



**Final submission from the
Corporation of the Town of
Deep River**

**Mémoire définitif de la
Corporation of the Town of
Deep River**

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

THE CORPORATION OF THE TOWN OF DEEP RIVER

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Canadian Nuclear Safety Commission
280 Slater Street
P.O. Box 1046, Station B
Ottawa, ON K1P 5S9

Re: Town of Deep River Final 2023 Submission to the CNSC in Support of Canadian Nuclear Laboratories Application to Amend the Chalk River Laboratories (CRL) Site License to permit construction of the Near Surface Disposal Facility (NSDF) at Chalk River Laboratories

Dear Commissioners,

As the host community of Chalk River Laboratories and a member of CNL's Environmental Stewardship Committee, the Town of Deep River is quite familiar with the activities and operation of CNL and we fully support the needed clean-up and disposal of legacy low-level radioactive waste existing on the CRL site in the proposed NSDF. As the community which has co-existed with this non-optimally stored low-level waste for decades, we look forward to the enhanced protection for the Ottawa River, for both our community and communities downstream, that the NSDF will provide.

The Town of Deep River expects and receives a very high level of ethical, safe, technical and environmental performance from AECL and CNL in the operation, management, and remediation of the entire CRL site and we hold AECL and CNL fully accountable for their performance

The Town of Deep River also recognizes that the Canadian Nuclear Safety Commission is one of the world's foremost nuclear regulators with a mandate to safely regulate the use of nuclear energy and materials to protect health, safety, security and the environment. As a small municipality, with years of experience as both a neighbour of CRL and Canada's first nuclear host community, we also put significant trust in the CNSC's processes and their experts.

Our trust in AECL, CNL, the Canadian nuclear industry, and its exceptional regulator, the CNSC, is not misplaced. Statistically, nuclear energy is, by far, one of the cleanest and safest sources of energy globally and Canada's nuclear industry is second to none. <https://ourworldindata.org/safest-sources-of-energy>

As a progressive, responsible community founded upon nuclear science and passionate about achieving a safe, sustainable environment for our children, we support the mission of CNL and the Canadian Nuclear Industry to reduce greenhouse gas emissions and halt

further catastrophic climate change – which is, by far, the greatest threat to both our local environment and to life on earth. Deep River council are advocates of the need for more nuclear energy – not less, and suggest that irrational fears perpetuated by a few, need to be put into context of actual risk, actual probability, and the clear scientific facts. The Canadian Nuclear Association does a good job of this: <https://cna.ca/wp-content/uploads/2022/02/The-Canadian-Nuclear-Factbook-2021-EN.pdf>

On March 23, 2022, Council of the Town of Deep River passed the following motion authorizing Reeve Doncaster and I to submit a written intervention in support of CNL's application to amend its site license to permit construction of NSDF, and authorizing us to attend / participate in the Commission hearing in support of CNL's license amendment application on June 3, 2022:

6.1.10 BE IT RESOLVED THAT the correspondence from Mr. Joseph McBrearty of Canadian Nuclear Laboratories regarding a proposal to construct a Near Surface Disposal Facility to address legacy waste at the Chalk River Laboratories, be received,

WHEREAS the Part 2, Public Commission hearing on Canadian Nuclear Laboratories' application for a licence to construct its proposed Near Surface Disposal Facility for low level waste at Chalk River Laboratories is scheduled to begin May 31, 2022, following completion of an Environmental Assessment under the Canadian Environmental Assessment Act, review of CNL's licensing submission, final environmental impact statement (EIS) and other supporting information developed since 2017.

WHEREAS the deadline to submit an intervention (supporting or opposing) is April 11, 2022

WHEREAS consistent with previous council resolutions accepting and supporting the NSDF, (March 24, 2021 - Resolution 2021 87 and March 11, 2020 - Resolution 2020 82), that were based on the following:

a. **That** extensive research and communication work was done by Canadian Nuclear Laboratories and reviewed by the CNSC.

b. **That** supporting the NSDF is the right thing to do to safely clean-up and dispose of low-level waste at CRL in a carefully designed and highly engineered facility designed to stand the test of time, ensuring care for both people and the environment now and long into the future.

c. **That** the Near Surface Disposal Facility (NSDF) is required to enable Canadian Nuclear Laboratories (CNL) to conduct environmental remediation of contaminated soils and materials that are already present at the Chalk River Laboratories (CRL) site to protect the environment, including the Ottawa River.

d. **That** the NSDF is a key enabling facility supporting revitalization of the Chalk River Laboratories, required for the disposal of building debris and other waste material resulting from the site revitalization.

e. **That** the NSDF is a permanent solution to reduce environmental risk and isolate low-level radioactive waste, in accordance with international guidance and regulatory requirements.

f. **That** ninety percent of the waste intended for disposal is already on site at CRL, five per cent will come from hospitals and universities, and five percent is from other AECL sites.

g. **That** all waste materials for disposal are screened and only low-level waste materials will be allowed for disposal in the NSDF.

h. **That** the NSDF is safe and secure: designed to withstand extreme weather and events such as earthquakes, tornadoes, floods, forest fires, sabotage and major storms.

i. **That** the engineered containment mound is internationally recognized as best practice for low-level radioactive waste disposal and the barrier system for the NSDF has undergone rigorous materials testing at Queen's University in Kingston, Ontario

j. **That** cleaning up the Chalk River site and placing low level waste in a modern, engineered facility – using the most appropriate and best- available technology – is key to caring for the environment, including the Ottawa River and not leaving the problem for future generations.

k. **That** constructing and operating the NSDF will significantly improve the existing conditions at Chalk River Laboratories by enabling the cleanup of contaminated soils and materials that are already present on the site.

l. **That** CNL has a robust, well-established environmental monitoring program, which has been in place for over 60 years. This environmental monitoring program will be expanded to include specific monitoring related to the NSDF project. CNL shares the results of its environmental monitoring program publicly on its website.

m. **That** Chalk River Laboratories is Canada's largest Science and Technology complex and one of Renfrew County's largest employers where significant advancements are made in clean energy technology, nuclear medicine and nuclear safety and security.

n. **That** Chalk River Laboratories is ideally qualified to safely and effectively manage the NSDF site now and into the future and that CRL will remain under surveillance for hundreds of years and monitoring will ensure the NSDF facility performs as designed.

NOW THEREFORE BE IT RESOLVED THAT The Mayor and Reeve or their designates, on behalf of the Town of Deep River, be authorized to submit / file a positive written intervention in support of the NSDF Project, to the CNSC Commission Registry on or before April 11, 2022, and attend / participate in the Commission Hearing scheduled to start May 31, 2022 in support of the Town's intervention.

In April 2022, Reeve Glenn Doncaster and I, on behalf of council for the Corporation of the Town of Deep River, submitted a written submission in support of construction of the Near Surface Disposal Facility proposed at Chalk River Laboratories.

On Friday, June 3, 2022, Reeve Doncaster and I made an oral submission to the CNSC, during Part 2 of the Public Hearings.

Deep River council passed this motion because as representatives of our community, and as residents and recreational users of the Ottawa River ourselves, including as the source of drinking water for our community, we understand the need to protect the Ottawa River and the surrounding environment through the timely, safe and effective management of low-level waste coupled with rigorous and sustained environmental monitoring.

The Town of Deep River has full confidence in the robustness of the NSDF multi-barrier design including its effluent collection and treatment capabilities. We also believe in the competence and strong health, safety, and environmental focus of the Canadian Nuclear Laboratories organization, and in the highly qualified and conscientious technical and scientific staff who work there, many of whom are also our citizens. We are also aware that many science and engineering consultants, who are technical experts in their fields, have been engaged for years in the design of NSDF, and that the CNSC's own technical oversight staff have reviewed and support the NSDF solution to properly and effectively dispose of AECL's low-level waste at CRL.

Much of this low-level waste has been on the CRL site for decades, some dating back to the 1950's. It is this legacy, low-level waste in non-optimal placement, which represents an existing risk to the Ottawa River and to local communities. The NSDF virtually eliminates this risk. The NSDF project means both new and existing low-level waste on the CRL site will be safely disposed of in a facility specially designed for it and which meets international best practices. Low-level waste properly disposed of in an expertly designed, expertly operated and fully monitored facility with multiple safety barriers and a leachate treatment system, will be a huge reduction in risk for the Ottawa River, the surrounding environment and for nearby communities like ours. We believe the technical merits of the NSDF design have been rigorously-defined, thoroughly-analyzed and well-defended.

Additional material recently received from intervenors raises concerns related to clearing of the forest at the site and its localized impact on wildlife. While avoidance of any land use or forest clearing is ideal, we respectfully submit that as with many projects, there is a trade-off between the need for a site against the value of the facility being constructed on that site. In Deep River for example, an area of our valued community forest was recently cleared to facilitate construction of a 96 bed Long Term Care (LTC) building adjacent to the Deep River Hospital. While forest harvesting was an unfortunate necessity, the public understands the need for and the benefit of a LTC facility in our community. The situation with NSDF is not much different – while an area of forest must unfortunately be harvested, the safe disposal of historic low-level waste, mostly generated at the CRL site, in a secure, fully engineered and expertly monitored facility is the best result for the Ottawa River, for surrounding communities and for the broader environment.

There is also potential that deforestation can be compensated by afforestation of other cleared areas.

We note that the project to evaluate, site and design a robust disposal facility for AECL's existing and future low-level waste (NSDF) began in ~2016. The Commission's Code of Conduct states Board members are expected to "*make decisions based on the merits and evidence presented*". Given the extensive study, strong evidence presented and the support of CNSC staff, the Town of Deep River expected this 6-year process to culminate with a decision following Part 2 CNSC Hearings of June 2022.

On June 30th, 2022, the Commission, as is their right, approved an extension to January 31, 2023 for the Kebaowek First Nation and Kitigan Zibi Anishinabeg to allow more time for engagement and consultation.

In December 2022, these First Nations requested a further extension to May 1, 2023 which was also granted by the CNSC.

Both first nations subsequently submitted documents expressing their concerns, many of which appear to be beyond the scope of the licence application.

The Town of Deep River submits that it is our right, as the community nearest to the CRL site and the community which has been living beside historic, low-level radioactive waste for decades, to expect a timely decision from the CNSC based on facts and science.

The CNSC is widely considered to be a world class nuclear regulator. Per the CNSC's website: "*The CNSC has a strong licensing and compliance system to ensure that all persons who use, possess and store nuclear substances and radiation devices do so in accordance with a licence and have in place safety and security provisions that are balanced with the risks associated with the substance or device.*"

The application to the CNSC is for "*a licence to build an engineered disposal facility for low level radioactive waste.*" As the community closest to the Chalk River Laboratories, the Town of Deep River notes that we are now in the 7th year of design, review and discussion about an engineered facility to properly and safely dispose of low-level waste - most of which is already existing within our community on the CRL site and which, in its present state, represents a much greater risk than the NSDF itself. We respectfully suggest that greater urgency is required to decision-making about existing and future low-level waste. The NSDF is an excellent scientific solution to the existing situation and it would be highly inappropriate to further delay a decision on such an important environmental matter in order to further accommodate extraneous arguments which are often beyond the CNSC's jurisdiction or the scope of consideration for a licence to build an engineered disposal facility.

Also stated on the CNSC website: "*When making regulatory decisions about the management of radioactive waste, the CNSC will seek to achieve its objectives by considering certain key principles in the context of the facts and further consider the*

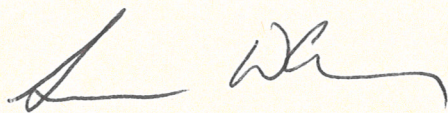
circumstances of each case including: ...that the management of radioactive waste is proportionate to its radiological, chemical and biological hazard..."

NSDF provides a strong solution to the risk and we submit that further delay or a "non-decision" about NSDF would in fact be a decision against scientific management of existing low-level radioactive waste currently at Chalk River Laboratories whereas constructing the NSDF will reduce the risk to those most likely impacted by continued non-optimal storage: Deep River and immediate downstream communities.

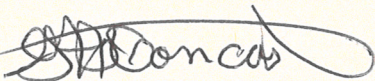
We respectfully suggest that Nuclear Safety is not a subject to be influenced by emotional arguments, irrational fears, dis-information or alarmist distortions by anti-anything-nuclear lobbyists. Nuclear Safety is a matter for decisions based on advice from formally trained experts in the fields of health, science, engineering and environmental science. These are the experts who understand both the context and the relevance of the data and of issues raised, who can advise the Commission on items raised solely as diversions or distractions, who can differentiate pertinent facts from alternate facts and who can advise on the true risks of an issue or of a radioactive substance from that of exaggerated dangers. We suggest the Commission rely on their staff and consultant's expertise as credible, relevant, and able to advise on a solution proportionate to the risk. In the words of former Mayor David Thompson, *"this is a scientific issue seeking a scientific solution."*

All Canadians, including indigenous peoples, rely on the Canadian Nuclear Safety Commission to make timely, evidence-based decisions about nuclear safety in the best interest of all Canadian's. Deep River believes that expert advice and evidence shows that NSDF will reduce the risk and enhance the protection of the Ottawa River, the health and safety of local communities and of the environment. Please make the responsible decision in a timely manner to approve the NSDF and expedite its construction.

Sincerely,



Sue D'Eon
Mayor
Town of Deep River



Glenn Doncaster
Reeve
Town of Deep River