



# Proposed Designation of the Nuclear Waste Management Organization's Deep Geological Repository as a Project of National Interest

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## **NORTHWATCH**

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## Précis

The Government of Canada is considering designating the Nuclear Waste Management Organization's (NWMO) proposed Deep Geological Repository Project (DGR) as a "Project of National Interest" (PONI). NWMO's proposed "DGR Project" includes the transportation, processing, burial and eventual abandonment of all of Canada's high-level nuclear fuel waste at a selected site in northwestern Ontario, an average distance of 1,700 km from over 90% of the wastes (farther for the remaining volumes in eastern Canada). Designating NWMO's DGR as a "PONI" would guarantee its approval and divert the project from the impact assessment process currently underway. This submission assesses the proposed designation and objects to it on several grounds, including that it does not reasonably meet the criteria set out in the Building Canada Act (2025) and that the project is novel and unprecedented with the potential for environmental and social harm that must be carefully assessed through a full public review such as under the Impact Assessment Act (and the process currently underway).

## The Project

In considering whether the NWMO's proposal to transport and process 142,000 tonnes<sup>1</sup> of highly radioactive irradiated nuclear fuel for emplacement in a series of constructed rooms at a depth of more than a half kilometre in a fractured site at the height of land for the Wabigoon River and Rainy Lake watersheds should be guaranteed an approval while still not fully designed, described or reviewed, it is important that those considering this proposal have at least a very basic understanding of the breadth and consequence of the project.

The Gazette I Notice failed to provide an adequate and accurate summary description of the project. For the purpose of commenting on that notice, a brief description is provided below; note that this is a description rather than a critique. For each phase of the project a critique and careful evaluation must be carried out, as is expected to take place if the current assessment underway under the Impact Assessment Act is permitted to run its course.

Project activities are described in the order of occurrence during project implementation, although several of these activities would be occurring concurrently. The activity sets are: transfer of wastes, transportation, processing, emplacement, closure and decommissioning and post-closure monitoring.

### Transfer of Wastes at Nuclear Generating Stations

The transfer of the used fuel waste from dry storage containers into transportation containers at the reactor site is the first activity in this project, although this important first step has been

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<sup>1</sup> NWMO Initial Project Description, December 2025, <https://iaac-aeic.gc.ca/050/evaluations/document/164740>

largely excluded from NWMO's project descriptions, including in the Initial Project Description<sup>2</sup> filed during the planning phase of the Impact Assessment review currently underway.<sup>3</sup> The transfer of the wastes at the reactor station should be considered to be part of the project as the methods and observations made during the transfer of the wastes are likely to have bearing on the condition of the fuel as it arrives at the repository site, and subsequently on key safety issues such as levels of radioactive release and worker exposure. Fuel defects are a precursor to dose; if the fuel bundles are found to be defective or damaged during observation or testing during transfer at the nuclear generating station this is of consequence at the repository site. Similarly, if the fuel bundles are damaged or made defective during the transfer, this will be of consequence at the repository site and throughout processing and emplacement of the wastes and into the long term.

### Transportation of Wastes from Nuclear Generating Stations to Proposed Repository Site

The Nuclear Fuel Waste Act – the legislation which provided the nuclear industry with a mandate to operate as the Nuclear Waste Management Organization – defines management, in relation to nuclear fuel waste, as “including handling, treatment, conditioning or transport for the purpose of storage or disposal”.

NWMO's plan to bury and abandon all of Canada's high-level nuclear fuel waste in northwestern Ontario will involve 2-3 shipments per day for more than 50 years, with each truck hauling 35 tonnes of radioactive cargo per trip. Over 90% of the shipments will come from southern Ontario, averaging 1,700 km per trip, with most of those kilometres travelled on the poorly maintained and mostly 2-lane roads of northeastern and northwestern Ontario. The remaining shipments will be coming from the east – Chalk River in the Ottawa Valley, Quebec and New Brunswick. Again, mostly 2-lane roads, and – again – riding a road of radioactive risk that will cut across northern Ontario. In May 2025, Alberta Energy announced their plan to construct four large reactors 30 km north of Peace River in northern Alberta and their intention to transfer the high-level radioactive wastes to the NWMO for transportation, burial and abandonment at the Revell site.

NWMO has not yet identified their preferred or intended route(s) and retain the option of sending the waste by rail.



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<sup>2</sup> As posted in the Impact Assessment Agency public registry at <https://iaac-aeic.gc.ca/050/evaluations/proj/88774/document/164492>

<sup>3</sup> The impact assessment under the Impact Assessment Act commenced on January 5, 2026. The planning phase was completed and Notice of Commencement for the Impact Study was posted on July 3, 2026. The public registry is at <https://iaac-aeic.gc.ca/050/evaluations/proj/88774?culture=en-CA>

The NWMO has identified three potential transportation containers.<sup>4</sup> The Basket Transportation Package is still conceptual and the Dry Storage Containers were designed and are in use for interim (stationary) storage at the nuclear generating sites. The Used Fuel Transportation Package is NWMO's "reference design" and was developed by Ontario Hydro in the 1980s and certified by the Atomic Energy Control Board after being subject to only limited testing in the late 1980s. The tests were only partially completed and only partially successful. Of the four standard international tests for transportation containers only two were attempted.

Each shipment involves constant emission of low levels of radioactivity. Calculations of "safe exposure" are based on moving vehicles. Travel delays are common in northern Ontario, due to traffic stoppages in the many communities the route traverses and for road construction. Road closures due to highway accidents, forest fires, flooding and winter weather conditions occur regularly. If an accident results in a breach of the containers, it is expected that the releases would be much larger. The shipments will be routed through numerous northern communities, cross major rivers, and in many instances closely follow the edges of lakes, separated from the water only by steep embankments.

There is no level of exposure to ionizing radiation that does not pose an associated risk to human health.

There is very little experience with nuclear fuel waste transportation in Canada, international experience has a mixed record, and there are substantial gaps in the testing of the transportation containers and training for emergency responders. No international program has involved similar distance, volume, frequency or duration so there is no equivalent experience to draw on.

Canada has no public registry of the transportation of nuclear materials, and no central repository of accident analysis. However, Transport Canada reports 90 transport-related radiological emergencies since 2015, and the Canadian Nuclear Safety Commission posts summary reports of select accidents that have involved the release of radioactive materials or have involved shipments of radioactive waste.

#### Processing of the Used Fuel in the Used Fuel Packaging Plant

Upon arrival at the repository site, the NWMO proposes that the used nuclear fuel will be received at a Used Fuel Packaging Plant (UFPP) which will incorporate multiple robotic/remote processing systems contained within hot cells (containment structures) to remove the used fuel from the transportation package and repackage it into Used Fuel Containers (UFCs) that will be emplaced in the DGR. The proposed scale of use of hot cells is unprecedented in Canada, where hot cells have been used on a very small scale and primarily for research purposes; there is no operational experience in Canada with the use of hot cells on this large industrial scale.

The NWMO has provided only very high-level conceptual descriptions of the Used Fuel Packaging Plant to date but established in its 2021 conceptual design report that there will be a

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<sup>4</sup> Preliminary Transportation Plan, NWMO, 2021, as posted at <https://www.nwmo.ca/-/media/Reports-MASTER/Corporate-reports/2021-Preliminary-transportation-plan.ashx>

release of radio-contaminants to the indoor and outdoor environments, additional low and intermediate level and liquid radioactive wastes will be generated, and there will be some monitoring of workers but it will be limited and may not adequately measure worker exposures.

A conference paper presented by NWMO the same year<sup>5</sup> acknowledged that normal operations of the repository surface handling facilities may result in emissions of radioactivity, for example from routine used fuel receipt from transportation and during re-packaging into the (final) Used Fuel Containers. “Anticipated Operational Occurrences” are considered outside the range of normal operations but are assumed to occur with frequencies of at least  $10^{-2}$  per year (Anticipated Operational Occurrences (AOOs) are defined as deviated or abnormal events, i.e. accidents, failures or mishaps).

### Emplacement of Wastes in the Deep Geological Repository

The wastes will be placed deep underground in a series of “emplacement” rooms using robotically controlled equipment because the levels of radioactivity will be too high to allow human workers to be present. After the emplacement rooms are sealed there will be no monitoring of the waste containers and no means to detect or respond to the expected failure of the waste containers. Eventually, the containers will fail, and the contents will be released to groundwater and then to the surface.

The NWMO acknowledged in their Initial Project Description (IPD) that “the placement rooms of the underground repository are constrained by the naturally occurring rock fracture network” and indicated that the Geoscience Verification Plan (which is not provided) and additional characterization work (which was not described) will be required to “ensure that where applicable, the placement arms are sufficiently far from these fractures”. This is a key safety factor, particularly in terms of long-term safety (the ability of the repository to actually contain and isolate the waste) and must be addressed in much greater detail, including through oversight of the geoscience verification work, contingency planning and contingency plans and clear failure thresholds, i.e. what is the measure that will be used to determining that the fracturing is to such a degree that placement (of tunnels, placement arms or placement rooms) cannot proceed.

The IPD illustrated why a detailed and independent assessment is required for this project. For example, it states that “to the degree possible, the subsurface ventilation system is expected to be set up to ensure that underground work is performed in a fresh air supply stream with the exhaust being directed through unoccupied areas”. The qualifier “to the degree possible” warrants careful

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<sup>5</sup> DOSE CONSIDERATIONS FOR A SITE BOUNDARY FOR SURFACE OPERATIONS AT A DEEP GEOLOGICAL REPOSITORY, E.P. Kremer, Nuclear Waste Management Organization, Toronto, Ontario, Canada and N.C. Garisto, SENES Consultants Limited, Richmond Hill, Ontario, Canada, presented at Waste Management, Decommissioning and Environmental Restoration for Canada's Nuclear Activities September 11-14, 2011, APM-REF-01917-26229

examination; the statement suggests that this may not be possible, and underground work would be performed without a fresh air supply.

### Closure, Decommissioning and Monitoring

In its 2005 report “Choosing the Way Forward”<sup>6</sup> (which was the basis for the Government mandating the NWMO to proceed to siting and DGR design) the NWMO described the deep repository closure as taking place after 300 years, followed by postclosure monitoring of the facility could take place from the surface<sup>7,8</sup> stating that this “approach provides opportunity for citizens, including future generations (at least over the next 300 years), to influence the way in which the fuel is managed<sup>9</sup>”. In the 2025 IPD the NWMO states that they will demonstrate the site’s long-term safety during the extended monitoring period and that “the actual duration of this period will be determined based on society’s desire at the time as well as experience from other international DGRs for used nuclear fuel and CNSC oversight”.

In summary, while the NWMO has identified the need for long term monitoring in various documents and in the IPD indicated that the extended monitoring phase will include monitoring of barrier parameters such as rock temperature, rock stress/displacement (response to thermal loading), water ingress, placement room seal performance, ground water quality, ground water radioactivity, humidity and acoustic emissions as required, neither the IPD or the 2021 Conceptual Design Report or the 2005 “Choosing the Way Forward” report provide sufficient information, definition or description of the closure, decommissioning and long-term monitoring.

The long-term safety of the project depends on design, operation and decommissioning. To date, the NWMO has not adequately described these

### **Northwatch’s Interest**

Northwatch is a regional coalition in northeastern Ontario with a long-standing interest in the impacts of the nuclear fuel chain and the management of radioactive wastes, given the presence in our region of the world’s largest uranium refinery on the North Shore of Lake Huron, the presence of millions of tonnes of radioactive uranium mine tailings primarily but not solely in the Elliot Lake area in the Serpent River watershed, and our experience as the repeated target of nuclear waste “disposal” projects. Northwatch has a dual mandate of advocating for environmental protection and supporting public participation in environmental decision-making.

Northeastern Ontario is comprised of six federal districts, five of which (excluding the District of Manitoulin, which is an island in the North Channel of Lake Huron) will be *en route* should the NWMO ever proceed to transporting nuclear fuel waste from the nuclear generating stations in southern Ontario and eastern Canada to a site in northwestern Ontario. Half of the federal

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<sup>6</sup> Choosing a Way Forward, Final Report, Nuclear Waste Management Organization, November 2005, as posted at <https://www.nwmo.ca/canadas-plan/selecting-canadas-plan/the-study>

<sup>7</sup> NWMO, Choosing a Way Forward, 2005, page 27

<sup>8</sup> IPD, page 140

<sup>9</sup> NWMO, Choosing a Way Forward, 2005,, page 31

districts have previously been investigated as potential sites for a deep geological repository (Temiskaming District by AECL, Sudbury District by NWMO and Algoma District in multiple locations by AECL and NWMO).

Northwatch formed in 1988 in large part to provide a regionally representative voice in the Federal Environmental Assessment Review Office assessment of Atomic Energy of Canada Limited's Geological Disposal Concept (the precursor to the NWMO's concept) and was a full participant in the scoping hearings in 1990 and the three phased public hearing in 1996 and 1997. Northwatch subsequently was a witness at the Parliamentary and Senate hearings on the Nuclear Fuel Waste Act in 2002 and has - since the NWMO's subsequent formation - been actively engaged with the monitoring of and responding to the NWMO's project development.

Since 2010 Northwatch has been supporting residents in northern Ontario in assessing the risks and impacts of the NWMO's evolving concept for a DGR project and associated activities during NWMO's investigation of multiple communities in the northwest including Manitouwadge, Schreiber, Nipigon, Red Rock, Ignace and Ear Falls and in northeastern Ontario, including in Spanish, Township of the North Shore, Elliot Lake, Blind River, Wawa, White River and Hornepayne.

Northwatch and Northwatch's membership are resident along the two routes for radioactive waste transportation through northeastern Ontario (Highway 11 and Highway 17) and have a high-level of concern with respect to the prospect of the NWMO transporting nuclear fuel waste through the region, including an estimated 2-3 trucks per day for fifty years or more. Concerns relate to the low-levels of radiation bystanders and fellow-travellers will be exposed to during "normal" operations and the risk of a container breach during an accident or other upset condition resulting in larger releases or longer exposures.

Northwatch has knowledge with respect to the NWMO's project and its project development and siting process, and with the predecessor AECL concept. Northwatch is also familiar with other international programs and has tracked their progress – and in some cases lack thereof – over several decades, and in more detail over the last decade, including by participating in international networks and hosting international panels discussing various countries' DGR programs.

## **Designation as a Project of National Interest**

On June 24<sup>th</sup> the Honourable Tim Hodgson, Minister of Energy and Natural Resources; the Honourable Steven MacKinnon, Minister of Transport and Leader of the Government in the House of Commons; and the Honourable Rebecca Alty, Minister of Crown-Indigenous Relations, announced that the government is initiating the process toward potential listing of the [Nuclear Waste Management Organization's \(NWMO\)'s Deep Geological Repository \(DGR\)](#) – as projects of national interest under the Building Canada Act and that the Government is referring the DGR to the Major Projects Office (MPO). The announcement described NWMO's DGR project as "located in northwestern Ontario, near Wabigoon Lake Ojibway Nation and the Township of Ignace area, the DGR project is a world-recognized best practice solution for safe,

long-term storage of all used nuclear fuel from Canada's existing nuclear reactor fleet, as recognized under the federal government's [new Nuclear Energy Strategy](#)."

According to the announcement, *"listing these projects under the Act would streamline and consolidate key federal permits and authorizations, subject to a document outlining the conditions under which the project may proceed. National interest listing of the project would provide confidence that key federal permits and authorizations for the project will be granted, shifting Canada's regulatory focus from 'whether' the project should proceed to 'how' it will proceed."* The announcement further stated that "in the case of the Mackenzie Valley Highway and the Grays Bay Road and Port projects, this will be contingent on both projects successfully completing treaty-based impact assessment and regulatory processes" but did not acknowledge Wabigoon Lake Ojibway Nation's sovereign review and approval process or the authority of the rightsholders that comprise the 28 Nations of Treaty 3 where the NWMO DGR's candidate site is located.

The announcement offered "reasons" these projects are candidates for listing under the Act, stating that *"By delivering on Canada's commitment to safe, long-term management of used nuclear fuel, NWMO's DGR project presents the potential to unlock clean nuclear energy projects that strengthen Canada's autonomy, resilience and security; ensure best-in-class safety and environmental standards; and catalyze new investment and create jobs. The opportunity presented for safety, security, economic growth, and Indigenous partnership aligns with the federal government's new [Nuclear Energy Strategy](#). The construction and operation of the DGR will generate sustained economic activity – including through Indigenous participation plans; and support the continued safe operation and expansion of Canada's nuclear power facilities, in line with Canada's Nuclear Strategy."*

As further discussed in comments on the Gazette I notice, these "reasons" are unfounded and without basis. In response:

- The DGR is one option for the long-term management of nuclear fuel waste; it does not "unlock clean nuclear energy projects", it provides one option for managing – and attempting to contain over the long term – the radioactive legacy of past and ongoing decisions about means of electricity generation
- Nuclear energy projects are not "clean", particularly in comparison to other generating options such as renewable energy and more particularly renewables coupled with storage and efficiency;
  - o nuclear energy projects generate large amounts of CO<sub>2</sub> during uranium mining and processing, fuel processing and production, and construction of reactors and waste facilities and produce other pollutants and waste products at each of those stages including during operation;
  - o reactor stations continue to rely on fossil fuels during operation, and so produce CO<sub>2</sub> but also multiple conventional chemical pollutants and criteria air

contaminants as tracked through the National Pollutants Release Inventory, as well as radioactive emissions and nuclear substances (such as tritium and carbon-14) as tracked by the Canadian Nuclear Safety Commission.

- Nuclear energy projects generate large volumes of low, intermediate and high-level radioactive wastes, the latter two categories require containment into perpetuity to manage the radioactive hazard and the former for an estimated 300 years, all of which are carbon and energy intensive activities
- The “reason” states that “*nuclear energy projects that strengthen Canada’s autonomy, resilience and security*” but the newest “nuclear energy project” is the BWRX-300 reactor being constructed at Darlington Nuclear Generating Station and that nuclear energy project is a purchase of American technology and utilizes an American reactor design and will rely on enriched uranium which will require purchase from an American supplier; these factors are all counter to any ambition to strengthen Canada’s autonomy
- The “reason” states that the project will strengthen Canada’s resilience, but the NWMO’s project has been highly divisive in the 22 communities that were investigated as potential burial sites and is causing further alienation between northern and southern Ontario; these are not contributors to our country’s resilience
- The “reason” states that the project will strengthen Canada’s security, but sending 30,000 shipments of 35 tonne packages of highly radioactive waste on the 1,700 to 2,400 km long trips on mostly narrow two-lane northern roads which are accident ridden and prone almost daily to weather and accident related closures will weaken rather than strengthen Canada’s security and make large regions vulnerable to malevolent acts and sabotage
- The “reason” states that the project will “ensure best-in-class safety and environmental standards” but this has not been established and will not be established if approval is guaranteed and the project assessment process is bypassed

The announcement listed “Benefits of the *Building Canada Act*” but these “benefits” will not be realized in the instance of the proposed nuclear waste project. For example:

- The DGR is financed through contributions required from the waste generators as set out in the Nuclear Fuel Waste Act; the proponent is not required to raise funds or acquire financing or investors
- As per above, the NWMO DGR project does not require investors and attracting investors is not a consideration for this project
- The announcement claims that a “benefit” for Indigenous Peoples will be that “the Act creates a more consistent, centralized process that supports Indigenous engagement, consultation and partnership, and legislates a focus on projects that advance the interests of Indigenous Peoples” but as per the strong and clear resolutions passed by the [Chiefs of Ontario](#) and [Anishnabek Nation](#) in 2026 and by Grand Council Treaty #3 and Nishnawbe

Aski Nation previously, the affected and potentially affected Indigenous Peoples are calling for a comprehensive impact assessment in which they have a supported role, and have strongly and clearly [objected to the potential designation of the NWMO's project as a Project of National Interest](#)

- Designating the NWMO project as a PONI will not cause any material difference to the overall length of the project or the jobs or economic activities that may be associated with the project
- It is a matter of concern that a “benefit” that may be associated with the NWMO project would be to “diversify trade”; is this a signal that nuclear waste is to be treated as “goods and service” under a trade agreement with the U.S. or internationally and that the “service” of nuclear fuel waste management is to be offered to trade partners? Does this signal that Canada is to be opened to the import of high-level nuclear waste from the U.S. or other jurisdictions for the placement in the NWMO’s proposed deep geological repository? If that is not the intended signal then greater caution should be exercised by the Government of Canada and its agents when attempting to conjure “benefits” to be assigned to the project or the project’s potential designation as a “Project of National Interest”

#### September Announcement

On September 18, 2026 the Government of Canada announced the publication of a notice in the *Canada Gazette* for the Deep Geological Repository (DGR) Project “marking the next step in considering whether the project should be listed under Schedule 1 of the *Building Canada Act* (the Act) as a project of national interest”

The announcement described the proposed DGR Project as representing “nationally significant infrastructure that would provide a permanent solution for the long-term management of Canada's used nuclear fuel while supporting Canada's position as a global leader in reliable, non-emitting nuclear energy.”

The announcement went on to state that “*Under the umbrella of Canada’s first-ever Nuclear Energy Strategy, released in June 2026, the project would help align Canada's growing nuclear sector, support energy security and economic competitiveness, create long-term employment opportunities, ensure Canada maintains its world-class safety standards, and generate lasting benefits for Indigenous communities and the region. It also supports Canada’s long-term clean energy future by helping sustain a reliable, low-carbon electricity system for generations.*”

We note that of the several energy and nuclear related initiatives (discussed below under “context”) the Nuclear Strategy was the single instance of there being no public engagement, no public comment, and no public opportunity to respond to the strategy.

The statements in the announcement are promotional in nature. They are not factual, and do not provide a convincing rationale for designating the NWMO’s project as a “Project of National

Interest” and in so doing guarantee approval and interrupt the impact assessment review currently underway. The statements warrant scrutiny.

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|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| According to the announcement the project would:                         | Northwatch commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| help align Canada's growing nuclear sector,                              | Align Canada’s “growing nuclear sector” with what? With the exception of a 300 megawatt reactor at Darlington which is a downsize from the 2011 approval of a much larger reactor how is the sector “growing” other than in federal and provincial subsidies?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| support energy security and economic competitiveness,                    | Presumably this is in reference to “supporting” the nuclear sector, but the most direct path to a secure energy future is building a distributed grid which decentralizes renewable energy generators, coupled with efficiency and storage; nuclear power is the quintessential “large plant” generator; the large plant approach requires extensive, expensive transmission and substations, suffer from long-distance line energy losses, have high upfront costs, and can cause widespread outages if a major plant fails. Nuclear power additionally generates multiple classes of radioactive waste which require perpetual care and containment                                                                                           |
| create long-term employment opportunities,                               | No additional employment opportunities will be created as a result of designating this project as a PONI.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| ensure Canada maintains its world-class safety standards,                | designating this project as a PONI i.e. guaranteeing approval and short-circuiting the current assessment process is counter-productive to ensuring that “world-class” safety standards are achieved; for example, the Gazette I notice indicates that the examination of the impacts of the NWMO project will be limited to 160 years, which is not the international standard and not sufficient to evaluate the project’s impacts; designating the project as a PONI and the limitations on safety assessment anticipated as a result of that designation will make Canada an outlier and place Canada out of conformance with the approaches being taken internationally under International Atomic Energy Agency standards and guidelines. |
| and generate lasting benefits for Indigenous communities and the region. | NWMO’s project has been rejected by Indigenous peoples along the transportation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                              | route and in the region of the project, as noted above                                                                                                                                                                                                                                            |
| support Canada's long-term clean energy future by helping sustain a reliable, low-carbon electricity system for generations. | Canada's better option for a long-term clean energy future lies with renewable energy combined with energy efficiency and storage; that approach produces electricity at a lower price, with a lower carbon footprint, with a much shorter construction time and more flexibility and resilience. |

### Context

There are currently multiple federal nuclear related initiatives underway at the federal level, ranging from legislation to unilateral declarations. These initiatives interact or intersect and, in some cases, contradict.

- “Getting Major Projects Built in Canada - Discussion Paper on Proposed Legislative, Regulatory, and Policy Reforms” announced May 8th with the deadline extended July 22<sup>nd</sup> with one of its biggest hits – the handover of impact assessment from the Impact Assessment Agency to the Canadian Nuclear Safety Commission - now being delivered through Bill C-39.
- The electricity strategy “Powering Canada Strong: A National Strategy for an Electrified Canadian Economy” which was announced May 14 with comment invited but no deadline. The Standing Committee on Natural Resources and the Environment electrification study with the deadline – and the study – resumed its study with at its September 23rd committee meeting.
- The Nuclear Energy Strategy for Canada announced June 22 with no comment invited. The Nuclear Energy Strategy is wholly promotional of the nuclear industry and nuclear expansionism, and signals that the federal government intends to “derisk” investments in the nuclear sector by transferring those risks from the private investor to the public purse.
- The June 24 announcement of the potential “listing” of the NWMO DGR under the Build Canada Act (aka Bill C-5) was followed by a September 18th Notice posted in the *Canada Gazette* that the Nuclear Waste Management Organization's (NWMO's) Deep Geological Repository (DGR) project for all of Canada's nuclear fuel waste is proposed for designation as a “Project of National Interest” under the *Building Canada Act* with a comment deadline of October 26th.
- Bill C-39, the Build Canada Strong Act , launched the day Parliament resumed on September 21st. The bill delivers the May 8th discussion paper 's threat of transferring impact assessment of nuclear projects from the independent Impact Assessment Agency to the nuclear industry led Canadian Nuclear Safety Commission. Bill C-39 also undoes sections of Bill C-5 passed by the same government the year previous.

At the same time, four major nuclear projects are in the second phase of impact assessments under the Impact Assessment Act, including the Nuclear Waste Management Organization's proposed deep geological repository for nuclear fuel waste.

| Project                   | Start Date | Commence Date | Public Comments | Current status                                                                      |
|---------------------------|------------|---------------|-----------------|-------------------------------------------------------------------------------------|
| Bruce C Nuclear Build     | 2024-08-12 | 2025-08-19    | 335             | Participant Funding in place, Impact statement delayed from August to November 2026 |
| Peace River Nuclear Build | 2025-04-14 | 2026-04-20    | 1,150           | Entered Impact Statement Phase, Guidelines revised                                  |
| Wesleyville Nuclear Build | 2026-01-12 | 2026-07-10    | 1,358           | Entered Impact Statement Phase                                                      |
| NWMO's DGR                | 2026-01-06 | 2026-07-03    | 1,497           | Impact Statement Workplan filed 2026-10-04                                          |

In the case of all four impact assessment review processes, and most definitely in the case of the NWMO's deep geological repository, the public and Indigenous people have engaged in good faith and invested tens of thousands of hours into the review process, reading and reviewing thousands of pages of filings on the respective public registries, holding community conversations and sharing sessions, and providing thoughtful and relevant comments and critiques, responding to the Impact Assessment Act's stated obligation of the federal government to provide meaningful public participation opportunities.

The proposed deep geological repository has a longer project history, dating back to its predecessor proposal, Atomic Energy of Canada Limited's deep geological repository concept, which was subject to a review under the Federal Environmental Assessment Review Project Guidelines Order in the 1990s. That review concluded that the AECL concept had not been demonstrated to be "safe and acceptable" and the review panel made several important recommendations, including that future work should be undertaken by an organization independent of the nuclear industry. The Nuclear Fuel Waste Act delivered a contrary approach, directing the nuclear industry to organize themselves as a "waste management organization".

Milestones since the passing of the Nuclear Fuel Waste Act in 2002 include:

- 2002            Nuclear Waste Management Organization Created
- 2005            "Adaptive Phased Management", as per the 2005 "Choosing the Way Forward – Final Report" by the NWMO

|      |                                               |
|------|-----------------------------------------------|
| 2007 | Government accepts NWMO recommendation of APM |
| 2010 | Site search launched                          |
| 2024 | Revell site selected                          |
| 2026 | Impact Assessment begins                      |

Milestones in the impact assessment of the NWMO's project in 2026 include:

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| January 5 | Planning Phase of Impact Assessment begins with the invitation to comment on the NWMO's Initial Project Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| March 18  | The Impact Assessment Agency of Canada (IAAC) announced its <a href="#">decision</a> that a further assessment is required for the NWMO's Deep Geological Repository and that it has <a href="#">referred the integrated assessment</a> of the Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel Project (the project) to an independent review panel on behalf of the Honourable Julie Dabrusin, Minister of the Environment, Climate Change and Nature stating that "IAAC has chosen to issue the notice of referral to a review panel prior to the notice of commencement to <u>provide greater certainty to participants</u> and the proponent regarding next steps in the integrated assessment" |
| April 10  | A second major comment period on draft Tailored Impact Statement Guidelines and various plans commenced on April 10 <sup>th</sup> ; 1,497 comments were received from the public, Indigenous people, experts, residents, municipalities and others during the planning phase of the impact assessment process                                                                                                                                                                                                                                                                                                                                                                                                       |
| July 3    | Notice of Commencement of Impact Statement Phase was posted, with the final impact statement guidelines, public participation plan, Indigenous engagement and partnership plan, permitting plan and cooperation plan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| October 4 | NWMO's workplan for Impact Statement development was posted to the public registry outlining NWMO's proposed schedule for filing of documents and studies in the development of the impact statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

On June 24<sup>th</sup> – nine days before the Notice of Commencement of the Impact Assessment for NWMO's DGR was posted – the federal government [announced](#) it would potentially designate the Nuclear Waste Management Organization's (NWMO's) Deep Geological Repository (DGR) as a "Project of National Interest" under the *Building Canada Act*. Such a designation would mean guaranteed approval of the DGR, despite any lack of evidence to support the safety of the project.

In its [media release](#) the federal government defined the implications for the DGR project and other projects that were named:

*"Listing these projects under the Act would streamline and consolidate key federal permits and authorizations, subject to a document outlining the conditions under which the project may proceed."*

The announcement stated that national interest listing of a project would include “shifting Canada’s regulatory focus from ‘whether’ the project should proceed to ‘how’ it will proceed.”

In the case of the two other projects named in the announcement - the Mackenzie Valley Highway and the Grays Bay Road and Port projects – the federal government committed that the project moving forward would be “contingent on both projects successfully completing treaty-based impact assessment and regulatory processes”. No such statement was made with respect to the proposed deep geological repository in Treaty 3 territory. Grand Council Treaty #3 Chiefs in Assembly passed a unanimous **resolution** opposing the project in October 2024, just weeks before the site selection was announced, and Wabigoon Lake Ojibway Nation, whom the Nuclear Waste Management Organization refers to as a “host” for the project, responded to the site selection by announcing that they would be holding their own sovereign Regulatory Assessment and Approvals Process. There is no acknowledgment of the treaty rights or respect for a treaty-based impact assessment for the deep geological repository project in the June 24th announcement.

## **Response to Gazette I Notice**

On September 18, 2026 a notice was posted in Canada Gazette I under the heading “Major Projects Office” that “in accordance with subsection 5(1.1) of the *Building Canada Act* (the Act), notice is hereby given that the Governor in Council may amend Schedule 1 of the Act to list the Nuclear Waste Management Organization’s Deep Geological Repository for Canada’s Used Nuclear Fuel Project as a project of national interest.”

According to the notice, the Act enables the government to streamline federal approval processes for projects determined to be in the national interest “helping such projects to move forward efficiently while protecting Canada’s environment and upholding the rights of Indigenous Peoples.”

In previous sections we have commented on the May 24<sup>th</sup> announcement and the September 18<sup>th</sup> announcement of this potential designation of the NWMO’s Deep Geological Repository as a “Project of National Interest”. Commentary in those sections form part of our response to the potential designation, in addition to setting context for the potential designation and the project.

In this section we comment directly on the Gazette I notice, with the reasonable expectation that these will be considered as additive to our comments in previous sections.

### Criteria for Designation as a Project of National Interest

The Gazette I Notice sets out that “in deciding whether to list the project as a national interest project under the Act, the Governor in Council may consider any factor that the Governor in

Council considers relevant, including the extent to which the project can” satisfy five bulleted criteria.

| Criteria as set out in Gazette I Notice                    | Northwatch Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| (a) strengthen Canada’s autonomy, resilience and security; | In general, the project will be unchanged by the designation as a Project of National Interest, with the exception of the reduced scope of the project evaluation to limit the safety assessment to 160 years (versus the 1 million years required by the IA final guidelines) which will reduce the security of the environment and persons in the longer term.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| (b) provide economic or other benefits to Canada;          | <p>The project will create economic activity in Ontario (the NWMO has not produced any analysis but it is anticipated that the larger economic benefits will be realized in southern Ontario with the award of engineering and consulting contracts, as has been the case for the first 25 years of the NWMO’s operation, with economic activities in northern Ontario associated with construction, worker accommodation, and continued promotional activities). However, the designation of the project as a PONI will not enhance or expand those benefits or expenditures, so “economic benefits” is not a meaningful criteria by which to decide to designate the DGR as a “Project of National Interest” given that the designation will not increase the economic activities and/or benefits and may in fact decrease the economic activities and/or benefits (for example, if fewer baseline studies are required then economic activities such as “motel nights” in the project region will be reduced).</p> <p>There <u>will</u> be an approach applied to the long-term management of nuclear fuel waste, as established by the Nuclear Fuel Waste Act. However, economic studies in the 2002-2005 study period established that the economic activities would be generally similar for the three options studied (extended on-site storage, centralized storage, or a deep geological repository) so there no net economic benefit to Canada from this project versus one of the other approaches to the long term management of nuclear fuel waste, and there is no gain in economic benefit or activity by designating the NWMO project as a PONI.</p> |
| (c) have a high likelihood of successful execution;        | The potential for successful execution of this project is unknown, which is the very reason why a full and comprehensive impact assessment with meaningful                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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|  | <p>participation by the public and Indigenous people is of great importance.</p> <p>The project is still at a conceptual stage in design – or at least, only concept-level project descriptions have been released by the proponent – and major components of the project, such as the Used Fuel Packaging Plant, are of a novel nature, are anticipated to be a significant source of radio-contaminants to the environment via both air and water, and information to date has not demonstrated that worker exposure and worker health and safety will be subject to adequate safeguards. Similarly, the systems for ventilation and filtering / treatment of air and water from the underground environment have not been determined and the general information released to date indicate that the standard of care will be insufficient (such as not filtering air prior to release to the environment from the underground working areas where radiation levels will be too high to permit workers to be present). Those examples are drawn from NWMO materials and are provided for illustrative purposes only as examples of the complexity of the project and the high levels of associated risks and radioactive releases.</p> <p>There is no operating deep geological repository for high-level nuclear fuel waste anywhere in the world. Sweden’s safety assessment began in 2011 and while a general approval has been issued final permits have not due to outstanding issues with the safety case. Finland’s operating license review began in 2021 and an operating license was issued on October 22, 2026 but before operations can begin, the company must complete the remaining commissioning tests and inspections, which will require verification and approval by Finland's Radiation and Nuclear Safety Authority (STUK). No timeline for beginning operations was released by the proponent at the time of the license being issued. It is anticipated that both of these “approved” deep geological repositories are still a considerable period away from actually commencing operation, and a determination of “successful execution” of those projects will be first years, then decades and then centuries into the future, as the longer term safety of the DGR approach is an area of</p> |
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|                                                             | <p>great uncertainty, as demonstrated throughout the Swedish review.</p> <p>In addition, the Canadian project differs from other international programs – such as in Sweden and Finland – in several significant ways, including the repository access, repository design and layout, container design (Sweden’s copper coating is 50 mm thick compared to the NWMO’s 3 mm coating) and proximity of the DGR site to the interim waste storage sites (in Finland, for example, the majority of Finland’s spent fuel is at Olkiluoto Site which is co-located with the Onkala deep geological repository, and a smaller volume at the Loviisa Site approximately 300 km away, with an estimated maximum of around ten transport runs per year using E18 and E8 Main Arteries which are major, high-priority national highways. Contrast this with the NWMO DGR where all wastes will be transported a minimum of 1,700 km with 2-3 trucks per day over mostly two-lane northern and rural roads for more than 50 years.</p> <p>For multiple reasons, including those identified above and in earlier sections of this submission, the “successful execution” of this project cannot be predicted, and guaranteeing its approval by designating it as a PONI can most definitely not be justified using a criterion of “successful execution”. Further, having the project subject to anything less than a comprehensive independent impact assessment with meaningful participation by the public, independent experts and Indigenous people will reduce the likelihood of the “successful execution” of the project.</p> |
| <p>(d) advance the interests of Indigenous peoples; and</p> | <p>The interests of Indigenous people have been clearly and consistently expressed, including by <a href="#">Grand Council Treaty #3</a>, <a href="#">Nishnawbe Aski Nation</a>, <a href="#">Anishnabek Nation</a>, <a href="#">Chiefs of Ontario</a>, <a href="#">Assembly of First Nations</a>, and <a href="#">many First Nations</a> within the impact area of the project (transportation route, DGR site, neighbouring and downstream regions). Those interests, as expressed by Indigenous peoples, are a) in a rejection of the NWMO project and ejection of the project and the associated transportation route from their territories, and b) in First Nations being adequately resourced to participate in a comprehensive impact assessment.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

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|                                                                                                   | <p>On July 1, 2026, the <a href="#">Anishinabek Nation issued a formal statement</a> expressing unequivocal opposition to the transportation and disposal of nuclear waste through its entire territory.</p> <p>The statement, delivered by Grand Council Chief Linda Debassige, came in response to the federal government's move to consider the Nuclear Waste Management Organization's (NWMO) \$26-billion deep geological repository (DGR) as a "project of national interest" under the Building Canada Act</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| (e) contribute to clean growth and to meeting Canada's objectives with respect to climate change. | <p>As discussed in earlier sections of this submission, if the supposition is that this project is a necessary support to the expansion of nuclear power and that nuclear power is "clean growth" the supposition is not supported by facts. Factually, "clean" growth and electricity generation can be better achieved through renewable energy options coupled with energy efficiency measures and storage, which produces electricity at a lower price, with a lower carbon footprint, with a much shorter construction time and more flexibility and resilience.</p> <p>With respect to climate change, the NWMO's DGR project is expected to be a major contributor to GHG emissions. To date, NWMO has not produced a detailed or reliable estimate of the GHG emissions from the project, but there will be sizeable GHG emissions generated during construction and operation of the supporting industrial operations at the repository site (rock excavation, concrete batch plant, used fuel processing (packaging) plant, administration, accommodation, treatment systems) in addition to the GHG emissions from sending 30,000 shipments of 35 tonne packages of highly radioactive waste a distance of 1,700 to 2,400 km per trip.</p> |

As set out in the above table, the five criteria for designating the NWMO's project as Project of National Interest have not been met or would be met by the project equally if the project proceeded on its current trajectory (through an impact assessment process under the Impact Assessment Act) rather than being designated as a PONI.

In summary, the provided criteria do not support designating the NWMO's DGR Project as a Project of National Interest.

## Gazette I Project Description

The Gazette I notice included a project description which is of concern because of its inaccuracies and its project scoping.

We recognize that it is possible that these were errors resulting for a lack of familiarity with the project and its many facets, concerns and implications. If that is the case, the errors should be immediately corrected but should also serve as an indication that the NWMO project is not an easy hand-off to a decisionmaker that lacks the depth of knowledge and expertise required to fully evaluate the project and its potential impacts and adverse social and environmental effects in the short, medium and long term.

| Project Description in Gazette I Notice                                                                                                                                                                                                            | Northwatch Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| <ul style="list-style-type: none"><li>an underground repository, at a depth greater than 500 m below surface, where used nuclear fuel will be placed in engineered containers surrounded by a protective system involving clay and rock;</li></ul> | <p>The degree to which the clay-mix buffer material and the fractured crystalline rock formations in the Revell Batholith will be protective has not yet been determined; site studies to date indicate that there are significant inconsistencies in the rock formation. Both fractures and mafic dykes are present in the geology of the Revell Batholith according to assessments by the NWMO. Studies of the six deep boreholes and 2D seismic reflection data reveal over 30 sub-horizontal, north-northwest-dipping (12° to 24°) mafic dykes or intrusions within the host biotite granodiorite-tonalite bedrock. These dykes typically measure up to 3.5 meters in thickness and appear either as isolated features or in stacked configurations. Enhanced fracture intensity and localized shearing correlate directly with the proximity of these mafic dykes and intrusions.</p> <p>Similarly, there are a number of technical unknowns with respect to the efficacy of a clay-based barrier. The efficacy of a clay barrier (such as a compacted bentonite buffer) in a deep geological repository (DGR) relies on its low hydraulic permeability and self-sealing swelling capacity. However, its long-term performance over hundreds of thousands of years involves several major uncertainties and coupled physical-chemical-thermal challenges including those related to decay heat from spent nuclear fuel driving temperatures above 100 °C, which threatens the stability of the clay and can reduce the clay's swelling pressure and self-sealing ability and can embrittle the clay and create migration pathways. High salinity can also significantly deteriorate the free-swelling capacity and hydraulic performance of bentonite-sand mixtures. There can also be cement-bentonite reactions (concrete or cement is used for shafts, bulkheads, or liners) that can alter local porosity and permeability. Other issues include non-uniform swelling and voids, and microbial activity which can include both corrosion</p> |

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|                                                                                                                                                         | <p>and the generation of gasses which in turn can create outward pressures and so associated migration routes for radionuclides.</p> <p>These observations are not provided here with any expectation that the MPO could or should adjudicate on these technical matters; they are provided to demonstrate that the MPO is adjudicating on the project by providing a project description which is both erroneous and promotional.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <ul style="list-style-type: none"> <li>• surface facilities for receiving, handling and packaging the used fuel;</li> </ul>                             | <p>The scope and function of the surface buildings is much broader than the used fuel packaging plant, which is the only surface facility identified in the Gazette I project description. Surface facilities will include: Security Monitoring Stations, Fire Hall, Quality Control Offices, Laboratories, Active Waste Handling, Storm Water Management Ponds, Process Water Management Ponds, Used fuel packaging plant, Sealing material compaction plant, Concrete batch plant, Main Shaft Complex, Ventilation Shaft Complex, Excavated rock management area, Administration buildings, Accommodation buildings. While the Used Fuel Packaging Plant is certainly a surface facility of significant concern given the radio-contaminants that will be released from this facility to air and water and the expected worker exposures in this operation, the exclusion of the many other surface facilities – several of which will be of significant environmental concern – again indicates that the author of the Gazette I notice is either unfamiliar with the project or is attempting to bias the decision outcomes by excluding key information.</p> |
| <ul style="list-style-type: none"> <li>• transportation activities along the primary and secondary access roads within the Project site; and</li> </ul> | <p>Transportation for this project includes the long-distance transportation from the current locations (at nuclear generating stations in southern Ontario and eastern Canada) to the repository site, as set out in the <a href="#">Integrated Tailored Impact Statement Guidelines (Integrated Guidelines)</a>.</p> <p>This exclusion of long-distance transportation from this project description is erroneous on three additional counts:</p> <ul style="list-style-type: none"> <li>- The Impact Assessment Act sets out that its application is to designated projects and to activities and effects which are “incidental” to those projects, such as long distance transportation is to the NWMO’s DGR project</li> <li>- The NWMO has been describing transportation as part of the APM project for 20 years, including in the Choosing a Way Forward report which is the basis of the federal government allowing NWMO to proceed with this project</li> <li>- the Nuclear Fuel Waste Act – the legislation which provided the nuclear industry with a mandate to operate as the Nuclear</li> </ul>                                                   |

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|                                                                                                                                                                                                                                      | Waste Management Organization – defines management, in relation to nuclear fuel waste, as “including handling, treatment, conditioning or <u>transport</u> for the purpose of storage or disposal”.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>supporting infrastructure, including access and haul roads, a rail spur, transmission line, worker accommodation camp and excavated rock management area.</li> </ul>                          | As noted earlier in this table in comments on “surface facilities” we don’t disagree that the worker accommodation and excavated rock management area are part of the project, but they are more regularly included as “surface facilities” rather than as “supporting infrastructure”; it may not make a material difference whether they are listed as supporting infrastructure or as surface facilities but the gap remains – between surface facilities and supporting infrastructure – in listing all of the surface facilities / supporting infrastructure which comprise this project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| The Project would contain and isolate approximately 5.9 million used fuel bundles, which is the projected total inventory of used nuclear fuel estimated to be produced in Canada from the current fleet of reactors to end of life. | <p>The capacity of 5.9 million used fuel bundles is the projected total inventory of used nuclear fuel estimated expected to be produced in Canada from the current fleet of reactors to end of life, as outlined in the NWMO’s 2024 Nuclear Fuel Waste Projections Report (NWMO 2024).</p> <p>The estimated volume of 5.9 million used fuel bundles was the projected total inventory of used nuclear fuel estimated expected to be produced in Canada from the current fleet of reactors to end of life provided by NWMO in their Initial Project Description and they cited NWMO’s 2024 Nuclear Fuel Waste Projections Report (NWMO 2024) as the source. However, the production date for that report (November 2024) was prior to the decision made by the Ontario Government and Ontario Power Generation to refurbish the Pickering B units; as noted in NWMO’s 2025 Nuclear Fuel Waste Projections Report (NWMO 2025) the decision to move forward with refurbishing Pickering B Units was not made until December 2025. Hence, the figure of 5.9 million is questionable as it appears to exclude the significant volumes of waste that will be generated through an additional 30-38 years of operation of the four units and Pickering B. This will impact the volume of waste and potentially the operating period of the DGR and significantly add to the current estimate of transportation including 2-3 truck per day for 50 years.</p> |
| The Project would be located in the Wabigoon Lake Ojibway Nation and Township of Ignace area in northwestern Ontario.                                                                                                                | The project will be located in the heart of Treaty 3 territory in Kenora District in northwestern Ontario, approximately equidistant between the Township of Ignace and the City of Dryden. The closest communities include Borups Corners, Dymont, Dwinoric and the hamlet of Wabigoon. Theses communities are in unorganized townships with local service                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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|                                                                                                                                                                                       | boards; other residents in the area of the project between Ignace and Dryden live in unorganized townships without local service boards. The project is at the headwaters of the Wabigoon River and the Rainy Lake watersheds. The portion of the withdrawal area where NWMO's most intensive investigations have been carried out includes two tourist lodges, six outpost camps, one private recreation camp, three remote cottages and a number of private cottages.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| The Project is expected to occur over approximately 160 years, including site preparation, construction, operation, decommissioning and closure, followed by post-closure monitoring. | <p>Applying a limit of 160 years to the project life is inconsistent with the manner in which the NWMO described the project in its 2005 "Choosing the Way Forward" report which was the basis of the federal government allowing the project to proceed to site investigation and design and development. In the 2005 report the NWMO stated "<i>After closure of the deep repository around 300 years, postclosure monitoring of the facility could take place from the surface</i>"<sup>10</sup> and further stated that:</p> <ul style="list-style-type: none"> <li>• <i>The approach provides opportunity for citizens, including future generations (at least over the next 300 years), to influence the way in which the fuel is managed;</i></li> <li>• <i>The approach provides for research and collaborative decision-making in determining the manner and timing of movement through realistic and manageable phases; and</i></li> <li>• <i>The approach suggests a process through which confidence in the technology and supporting systems can be developed before moving to the final phase.</i><sup>11</sup></li> </ul> <p>Despite that timeframe and those statements being the basis for the NWMO proceeding after the federal government's approval in 2007, the NWMO has over time rewritten that timeline. For example, but by 2011 the timeline had been reduced to closure at 70 years followed by monitoring. In the Initial Project Description filed in 2025 in the planning phase of the Impact Assessment NWMO was arguing for 160 years total project life (which appears to have been adopted by the MPO).</p> <p>Central to consideration of a deep geological repository are the issues of long-term safety and the evaluation of the safety case. The safety case for a deep geological repository (DGR) is the structured synthesis of evidence, scientific analyses, and qualitative arguments that substantiate and quantify the claim that an underground radioactive waste facility will remain safe</p> |

<sup>10</sup> "Choosing a Way Forward The Future Management of Canada's Used Nuclear Fuel (Final Study)", NWMO, 2005, page 28

<sup>11</sup> "Choosing a Way Forward The Future Management of Canada's Used Nuclear Fuel (Final Study)", NWMO, 2005, page 31

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|                                                                                                                                          | <p>for humans and the environment after closure.<sup>12</sup> The safety case is not a single document; it evolves iteratively across the lifecycle of the repository, updated at major milestones from initial siting to post-closure abandonment.<sup>13</sup></p> <p>By erroneously describing the project life as 160 years, the long-term safety issues are potentially scoped out of the review.</p> |
| The Project is being advanced by the NWMO, a non-profit organization established as a requirement of the <i>Nuclear Fuel Waste Act</i> . | While corporately categorized as a not-for-profit organization it would be more informative in announcements by the Government of Canada, such as the Gazette I Notice, to also clarify that it is an association of the utilities that operate nuclear power generating stations and are the owners of the nuclear fuel waste.                                                                            |

In summary, the project description included in the Gazette I notice was flawed in several respects, and to such a degree that it can not adequately support consideration of the proposed designation of the NWMO project as a Project of National Interest.

## Conclusion

The Nuclear Waste Management Organization's proposed deep geological repository for nuclear fuel waste, which has been proposed for construction and operation at the Revell site in northwestern Ontario and is currently undergoing an impact assessment under the federal Impact Assessment Act, is a project of large and lasting consequences.

Three key factors must be acknowledged:

- the project is unprecedented; there is no operating deep geological repository for nuclear fuel waste operating anywhere in the world, despite a half-century of effort
- the NWMO's project is still conceptual; designating the project as a Project of National Interest and so "guaranteeing" approval would be reckless and irresponsible
- what is known about the NWMO's project is that it is going to be high-risk and will result in releases of radio-contaminants to the environmental via air and water

In addition, two truths must be acknowledged:

- there has been constant and long-standing opposition to the project from the public, including in the local area, downstream and along the transportation route; many municipalities have passed resolutions opposing the project as have numerous community and civil society organizations; there were over 1,400 interventions in the planning phase of the impact assessment, and over 90% were opposed or critical of the project

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<sup>12</sup> Nuclear Energy Agency

<sup>13</sup> OECD Nuclear Energy Agency

- Indigenous people along the transportation route, in the area of the project and downstream of the project are opposed to the transportation, processing, burial and abandonment of nuclear waste in their territory and have expressed this clearly and repeatedly

With respect to the proposal to designate the NWMO's DGR project as a Project of National Interest, as outlined in this submission and in submissions made by others the proposal should be rejected and the project should remain subject to the Impact Assessment Act and the review should continue under the auspices of the Impact Assessment Agency.

As set out in earlier sections, the five criteria for designating the NWMO's project as Project of National Interest have not been met or would be met by the project equally if the project proceeded on its current trajectory (through an impact assessment process under the Impact Assessment Act) rather than being designated as a PONI. The provided criteria do not support designating the NWMO's DGR Project as a Project of National Interest.

In addition, the project description included in the Gazette I notice was flawed in several respects, and to such a degree that it can not adequately support consideration of the proposed designation of the NWMO project as a Project of National Interest. We are concerned that the flawed project description represents the Major Project Office's understanding of the project, in which case we are concerned about the Major Project Office playing any advisory or decision-making role with respect to this project, given the lack of understanding and potential bias that was demonstrated through the authoring of the Gazette I notice.

In closing, we strongly request that the NWMO's DGR project not be designated a Project of National Interest and not be listed in Schedule I under the Building Canada Act.

Submitted by Brennain Lloyd on behalf of Northwatch  
October 25, 2026

For further communication use email [northwatch@northwatch.org](mailto:northwatch@northwatch.org) and telephone 705 497 0373