoire de
Moltex Energy**

In the Matter of the

À l'égard des

Canadian Nuclear Laboratories (CNL)

Laboratoires Nucléaires Canadiens (LNC)

Application from the CNL to amend its Chalk River Laboratories site licence to authorize the construction of a near surface disposal facility

Demande des LNC visant à modifier le permis du site des Laboratoires de Chalk River pour autoriser la construction d'une installation de gestion des déchets près de la surface

**Commission Public Hearing
Part 2**

**Audience publique de la Commission
Partie 2**

May and June 2022

Mai et juin 2022



April 11, 2022

Senior Tribunal Officer, Secretariat
Canadian Nuclear Safety Commission
280 Slater Street P.O. Box 1046, Station B
Ottawa, Ontario K1P 5S9

Subject: Canadian Nuclear Laboratories' application to amend its Chalk River Laboratories site licence to authorize the construction of a near-surface disposal facility (IAA Reference Number: 80122)

Dear Secretariat:

The purpose of this letter is to provide a written intervention for the public meeting of May 31, 2022, in which the Canadian Nuclear Safety Commission (CNSC) will consider the Near Surface Disposal Facility (NSDF) being proposed by Canadian Nuclear Laboratories on the site of Chalk River Laboratories (CRL). Moltex Energy supports CNL's application to amend its licence to authorize the constructions of the NSDF.

Moltex is a private company developing breakthrough nuclear technologies, including:

- the Stable Salt Reactor – Wasteburner (SSR-W), which uses recycled nuclear waste as fuel;
- a WASTE To Stable Salt (WATSS) process for recycling nuclear waste; and
- GridReserve thermal energy storage tanks that allow the reactor to complement intermittent renewables.

Moltex was selected by NB Power and the Government of New Brunswick to advance development of its reactor technology in New Brunswick, with the goal of deploying its first reactor next to the Point Lepreau Nuclear Generating Station. Moltex has established a service agreement with CNSC for Phase 1 and Phase 2 of the Pre-Licensing Vendor Design Review of the SSR-W, with Phase 1 successfully completed. CRL research supports these activities.

Moltex supports the environmentally responsible management of low-level waste as a means to further enhance the overall benefits that nuclear technologies bring to Canada and the world. With the NSDF, CNL is offering a permanent solution to the management of low-level waste already present at CRL and at other Atomic Energy of Canada Limited sites. The NSDF will also handle low-level waste from hospitals and universities, which greatly benefit Canadians. So, having a permanent mechanism to manage these wastes is particularly important.

The NSDF would apply internationally recognized, state-of-the-art technology to protect people and the environment from any potential harms of low-level waste. By proposing to build this facility now, CNL is avoiding a scenario in which it would be left for future generations.

The NSDF would also enable health research to continue at the CRL site. Not only does this research bring hope to people who suffer from cancer and other diseases, it also contributes to advances in clean, carbon-free energy to combat climate change. Some of these advances will support Moltex's technologies, which aim to provide clean, reliable and affordable energy that keeps fossil fuels in the ground.



The NSDF is an instance of CNL fulfilling its obligations to manage the environmental impacts of its past, present and future activities, including addressing Canada's legacy waste liabilities. Moltex is pleased to note that this is being done in a way that engages the community effectively, and especially that CNL has worked so diligently with Indigenous peoples to ensure that Indigenous rights and interests are represented and that valued species are being appropriately protected.

Thank you for providing the opportunity to intervene in this matter.

Sincerely,

Rory O'Sullivan
Chief Executive Officer, North America
Moltex Energy