



**Written submission from
Mohammad Madani**

**Mémoire de
Mohammad Madani**

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

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

2022-04-05

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:

My name is Mohammad Madani, and I hold PhD in Environmental Engineering from university of Windsor. I heard about this project from one my friend who is currently working in CNL, Chalk River. When I read and did more research about the Near-surface disposal facilities (NSDF) project I really like to write to support it.

Radioactive wastes are the most dangerous materials that is One of the biggest concerns that the world has with the disposal of nuclear waste is the affect the hazardous materials could have on animals and plant life. Although most of the time the waste is well sealed inside huge drums of steel and concrete, sometimes accidents can happen, and leaks can occur. Nuclear waste can have drastically bad effects on life, causing cancerous growths, for instance, or causing genetic problems for many generations of animal and plants. To reduce environmental risk and isolate low-level radioactive waste (LLW), in accordance with international guidance and regulatory requirements, I found NSDF and effective method to handle these wastes and NSDF at ground level are currently in operation in:

UK – LLW Repository at Drigg in Cumbria operated by UK Nuclear Waste Management

Spain – El Cabril LLW disposal facility operated by ENRESA.

France – Centre de l'Aube operated by Andra.

Japan – LLW Disposal Center at Rokkasho-Mura operated by Japan Nuclear Fuel Limited.

USA – five LLW disposal facilities: Texas Compact facility near the New Mexico border, operated by Waste Control Specialists; Barnwell, South Carolina operated by EnergySolutions; Clive, Utah (EnergySolutions); Oak Ridge, Tennessee (EnergySolutions); and Richland, Washington – operated by American Ecology Corporation.

Also, Near-surface disposal facilities in caverns below ground level are currently in operation in:

Sweden – the SFR final repository for short-lived radioactive waste at Forsmark.

Finland – an underground repository at Olkiluoto for LLW and ILW has been in operation since 1992. A similar facility at Loviisa was commissioned in 1997.

I believe that NSDF should also be implemented in Canada as well.

Thank you for providing the opportunity to intervene in this matter,
Mohammad Madani