Via Email to: nuclearwaste-dechetsnucleaires@iaac-aeic.gc.ca

TO WHOM IT MAY CONCERN:

Re: Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel Project, Ref # 8477

Please include my name/email address on your internal project list that advises interested parties around important project related developments, opportunities to comment, approvals that would be granted etc..

I list below some of my key concerns around this project. I reserve the right to provide additional comments at a later date.

- NWMO'S "Deep Geological Repository project" must be designated for a full impact assessment and public hearing
- The very short comment period (30 DAYS) does not provide the average citizen enough time to review all pertinent documents.
- Transportation must be included in the impact assessment – it's a major component of the project.
- A thorough examination of "alternatives to" the project and "alternative means/methods" of carrying out the project must be included in the impact assessment
- The Initial Project Description fails to provide the key information about the NWMO's project; a detailed project description is necessary so as to fully assess potential impacts.
- A fully costed estimate of the project through to completion and including monitoring in perpetuity must be provided INCLUDING how much the various utilities (OPG, Hydro Quebec, NB Power etc.) have/will set aside/be liable for as their portions of the cost AND, should there be shortfalls, which governments (federal or provincial) would backstop/guarantee full project costs. Note that the federal government and Ontario are running massive deficits which are projected to continue for some time.

TOO SHORT COMMENT PERIOD

- Given the complex nature of this project which the NWMO expects will be carried out over decades requires the opportunity to thoroughly review and identify issues/concerns.

INADEQUATE/INCOMPLETE PROJECT DESCRIPTION

From page 9 of 10 page summary: Scientific foundation and safety: "*More than a decade of geoscience, environmental, and safety studies confirm the site's suitability and preliminary safety. These studies form the foundation for the CNSC's graded approach to risk and licensing. As the Project advances through site preparation, construction, operation, decommissioning, and closure, the NWMO will submit progressively more detailed safety, environmental, and design documentation to support licensing under the NSCA."*

From 92 page summary: *"The Project is expected to span approximately 160 years, including site preparation, construction, operation (about 50 years), decommissioning and closure, and post-closure monitoring***."**

A decade of study for a project expected to span approximately 160 years is hardly adequate.

Given the extended project timeline, many of the people currently developing, promoting, reviewing, commenting on this scheme will be dead. Those most likely to be directly impacted may not even be born yet. Few of us currently alive would be around to know if even "Planned" aspects goes off the rails, never mind all the currently unanticipated/unknown issues that could arise over such a long period. Many governments don't keep much information posted for much more than a decade – this is a problem for a project of this anticipated rollout. Generally, governments are lousy communicators when it comes to complex and contentious projects.

An information repository with ALL project information – from initial plans, through to public engagement documents, commitments to communities, through to all regulatory and other assessments through to construction MUST be publicly accessible and regularly updated so that all interested parties including those most directly impacted would have the opportunity to become informed AND request regular project updates as the project evolves.

PROJECT DESCRIPTION EXCLUDES THE IMPACTS OF TRANSPORTATION OF HHL

From the 10 page summary: "*The Project does not include: transportation of used fuel from reactor sites to the Project beyond primary and secondary access roads at the Project site, as this is regulated separately under CNSC certification and uses existing transportation infrastructure"*

Not including and fully assessing the transportation impacts is extremely reckless and does not inspire confidence that the full range of potential impacts would be thoroughly examined and considered by anyone. E.g. the Ontario Ministry of Transportation does NOT have the expertise required to address the extremely risky transportation of HHL Waste.

Given that the NWMO intends to send High Level Radioactive waste shipments by truck and/or possibly rail over many decades, for distances up to approximately 1800 kilometers, ALL potential impacts arising from transportation of waste to the DGR MUST be identified and examined.

Cannisters from Darlington and Pickering Nuclear Generating Stations would most travel on sections of Highways 401 – this one of the most congested highways in North America that goes through heavily populated areas. There is not a day that there is not a major "accident" and serious congestion. I live in Whitby, in Durham Region, approximately 4 kilometres north of Highway 401 and thus have a keen interest that all potential impacts of transporting HHL waste (including emergency response) would be thoroughly examined during the impact assessment and full public hearings.

Many of the current crop of Durham regional politicians seem to have drunk the nuclear industry Kool Aid and cannot be relied upon to take ALL necessary steps so as to ensure that the public would be protected in event of any transportation related mishap and/or that there would be sufficiently comprehensive regularly updated emergency plans in place.

Therefore, the general public as well as the directed impacted communities must know that transportation impacts would be identified and fully considered.

I have travelled on Hwy 17 between Thunder Bay and Dryden several times. In April 2015 the road was washed out near Upsala, requiring me to overnight in the Ignace area (at a private residence) until I could continue my journey the next day. Imagine the many security and other issues around a loaded truck having to spend extended periods on the road or finding a place to park.

ALL potential impacts around transportation from security, emergency response in event of an "accident" through to potential impacts on large populations along both Highways 401 and 400 as well as potential impacts along the entire proposed route.

EMERGENCY RESPONSE MUST BE PROVIDED BY TRAINED PROFESSIONALS WHO HAVE EXPERIENCE ADDRESSING SITUATIONS INVOLVING RADIOACTIVE MATERIALS

Should an emergency situation develop close to any of the Ontario Nuclear Generating stations, there would be nuclear emergency response plans at this time. ALL communities along the transportation routes MUST be provided with resources/expertise so as to develop nuclear emergency response plans and these MUST be funded by the NWMO and/or other upper tier governments.

As well, Canada's army MUST have a unit trained in emergency response involving radioactive materials as many smaller municipalities along the routes would likely require external expertise and manpower.

INADEQUATE STATEMENTS AROUND "NEED" AND "PURPOSE"

From Summary: "*Canada's nuclear power plants have provided, and are expected to continue providing, clean, reliable, and low-carbon energy for decades. However, used nuclear fuel remains radioactive for a very long time and therefore requires careful, permanent management to avoid placing a burden on future generations. A deep geological repository represents the internationally recognized best practice for the long-term management of used nuclear fuel. The Project provides a safe, permanent, and responsible solution that will ensure the used fuel is securely contained and isolated from people and the environment for generations to come*"

The foregoing sentences read like marketing speak and wishful thinking. There is nothing "clean" about nuclear electricity generation that produces waste that remains radioactive for who knows exactly how long, but for centuries at a minimum.

More rosy marketing speak is found here:

"If implemented, the Project would:

• *provide a permanent and safe disposal solution for used nuclear fuel* (NO evidence that it would be safe)

• *support Canada's commitments to climate action and achieving net-zero by 2050 by ensuring nuclear energy remains a sustainable and socially responsible energy source* (all impacts of nuclear energy must be considered from mining uranium through to construction, operations, decommissioning)

• *eliminate the need for future generations to actively manage used nuclear fuel, thereby reducing long-term environmental risks and advancing intergenerational equity in managing Canada's nuclear legacy" (This is NOT accurate because a) new nuclear plants are being planned which will produce yet more high level waste. New plants won't be Candus. As I understand it the SMRs being planned in Ontario will produce high level waste that will be different from that of Candus – where will those wastes go??)*

SITE SELECTION AND COMMUNITY ENGAGEMENT

From Summary: "*In November 2024, following a 14-year site selection process, extensive public engagement, and a comprehensive technical assessment demonstrating confidence in safety, the decision was made to locate the Project in the Wabigoon Lake Ojibway Nation and Ignace siting area. This milestone marked the completion of more than a decade of rigorous scientific study and a community-driven, consent-based siting process, advancing the Project into the regulatory decision-making phase.*"

NWMO must demonstrate how choosing such a relatively distant site from the source of HHL is superior to choosing sites closer to the HHL waste to be managed long term.

Small communities are extremely vulnerable to being swayed/enticed by financial incentives. Some have declining populations and tax bases. Many are generally less equipped than larger communities near the nuclear generating stations where the wastes are currently stored.

CANNISTERS

Spent fuel packaging plant (lacks a complete or even summary description)

The NWMO has not provided evidence that cannister choice is a "best practices" method of doing so. NWMO MUST explain how the cannisters chosen stack up to that of other countries looking at their DGRs e.g. Finland – i.e. details needed about why NWMO option is best method.

POTENTIAL EFFECTS – impacts to groundwater MUST be considered

Radioactivity and estimates of radioactive releases from various project activities over various time frames and assessing those effects (largely just ignored)

From page 7 0f 10 page summary: "*Project activities that could result in environmental interactions include land clearing, blasting and excavation, water management, construction and operation of surface and underground facilities, materials handling, and in-site transportation. For the purposes of the Initial Project Description submission, the NWMO has applied a pathways-of-change screening approach to identify these interactions and to incorporate proven environmental protection measures drawn from comparable projects.*

Examples include: air quality and dust control: water spraying, material covers, and wheel-washing stations noise and vibration management: temporary barriers, controlled blasting, and limited work hours erosion and sediment control: silt fencing, sedimentation ponds, and progressive revegetation surface water protection: engineered drainage, water collection ponds, and treated effluent release wildlife and habitat protection: seasonal clearing restrictions and habitat restoration"

The potential for groundwater contamination both on and off the site must be considered

MONITORING

Monitoring plans need to be developed and available for public review and comment.

ALL monitoring MUST be conducted in perpetuity.

Monitoring must include real time monitoring technology where available.

Monitoring plans must be fully costed prior to project approval (and updated periodically) with sufficient contingency funding set aside to address cost increases.

Upper tier governments must be prepared to assume responsibility for monitoring in perpetuity should the project proponents become unable and/or fail to do so.

ALL monitoring must be conducted by INDEPENDENT QUALIFIED THIRD PARTY consultants/experts.

ALL monitoring must be publicly reported/publicly accessible as soon as reports become available – not wait for some annual summary to be produced – with a dedicated page on project website and/or other project information repository.

Monitoring must include response and notification plans should monitoring results demonstrate issues/ areas of concern.

All provinces where waste currently located must ensure their provincial ALERT READY systems or equivalent systems are functional and prepared to issue alerts should any issues arise during handling/transportation.

LIFECYCLE OVERSIGHT

"The CNSC will act as the lifecycle regulator, providing independent oversight and issuing authorizations only when the Project is demonstrated to be safe for people and the environment. The Project will also remain subject to other federal, provincial, and Wabigoon Lake Ojibway Nation approvals and will be under CNSC licensing for approximately 160 years, ensuring comprehensive oversight across its entire lifecycle."

A project of this complexity and extended duration cannot be left to CNSC alone to oversee. Upper tier governments have Ministries of Energy, Environment, Natural Resources etc. and experts MUST be engaged to provide advice and some level of oversight in addition to the CNSC.

CONCLUSION:

NWMO'S "Deep Geological Repository project" must be designated for a full impact assessment and public hearing

30 days is insufficient for the average citizen such as myself to fully review and consider the project.

By attempting to exclude transportation impacts, the NWMO has pretty much admitted that those pose serious potential impacts and MUST be included as part of the project assessment.

The project must discuss alternatives to a DGR located up to 1800 kilometres from the sources of most of the waste to be transported to the Ignace/Wabigoon area as well as alternative means of carrying out the project.

Please include my name/email on your internal list of interested parties relating to this project.

Thank you for your attention.

Linda Gasser
<personal information removed>