Comments from Legal Advocates for Nature's Defence on the Initial Project Description of the Deep Geological Repository (IAAC Reference No. 88774)

February 4, 2026

TO

Deep Geological Repository for Canada's Used Nuclear Fuel Project
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Comments on the Initial Project Description for the Deep Geological Repository

IAAC Reference No. 88774

This comment is submitted by Legal Advocates for Nature's Defence ("LAND") in response to the call for feedback by the Impact Assessment Agency of Canada's ("Agency") on the Nuclear Waste Management Organization's ("NWMO") Initial Project Description ("IPD") for the Deep Geological Repository ("DGR" or the "Project").[1]

We have reviewed the NWMO's materials in detail and have grave concerns both about the framing of the Project and how it will be subject to review. Our detailed comments below therefore set out why an impact assessment ("IA") is critically needed and the gaps which must be remedied before the IPD is an acceptable basis from which this IA can proceed.

In providing these comments, we also wish to endorse the submissions provided by Indigenous Nations including Kebaowek First Nation and Passamaquoddy Nation, and the many directly affected individuals and public interest groups who have also taken time to share their perspectives - including Environment North, the Friends of the Attawapiskat River and the Canadian Environmental Law Association.

We also acknowledge and thank the more than 1000 citizens from across the country who in just a few short weeks, sent a letter to the Agency, federal environment and natural resources Ministers, and their elected officials, calling for this project to undergo an IA that is inclusive of transportation activities and done in a way that upholds principles of environmental justice and Indigenous rights.[2]

Given the short 30-day comment period provided in which to review and respond to the lengthy IPD and accompanying documents, LAND retains the right to provide further and supplementary submissions to the Agency regarding the IPD, DGR, and its potential impacts on the environment, Indigenous rights and environmental justice.

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[1] Nuclear Waste Management Organization [**NWMO**], "Initial Project Description: Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel Project" (December 2025) [**IPD**].

[2] Legal Advocates for Nature's Defence [**LAND**], "Take Action! Say YES to Protecting Communities & Nature for Generations to Come" (14 January 2026).

I. BACKGROUND

a. About us

LAND is an environmental law non-profit dedicated to advancing access to justice in Northern Ontario, to protect nature and Indigenous rights. We are the only civil society organization based in Northern Ontario that provides pro bono legal representation to Indigenous people and communities most impacted by climate and environmental injustices.
Our comments are grounded in our experience working with and representing First Nations, Indigenous organizations, and allies across the country on IAs and related law reform processes, as well as IA designation requests and hearings before the Agency and its predecessor.

Having represented those most affected by industrial development, environmental hazards and systemic racism, our recommendations herein aim to ensure that this Project's assessment aligns with recent jurisprudence and does not compromise environmental protection, meaningful public participation, and Indigenous rights - all of which are core purposes of the *Impact Assessment Act* ("*IAA*").

b. Project Overview & NWMO's Proposal

On January 5, 2026, the NWMO released the IPD and Summary of the IPD for Canada's Used Nuclear Fuel Project, outlining their proposal to develop a DGR for Canada's used nuclear fuel, including site preparation, construction, operation, and eventual decommissioning and closure.[3] The proposed DGR would be located 43 km northwest of the Township of Ignace, within the traditional territory of the Wabigoon Lake Ojibway Nation ("WLON"), and situated around 21 km southeast of the reserve lands and 12 km from the nearest resident.[4]

If approved, the project would require transporting highly radioactive and toxic used nuclear fuel from Canada's nuclear power plants and reactor sites to the proposed DGR in Northwestern Ontario for permanent storage. Approximately 5.9 million used nuclear fuel bundles will be transported over thousands of kilometres, across unceded and Treaty lands, with shipments beginning in 2042 on a daily basis for up to 50 years.[5] Despite this, transportation of used fuel from reactor sites to the DGR - including the potential adverse impacts on environmental and human health, Indigenous rights,

[3] Impact Assessment Agency of Canada [**IAAC**], "Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel Project: Public Notice" (5 January 2026).
[4] Nuclear Waste Management Organization [**NWMO**], "Initial Project Description: Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel Project" (December 2025), p 10 [**IPD**].
[5] IPD, p 73.

environmental rights, and Canada's ability to meet their commitments regarding climate change - are explicitly excluded from the Project scope.[6]

II. AN IMPACT ASSESSMENT MUST BE REQUIRED

The *IAA* regime establishes an evidence-based, participatory and precautionary assessment process that anticipates and prevents adverse effects of proposed projects, prior to their construction or development. Done right, IAs provide a 'look before you leap' approach to decision making.

As expanded on below, an IA for the DGR is necessary because it is one of the best-placed mechanisms to ensure that the DGR moves forward in a manner that respects Indigenous rights, addresses adverse effects within federal jurisdiction (including cumulative effects and climate change commitments), and upholds environmental justice principles.

These factors - which must be taken into account by the Agency when determining whether to require an IA under section 16 of the *IAA* - have not been adequately addressed in the IPD and therefore must be assessed through an IA. Requiring an IA is also essential if the Agency is to fulfil their mandate - to foster sustainability, respect the rights of Indigenous peoples, take into account Indigenous knowledge, consider cumulative effects, apply the precautionary principle, and promote cooperation with Indigenous peoples - in a manner that is fair and adheres to the principles of scientific integrity, honesty, objectivity, thoroughness and accuracy.[7]

a. Respecting Indigenous rights

Among the factors the Agency must take into account per the *IAA* in deciding whether or not an IA is required for the project is:

> **16(2)(c)** any adverse impact that the designated project may have on the rights of the Indigenous peoples of Canada recognized and affirmed by section 35 of the *Constitution Act, 1982*;

The DGR and accompanying handling and transport of high level radioactive waste will unequivocally impact the rights of Indigenous Peoples and the health of communities. While this alone necessitates an IA for the DGR, an IA is further required by virtue of obligations set out in the *United Nations Declaration of the Rights of Indigenous Peoples* ("*UNDRIP*") and requirements within the *IAA* to ensure Indigenous engagement is inclusive of the rights, knowledge and interest of Indigenous Nations along the cross-Canada transport route and nuclear sites, where this high level radioactive waste currently resides.

i. The Agency is obligated to implement *UNDRIP*

[6] IPD, p vii.
[7] *Impact Assessment Act*, SC 2019, c 28, s 1, ss 6(2)-(3) [***IAA***].

An IA that recognizes the potential adverse impacts the DGR will have on Indigenous rightsholders is supported by the Agency's obligation to implement *UNDRIP.* This requires ensuring respect for the constitutional rights of Indigenous peoples, and implementing IA processes in partnership with Indigenous peoples in a manner that fosters reconciliation and integrates Indigenous knowledge.[8]

Pursuant to the *United Nations Declaration on the Rights of Indigenous Peoples Act ("UNDA"), UNDRIP* has been incorporated into the country's positive law[9] and the federal government is required to act in a manner consistent with *UNDRIP*, recognizing that Indigenous peoples have suffered historic injustices as a result of colonization and dispossession of their lands, territories and resources, and that all relations with Indigenous peoples must be based on the recognition and implementation of the inherent right to self-determination.[10] As *UNDRIP* - now part of Canada's domestic law - provides the foundational framework for reconciliation and proceeds on the premise that *UNDRIP* rights exist, *UNDRIP* may be used to interpret Canadian law and legal obligations[11] - including the *IAA* and the Agency's responsibility to uphold Indigenous rights.

The federal government recognizes that Indigenous peoples' rights protected by section 35 of the *Constitution Act, 1982* ("*Constitution Act"*) *"*are not frozen and are capable of evolution and growth" and that there is "an urgent need to respect and promote the rights of Indigenous peoples affirmed in treaties, agreements, and other constructive arrangements".[12] This supports a reasonable conclusion that Indigenous peoples' rights under *UNDRIP* are protected by section 35 of the *Constitution Act* and the federal government has a corresponding duty to uphold and respect these rights.

ii. Meaningful Indigenous engagement requires an IA

The approach for Indigenous engagement as framed in the IPD is contrary to section 12 of the *IAA,* which sets out the Agency's obligation to offer to consult:

> **12** For the purpose of preparing for a possible impact assessment of a designated project, the Agency must offer to consult with any jurisdiction that has powers, duties or functions in relation to an assessment of the environmental effects of the designated project and any Indigenous group that may be affected by the carrying out of the designated project. (emphasis added).

It is our respectful view that the NWMO has adopted an impoverished view of the principles and application of *UNDRIP*, contrary to the Crown's obligations under section 35 of the *Constitution Act* that require consultation with any and all Indigenous groups that may be impacted by government actions, with the goal of obtaining their free, prior and informed consent before adopting any administrative

[8] *IAA,* preamble.
[9] *Kebaowek First Nation v Canadian Nuclear Laboratories,* 2025 FC 319 at para 78 [***Kebaowek*].**
[10] *United Nations Declaration on the Rights of Indigenous Peoples Act,* SC 2021, c 14, preamble [***UNDA***].
[11] *Kebaowek* at paras 76-77, 80.
[12] *UNDA,* preamble.

measures that may affect them[13] and before storing or disposing hazardous materials on Indigenous lands or territories.[14] LAND is deeply concerned by the NWMO's failure to mention *UNDRIP* in the IPD*,* and suggestion that consent must only be obtained by WLON[15]. Just as WLON's sovereignty, rights, protocols and laws must be respected[16], those of all potentially impacted Indigenous communities must also be respected. Instead, NWMO only identifies four other Indigenous groups that "may also be affected by the carrying out the Project".[17] The DGR has the potential to cause adverse impacts on the rights of dozens of First Nations and thousands more community members, who may not be able to have their concerns heard and addressed without an IA.

Further, as currently drafted, the IPD does not disclose the transportation routes for the high-level radioactive waste (it only indicates that transport will occur by rail along major Class 1 lines or along major provincial highways[18]). Based on our understanding of the IPD, and the location of the DGR in relation to the locations of the interim storage facilities, it is likely that the transportation routes would cross multiple Treaty areas (including various Numbered Treaties and the Robinson Treaties). In practice, fuel bundles shipped from eastern facilities, such as Point Lepreau in New Brunswick, or facilities in the Greater Toronto Area, would likely travel west along Highway 11 or 17, or along adjacent rail corridors. These transportation corridors cross multiple treaty areas, including various Numbered Treaties and the Robinson Treaties, and pass through major population centres such as North Bay, Sudbury, Cochrane, Sault Ste. Marie, and Thunder Bay, among others. Similarly, fuel bundles transported from western facilities, including Whiteshell Laboratories in Manitoba, would move east along the Trans-Canada Highway or adjacent railways, travelling through Kenora, and Dryden, and multiple First Nation communities within Treaty 1 and Treaty 3.

As the duty to consult arises whenever the Crown contemplates action that may adversely impact Indigenous rights, it is essential that this project proceed for an IA such that potentially impacted Nations along the entirety of the route have access to knowledge and information which, as Chief Hugh Akagi of the Passamaquoddy Nation has shared, is a "necessary step in seeking the achievement of free, prior and informed consent"[19]. The Agency must therefore require a full IA, to uphold the rights of Indigenous peoples in alignment with the intent of the *IAA*[20] and *UNDA.*

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[13] *United Nations Declaration on the Rights of Indigenous Peoples*, GA Res 61/295, UNGAOR, 2007, Supp No 53, UN Doc A/RES/61/295, (2 October 2007), Article 19 [***UNDRIP***].
[14] *UNDRIP,* Article 29(2).
[15] IPD, p i.
[16] IPD, p i, 21.
[17] IPD, p 22.
[18] NWMO, "Preliminary Transportation Plan" (December 2021), p 23.
[19] LAND, "Press Release: Public urged to support call for impact assessment of radioactive waste project that ignores transport risks, impacted communities, and Indigenous rights" (January 15, 2026).
[20] *IAA,* preamble, s 6(2), s 16(2)(c), s 22(1)(c).

b. Addressing adverse effects within federal jurisdiction, including cumulative effects

Among the factors the Agency must take into account in deciding whether or not an IA is required for the project is:

> **16(2)(b)** the adverse effects within federal jurisdiction — or the direct or incidental adverse effects — that may be caused by the carrying out of the designated project;

LAND submits that the DGR's potential to cause adverse effects within federal jurisdiction (as defined by section 2 of the *IAA* and including the project's impacts on Canada's ability to meet its climate change obligations[21]) can only truly be assessed through an IA. Additionally, as expanded on in section III(b)(ii) of this submission, transporting used nuclear fuel to the DGR site is directly linked to the carrying out of the designated project and also has the potential to cause non-negligible adverse effects within federal jurisdiction including, but not limited to:

1) Impacts to the health, social or economic conditions of Indigenous people;[22]
2) Impacts (caused by any change to the environment) on physical and cultural heritage, current use of lands and resources for traditional purposes, or any any structure, site or thing that is of historical, archaeological, paleontological or architectural significance; and[23]
3) Impacts on migratory birds, fish and fish habitat, and aquatic species.[24]

An IA is therefore required if the Agency is to uphold the stated purpose of the *IAA* to "to prevent or mitigate significant adverse effects within federal jurisdiction — and significant direct or incidental adverse effects — that may be caused by the carrying out of designated projects, as well as significant adverse environmental effects"[25].

c. Upholding environmental justice principles

The Agency has a legal duty to act in a manner that advances environmental justice, in accordance with the intent of the *IAA* as well as the obligations set out in the *National Strategy Respecting Environmental Racism and Environmental Justice Act* ("*Environmental Justice Act")*[26].

As explained in section III(b)(iv) of this submission, upholding the three pillars of environmental justice (i.e. distributional, recognitional and procedural justice) requires that transport routes and risks be within the Project scope and studied as part of an IA, to allow for public scrutiny, the meaningful involvement of impacted communities (i.e. those who live along the transport routes, downstream from

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[21] *IAA,* s 2, preamble.
[22] *IAA,* s 2(f).
[23] *IAA,* s 2(e).
[24] *IAA,* s 2(a).
[25] *IAA,* s 6(1).
[26] *National Strategy Respecting Environmental Racism and Environmental Justice Act*, SC 2024, c 11 [***Environmental Justice Act***].

or in close proximity to the interim facilities and/or the DGR site), and to ensure the government is actively seeking to change the historical patterns that have resulted in the inequitable distribution of environmental risk and benefits.

Additionally, an IA is required to uphold the procedural rights of the general public, Indigenous groups and civil society organizations, who have been vocal and active in raising their concerns. Among the factors the Agency must take into account in deciding whether or not an IA is required for the project is:

> **16(2)(d)** any comments received within the time period specified by the Agency from the public and from any jurisdiction or Indigenous group that is consulted under section 12;

Through various routes, the public has actively expressed their concerns regarding the DGR, and it is critical these concerns be adequately addressed and responded to - necessitating an IA for this project.

The following non-exhaustive list signifies the widespread public interest and concern in this project:

- As of February 4, 2026 at 8pm EST, over 650 comments have been submitted via the Impact Assessment Registry[27]
- As of February 4, 2026 at 8pm EST, more than 1030 letters have been sent to the Agency by way of LAND's Take Action Alert, in support of an IA for the DGR that includes transport routes and risks, protects Indigenous rights and consent, and upholds environmental justice[28]
- The Passamaquoddy Recognition Group Inc.'s publication regarding Indigenous Views on Nuclear Energy and Radioactive Waste[29]
- The Chiefs of Ontario's Resolution Against Nuclear Waste Transportation and Burial[30]
- Anishinabek Nation's Resolution opposing the transportation and burial of radioactive waste, including the transportation of high-level nuclear waste through their territories[31]
- We The Nuclear Free North's concerns regarding nuclear waste abandonment in Northwestern Ontario, including lack of informed consent, lack of scientific evidence of safety, and dangers of transportation.[32]

We also encourage the Agency to ensure its messaging is clear and attempts to facilitate, rather than preclude, public engagement. Based on our attendance at the Agency's Public Information Session on January 14, 2026 at 12pm EST, we know that various members of the public raised concerns regarding the transportation of used nuclear fuel, cumulative effects assessments, and emergency planning. In response, the Agency stated that these issues would be addressed when the scoping for the assessment is finalised and detailed in the Tailored Impact Statement Guidelines ("TISGs"). However, until explicitly

[27] IAAC, "Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel Project: Comments".
[28] LAND, "Take Action! Say YES to Protecting Communities & Nature for Generations to Come" (14 January 2026).
[29] Abby Bartlett, Robbie Atwin & Susan O'Donnell, "Indigenous Views on Nuclear Energy and Radioactive Waste" (PRGI & CEDAR Project, St. Thomas University, Fredericton, NB, November 2024).
[30] Chiefs of Ontario, "Resolution Against Nuclear Waste Transportation and Burial" (November 18-19, 2025).
[31] Anishinabek Nation, "Resolution regarding Nuclear Waste Transportation and Burial in Anishinabek Nation Lands" (2025).
[32] We The Nuclear Free North, "The Nuclear Waste Abandonment Issue in Northwestern Ontario".

asked, the Agency did not disclose that the scoping for the assessment and development of the TISGs will only happen if the Agency decides that an IA is required**.**

This "if" raises significant concerns about the effectiveness of the Agency's approach in fostering public participation in this process, as the information provided during the public information session could reasonably be perceived as attempting to quell public concerns through an inaccurate description of the IA process that implies that the Project will proceed for an IA by default.

LAND submits that to uphold the intent of the *IAA* to foster meaningful public participation[33], the Agency ought to require that the NWMO, when responding with its Summary of Issues, also respond to the various public concerns documented in their transportation planning documents.[34] The NWMO has a lengthy record of consulting with the public and documenting transportation-related concerns and has committed to addressing these concerns and ensuring that their transportation system prioritizes the protection of people and the environment[35].

Excluding transportation from the project's review - thereby removing the ability of impacted communities to be informed and have a say - is inconsistent with NWMO's stated commitments around transportation planning and would not uphold procedural rights. Therefore, as transporting high-level nuclear waste to the DGR remains a highly contentious issue warranting further review and transparent decision-making, an IA consistent with with the *IAA's* intent to foster meaningful public participation[36] must be required for the DGR.

d. Complying with the Strategic Assessment of Climate Change

The Strategic Assessment of Climate Change ("SACC") conducted under section 95 of the *IAA* is applicable to the DGR[37], and is intended to "enable consistent, predictable, efficient and transparent consideration of climate change throughout the impact assessment process."[38] LAND submits that the purpose and intent of the SACC cannot be upheld without an IA for the DGR that includes transportation-related greenhouse gas ("GHG") emissions.

The federal government has recognized the importance of implementing the IA process in a manner that contributes to the Government of Canada's ability to meet its commitments in respect of climate

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[33] *IAA,* preamble, s 11.
[34] *See for instance:* NWMO, "Moving forward together: Planning framework for the transportation of used nuclear fuel" (December 2021) [**Planning Framework**]; NWMO, "Preliminary transportation plan" (December 2021)' [**Preliminary Transportation Plan**]. For more information on NWMO's transportation approach, see their webpage: *Transporting Used Nuclear Fuel*.
[35] NWMO, webpage: *Transporting Used Nuclear Fuel*.
[36] *IAA,* preamble.
[37] IPD, p 40.
[38] Environment and Climate Change Canada [**ECCC**], "Strategic Assessment of Climate Change" (revised October 2020), Executive Summary [**SACC**].

change,[39] including Canada's 2030 emissions reduction target and goal of achieving net-zero emissions by 2050.[40]

While the NWMO repeatedly claims that the DGR will support Canada's goal of achieving net-zero emissions,[41] if an IA inclusive of transportation and related activities is not required:

- A comprehensive assessment of the DGR's impacts on Canada's ability to meet its commitments in respect of climate change cannot be completed;
- The NWMO will not have to provide relevant information regarding its GHG emissions (in accordance with the SACC's requirements during the Impact Statement Phase and Impact Assessment Phase), thereby impeding the Agency's ability to analyze and understand the DGR's climate change related impacts and enforce conditions and mitigation measures (during the decision-making phase and post-decision phase);[42] and
- The NWMO's claims that the DGR will "contribute directly to Canada's commitments on climate change and achieving net-zero emissions"[43] cannot be verified and therefore greenwash the actual impact of their project.

i. The GHG emissions from transporting used nuclear fuel must assessed in order to understand the DGR's impact on climate change

As currently drafted, the IPD sets out the NWMO's estimate of net GHG emissions[44], which is required by the SACC. This net GHG emissions estimate only accounts for GHGs that will be emitted throughout the Project phases at the Project Site[45] (including the combustion of fossil fuels for the transport of used nuclear fuel along the access roads within the Project site[46]). However, the NWMO's framing does not include emissions from transporting used nuclear fuel from the interim storage facilities to the DGR site because the IPD attempts to exclude the transport of used nuclear fuel from the Project scope[47]. This is a proposition that LAND strongly opposes, as expanded on in section III(b) of this submission.

[39] *IAA*, preamble, s 22(1)(i).
[40] SACC, s 2.1.
[41] IPD, p v, vi, xiii, 1, 5, 8, 41, 255, 261.
[42] SACC, s 1.3 (this section sets out the various phases of the IA process and outlines how the information related to GHG emissions and climate change is collected, analyzed and used to inform decisions on the projects, conditions related to project approvals, and potential follow-up measures).
[43] IPD, p xiii.
[44] IPD, p 255.
[45] SACC, s 3.1.1 (states that the equation for net GHG emissions includes direct emissions "for all phases of the project", and that direct emissions are those "generated by activities that are within the defined scope of the project").
[46] IPD, p 255.
[47] IPD, p viii; SACC, s 3.1.1 (states that direct GHG emissions include emissions generated by transportation of products *if* transportation is included in the scope of the project).

The emissions from transporting used nuclear fuel to the DGR during the operation phase[48] would constitute upstream GHG emissions, which are "the domestic and non-domestic emissions associated with all stages of production, from the point of extracting the resources up to, but not including, the activities within the scope of the project under review"[49] and "[include] GHG emissions generated from activities including production, processing and transportation"[50]. The SACC requires upstream GHG emissions assessment for projects with the potential for high upstream GHG emissions during the operations phase.[51] This is especially relevant in this instance as the DGR has the potential for high upstream GHG emissions from transporting used nuclear fuel to the Project site, because:

- The operations phase for the DGR (approximately 50 years[52]) will primarily involve the handling and transportation of used nuclear fuel[53] across hundreds of kilometres with approximately two to three trucks (roughly the same size and weight as a logging truck)[54] of used nuclear fuel arriving at the Project site per day (for 6 days per week and 9 months of the year);[55]
- The NWMO has acknowledged that there will be a "carbon footprint associated with transporting the fuel"[56] and that their transportation plan must take into account the impacts from day-to-day transportation operations, specifically greenhouse gas emissions from trucks or trains;[57] and
- The NWMO's inclusion of the GHG emissions from transporting used nuclear fuel along the on-site access roads in their net GHG emissions calculation demonstrates their understanding that transportation will have climate-change related consequences.[58] The on-site access roads seem to total approximately 10km,[59] which is a negligible distance when compared to the interprovincial transportation required to bring the used nuclear fuel to the DGR.

The DGR's potential for high upstream GHG emissions warrants an upstream GHG emissions assessment. While the Agency can direct the NWMO to complete an upstream GHG emissions assessment to better understand the DGR's impacts on climate change,[60] this direction can only be given if the Agency decides

[48] ECCC, "Draft technical guide related to the strategic assessment of climate change" (August 2021), s 5.1.1 (states that "Upstream GHG emissions must be based on maximum annual capacity of the project at any given time during the operation phase") [**SACC Guide**].
[49] SACC, s 3.2.1.
[50] SACC Guide, s 5.1.1.
[51] SACC Guide, s 5.1.
[52] IPD, p v.
[53] IPD, p 65.
[54] IPD, Appendix B, What We Heard - IPD Engagement Report: Ignace Information Session (July 24, 2025), p 5.
[55] IPD, p 73.
[56] Planning Framework, p 10.
[57] Planning Framework, p 16.
[58] IPD, p 255.
[59] IPD, p 45.
[60] SACC Guide, s 5.1 (states that upstream GHG emissions assessments are required for energy projects (i.e. those related to the exploitation or potential exploitation of non-renewable resources to produce energy, or to the storage or transmission of energy products produced from non-renewable resources) likely to exceed the upstream GHG emissions thresholds (i.e amount of kt CO_2 eq/year), which decline over time in accordance with Canada's

an IA is required. Specifically, the decision on whether an upstream GHG assessment is required in the Impact Statement can only be confirmed through the Tailored Impact Statement Guidelines "based on preliminary calculations conducted by IAAC with the support of expert federal authorities."[61] LAND therefore strongly urges the Agency to require an IA and ensure that the need for a corresponding upstream GHG emissions assessment for the DGR is reflected in the TISGs.

III. THE IA MUST ADDRESS THE GAPS AND MISCHARACTERIZATIONS WITHIN THE INITIAL PROJECT DESCRIPTION

After deciding that an IA is warranted under s 16 of the *IAA*, we strongly urge the Agency to ensure that subsequent steps within the planning phase remedy the gaps and mischaracterizations within the IPD, as currently drafted. The Agency ought to require the NWMO to address these profound limitations - that impact the scope, veracity and robustness of the IA - before the planning phase moves forward.

a. The scope of the IA must include the elements listed in section II of this submission

The factors referenced in section II of this submission are essential to a meaningful IA and the Agency must take them into account in determining what information or which studies it considers necessary for the conduct of the IA.[62] We strongly urge the Agency to ensure that these factors are included within the project's TISGs.

b. The transport routes and risks are inherent to the DGR and must be included in the IA

According to the IPD, the Project will not include transportation of used fuel from reactor sites to the Project site beyond primary and secondary access roads at the Project site. NWMO contends these activities use existing transportation infrastructure and are regulated separately under certification and licensing by the Canadian Nuclear Safety Commission ("CNSC") and Transport Canada.[63] For the following reasons, it is imperative that the IA for the DGR include a comprehensive assessment of the transport routes, impacts, and risks.

i. The NWMO's responsibility for managing used nuclear fuel includes the transportation of used nuclear fuel and must therefore be scrutinized as part of the DGR project.

The NWMO was established under the *Nuclear Fuel Waste Act* - which a key component of the legislative regime governing the DGR[64]- and is responsible for the "management" of used nuclear fuel, which is

climate change commitments, meaning that that upstream GHG emissions assessments are more likely to be required).

[61] SACC, s 3.2.2.

[62] *IAA,* s 18(1.1).

[63] IPD, p vii.

[64] IPD, p v, 5.

defined as “long-term management by means of storage or disposal, including handling, treatment, conditioning or transport for the purpose of storage or disposal” (emphasis added).[65] The NWMO has recognized that “[planning] for the transportation of used nuclear fuel from interim storage facilities to a deep geological repository site is a key portion of Canada's plan for the safe, long-term management of used nuclear fuel”,[66] demonstrating their understanding that transportation is an essential component of the DGR’s operation.

Transporting spent fuel and high-level radioactive waste poses health, safety and social risks due to the potential of radiological exposures to people who travel, work, or live near transportation routes, and to transportation workers themselves.[67] Due to the risk of significant harm, including injuries and loss of life, transporting used nuclear fuel constitutes an anthropogenic hazard that can only be controlled if regulated effectively.[68] Excluding the transportation of used nuclear fuel to the DGR is incompatible with the NWMO commitment to integrating safety into every aspect of the transportation system to ensure the protection of people and the environment,[69] and will undermine both public trust in the IA process and confidence in the NWMO’s ability to safely manage used nuclear fuel.

ii. Transporting high-level radioactive waste over thousands of kilometers, across provincial borders, is directly linked to the DGR and has the potential to cause non-negligible adverse effects.

Used nuclear fuel is a highly toxic substance that can cause irreversible damage to human and environmental health if there are accidental spills or human error in the loading, handling or transport of waste. This must be considered by the Agency when determining whether to require an IA, especially considering the non-negligible adverse effects[70] an accident would have on multiple areas of federal jurisdiction, including fish and fish habitat, migratory birds, Indigenous rights, and Canada’s ability to meet their environmental obligations.[71]

Because the transport and handling of the waste are activities directly linked to the DGR, the cumulative effects of the loading, handling, and interprovincial transport of used nuclear fuel must be considered.[72] According to the IPD, the transportation activities “do not require infrastructure upgrades or changes directly attributable to the Project” and are therefore “not subordinate or complementary to the

[65] *Nuclear Fuel Waste Act*, SC 2002, c 23, s 2 (definition of “management”).
[66] NWMO, webpage: *Transporting Used Nuclear Fuel*.
[67] National Research Council’s Nuclear and Radiation Studies Board & the Transportation Research Board, *Going the Distance? The Safe Transport of Spent Nuclear Fuel and High-Level Radioactive Waste in the United States,* Chapter 3: Transportation Risk (Washington, DC: The National Academies Press, 2006), p 111 [**Chapter 3: Transportation Risk**].
[68] Chapter 3: Transportation Risk, p 112.
[69] NWMO, webpage: *Transporting Used Nuclear Fuel*.
[70] *IAA,* s 2 (definition of “direct or incidental adverse effects” and “non-negligible”).
[71] *IAA,* s 16(2)(b).
[72] *IAA,* s 6(2).

designated activity (i.e., construction and operation of the DGR)".[73] This, however, contradicts NWMO's Preliminary Transportation plan, which states that considerations for transport routes include "proximity to sensitive environmental areas (e.g. for any new infrastructure required)" and the "potential need to improve or build new infrastructure (e.g. extension of rail track)"[74] (emphasis added). As the transport methods and routes have not yet been finalized - and indeed ought to be subject to review and input resulting from the IA - we do not accept NWMO's position that no infrastructure upgrades attributable to the Project will be required and that they will not have adverse effects.

Additionally, the IPD states that the NWMO, in selecting the site for the DGR, followed the approach set out in their 2010 report (Moving Forward Together: Process for Selecting a Site for Canada's Deep Geological Repository for Used Nuclear Fuel).[75] This Report confirmed that the potential of a site to avoid or minimize effects of the transportation of used nuclear fuel is a key consideration in the site selection process[76], and states that "in order for a site to be considered technically safe, a transportation route must be identified, or be capable of development, by which used nuclear fuel can safely and securely be transported to the site from the locations at which it is currently stored. Beyond safety, transportation is also an important consideration in identifying and assessing effects on community well-being."[77]

During the site selection process, sites were evaluated for transportation-related considerations including the availability of transportation routes (road, rail, water), the adequacy of associated infrastructure and potential to put such routes in place, the availability of suitable safe connections and intermodal transfer points if required, the NWMO resources (e.g. fuel, people) and associated carbon footprint required to transport the used fuel, and the potential for effects on communities along the transportation routes and at intermodal transfer points.[78] This extensive evaluation of transportation risks that was conducted in the site selection process demonstrates that transport of the used nuclear fuel was never framed as being separate from the DGR, and to exclude it now would erode public trust in this process. We again urge the Agency to recognize its necessary inclusion within the TISGs and scope of the IA.

iii. The inclusion of transport routes and associated risks in the IA is necessary to upholding the precautionary principle.

The Agency has a mandate to exercise their powers in a manner that applies the precautionary principle[79], which instructs that "where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental

[73] IPD, p 50-51.
[74] Preliminary Transportation Plan, p 22.
[75] IPD, p 14.
[76] NWMO, "Moving Forward Together: Process for Selecting a Site for Canada's Deep Geological Repository for Used Nuclear Fuel" (May 2010), p 37 [**Site Selection Process**].
[77] Site Selection Process, p 32.
[78] Site Selection Process, p 37.
[79] *IAA*, s 6(2).

degradation".[80] In recognition of the precautionary principle, environmental regimes such as the *IAA* often require a pause while information about the potential impacts of a project is gathered and evaluated.[81]

As there are clear risks (i.e. non-negligible adverse effects as defined in the *IAA*) regarding transporting high-level nuclear waste, the Agency ought to implement the precautionary principle by requiring an IA that reviews transportation, as a thorough review of the risks would support informed decision-making to prevent harm to human and environmental health. Further, the NWMO has explicitly committed to acting in accordance with the precautionary approach, which "first seeks to avoid harm and risk of harm" and, if harm or risk of harm is unavoidable, "[places] the burden of proving that the harm or risk of harm is ethically justified on those making the decision to impose it".[82] Without an IA, the NWMO will not be able to meet this burden.

iv. The inclusion of transport routes and associated risks in the IA is necessary to advance environmental justice.

The Agency, as part of the federal government, has a legal duty to advance environmental justice under the *Environmental Justice Act.* The *Environmental Justice Act* recognizes that "a disproportionate number of people who live in environmentally hazardous areas are members of an Indigenous, racialized or other marginalized community" and a failure to meaningfully involve members of those communities in the development of environmental policy constitutes environmental racism.[83] While there is no definitive definition of environmental racism or injustice, it is generally accepted as a concept acknowledging that marginalized communities in Canada, including low-income and racialized communities, often bear a disproportionate burden of human health, social, cultural, ecological and other adverse impacts of environmental harm while being denied benefits.[84] These inequitable burdens undermine human dignity, equality and non-discrimination.[85] This is, and has been, evident in Canada's decision-making regarding the establishment of environmentally hazardous sites such as landfills, mines and other polluting industries.[86]

It is essential that the Agency apply an environmental justice lens to the proposed DGR, but this first requires that the IA has a comprehensive scope. Applying an environmental justice requires consideration of how environmental risk, harm and benefits are distributed among different members of society (i.e. distributional justice), how different members of society access and influence environmental

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[80] *Reference re Impact Assessment Act,* 2023 SCC 23 at para 145.
[81] *Reference re Impact Assessment Act,* 2023 SCC 23 at para 286.
[82] IPD, Appendix D: Choosing a Way Forward: The Future Management of Canada's Used Nuclear Fuel, p 41.
[83] *Environmental Justice Act,* preamble.
[84] Larissa Parker, "Not in Anyone's Backyard: Exploring Environmental Inequality under Section 15 of the Charter and Flexibility after Fraser v Canada" (2022) 27 Appeal 19, p 21-22.
[85] Maia Dombey, "Environmental Racism: How Governments are Systematically Poisoning Indigenous Communities & the UN's Role" (2020) 27 U Miami Int'l & Comp L Rev 131, p 145.
[86] Environmental Conservation Lab at the University of Manitoba, "Examples of Environmental Racism in Canada" (April 2024).

decision-making (i.e. procedural justice) and how underlying systemic injustices and differing values and identities are recognized and represented (i.e. recognitional justice).[87] All three of these components are engaged by the transportation of high-level nuclear waste to the DGR:

1) **Distributional injustice:** To transport the used nuclear fuel, the waste will travel through many communities, putting them at higher risk than the general public should any accidents or malfunctions occur.[88] By not including transport routes, transportation and waste handling activities within the scope of the IA, these risks may not be adequately studied and prevented.

2) **Recognitional injustice:** Communities along the transport route or in close proximity to the interim facilities or the DGR site, particularly low-income, Indigenous and racialized communities, are among those who have historically experienced marginalization, discrimination and exclusion due to their lack of political and economic power. In a 2020 report, the United Nations Special Rapporteur on Toxics and Human Rights highlighted "a pattern in Canada where marginalized groups, and Indigenous peoples in particular, find themselves on the wrong side of a toxic divide, subject to conditions that would not be acceptable elsewhere in Canada."[89]

   If transport routes are excluded from the IA's scope, the historical and systemic injustices that have led to inequitable decision-making by the Crown will not be recognized and accordingly cannot be remedied. For the Agency to advance environmental justice and disrupt the status quo, they must recognize the ongoing reality that the rights of certain populations (i.e. affluent, caucasian) continue to be upheld more than others.

3) **Procedural injustice:** Impacted communities (i.e. communities along the transport route or in close proximity to the interim facilities or the DGR site) will not have equitable access to be informed and participate in environmental decision-making. Decisions regarding the selection of transport routes, emergency preparedness, and risk prevention must be included within the IA to allow for information disclosure, public scrutiny, meaningful involvement, and to build public trust in government decision-making. Additionally, the NWMO only commits to engaging with communities who "may be affected by the carrying out of the Project"[90] which, according to the IPD, would not include any downstream communities or communities along the transport routes.

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[87] Rebecca L Gruby, "Opening the black box of conservation philanthropy: A co-produced research agenda on private foundations in marine conservation" (2021) 132 Elsevier Marine Policy, p 8; Distributional, procedural and recognitional justice are the three key dimensions of environmental equity and justice (European Environment Agency, "Delivering Justice in Sustainability Transitions", February 28, 2024).
[88] Chapter 3: Transportation Risk, p 112.
[89] Tuncak, Baskut. "Visit to Canada: Report of the Special Rapporteur on the Implications for Human Rights of the Environmentally Sound Management and Disposal of Hazardous Substances and Wastes" (2020), p 21.
[90] IPD, p 22.

The inclusion of transport routes and risks in an IA is necessary to advancing environmental justice because it is best placed to ensure that the many communities along the transportation routes will be able to be informed, heard, and meaningfully involved in the DGR decision-making processes.

v. There are no alternative processes that will review the transportation of the waste en par with IA and excluding these activities from the scope is project splitting.

Among the factors the Agency must take into account in deciding whether or not an IA is required for the project is:

> **16(2)(f.1)** whether a means other than an impact assessment exists that would permit a jurisdiction to address the adverse effects within federal jurisdiction — and the direct or incidental adverse effects — that may be caused by the carrying out of the designated project;

LAND submits that an IA is the best available means to assess the adverse effects that may be caused by the transportation of used nuclear fuel to the DGR site (which is directly linked to the carrying out of the designated project and has the potential to cause non-negligible adverse effects, as expanded on in section III(b)(ii) of this submission). This is because:

- The existing regulatory requirements regarding transport (e.g. packaging certifications, transport licences, etc.) fail to consider the project's cumulative impacts on the environment and Indigenous rights and do not facilitate public or Indigenous participation; and
- No regional studies or assessments have been conducted for the area in proximity to the Project site.[91]

In an attempt to exclude transport and related activities like packaging from the IA, the NWMO states:[92]

> [T]he transportation of used nuclear fuel is jointly regulated by the [CNSC] and Transport Canada. The NWMO will need to demonstrate to these authorities the safety and security of its transportation system. The transportation system must also meet federal, provincial, and local safety requirements, and will be inspected for compliance.

The IPD explains that the regulatory regime includes various regulations and policies, such as:

- *Packaging and Transport of Nuclear Substances Regulations*[93]
- *Transportation of Dangerous Goods Regulations*[94]
- International Atomic Energy Agency Regulations for the Safe Transport of Radioactive Material[95]

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[91] IPD, p 38.
[92] NWMO, webpage: *Transportation regulations and oversight*.
[93] *Packaging and Transport of Nuclear Substances Regulations,* SOR/2015-145.
[94] *Transportation of Dangerous Goods Regulations*, SOR/2001-286.
[95] International Atomic Energy Agency, Regulations for the Safe Transport of Radioactive Material: Specific Safety Requirements (2018 Edition).

- *General Nuclear Safety and Control Regulations*[96]
- *Nuclear Security Regulations*[97]
- Adaptive Phased Management Plan for the long-term management of Canada's used nuclear fuel[98]

However, none of these regulatory requirements facilitate an evaluation of cumulative, social or environmental effects as part of participatory and public process. For example, an application for a transportation license, including the required transport security plan, does not require an assessment of the socio-ecological risks and impacts of transport, does not specify how the transportation routes are identified, and does not set out any notice, informational disclosure or public participation requirements.[99]

As we have extensively studied and shared with the Agency, federal government and CNSC, licensing pursuant to the *Nuclear Safety and Control Act* is not an equivalent nor sufficient alternative to or substitute for an IA as it does not require the same rigour in testing a proponent's claims regarding safety, level of harm or impacts to communities and the environment.[100] The net effect is a resultant weakening of the public's trust in decisions that purport to test and review these first of their kind projects.

For over forty years, environmental governance in Canada has used impact assessment as an important tool.[101] While there is no one definition of IA, broadly speaking it is a process to identify, predict, evaluate, mitigate the ecological, socioeconomic, and cultural impacts of a project and potentially improve social and ecological conditions before major decisions or commitments are made to site a new project. The *IAA* allows for a much fuller evaluation of a project's ramifications in comparison to the CNSC's licensing process - which is a regulatory proceeding, narrowly defined by the stage of activity being licensed (i.e., site preparation, operations, decommissioning).

While IA takes into account a project's full lifespan – from development through to decommissioning – and the impacts of projects which are 'direct or incidental' to the project, the CNSC's piecemeal approach is much narrower, viewing the project's life stages in isolation, and occurring in licensing hearings spaced years if not decades apart.

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[96] *Nuclear Security Regulations,* SOR/2025-219.
[97] *General Nuclear Safety and Control Regulations,* SOR/2000-202.
[98] NWMO, webpage: *Canada's plan used nuclear fuel*; NWMO, webpage: *Project Phases: Adaptive Phased Management (APM) is Canada's plan for the long-term management of used nuclear fuel. It involves the containment and isolation of Canada's used fuel at a new repository site.*
[99] *Packaging and Transport of Nuclear Substances Regulations,* SOR/2015-145, s 7; *Nuclear Security Regulations,* SOR/2025-219, s 100.
[100] *See for instance:* LAND, "Joint Response to the Impact Assessment Agency of Canada's Discussion Paper on the Review of the Physical Activities Regulations" 27 Sept 2024; M.V. Ramana, Kerrie Blaise, Regulation vs promotion: Small modular nuclear reactors in Canada, Energy Policy, Volume 192, 2024, https://doi.org/10.1016/j.enpol.2024.114228.
[101] M. Doelle, A.J. Sinclair (Eds.), The Next Generation of Impact Assessment, Irwin Law, Toronto (2021).

Three key distinctions between the two review processes are worth noting:

1. The statutory purposes of the IAA are, "to foster sustainability" and "encourage the assessment of cumulative effects", whereas CNSC's regulatory mandate during licensing does not include these broader and more ambitious decision-making criteria;
2. CNSC's licensing process is specific to the stage of the activity being undertaken, and does not comprehensively review the entire lifecycle of a project *upfront*; and
3. The CNSC assesses a licence application against a narrower range of factors than impact assessment.[102]

We are very concerned that if transportation is excluded from the project's scope, so too will considerations of emergency preparedness in response to accidents and malfunction that may occur in connection with the project, such as during the handling, loading and transporting of high-level nuclear waste.[103]

LAND is of the view that given the inherently interconnected nature of the transportation activities with the DGR, it would frustrate the purposes and efficacy of the IA should they not be considered within scope.

In *MiningWatch Canada v Canada (Fisheries and Oceans)*, the Supreme Court explained that "project splitting" occurs when a proponent "[…] represent[s] part of a project as the whole, or propos[es] several parts of a project as independent projects in order to circumvent additional assessment obligations […]".[104] The Court then provided an example of how project splitting could be used to "circumvent additional assessment obligations":

> Where the RA or Minister decides to combine projects or to enlarge the scope under s. 15(2) or (3), it is conceivable that the project as proposed by the proponent might have only required a screening. However, when the RA or Minister considers all matters in relation to the project as proposed, the resulting scope places the project in the [Comprehensive Study List]. Where this occurs, the project would be subject to a comprehensive study.[105]

If projects are tied together by connected actions, cumulative actions, or similar actions, or if they provide functional or economic dependence on a future project, they must be assessed as a single

[102] For further discussion, see: M.V. Ramana, Kerrie Blaise, Regulation vs promotion: Small modular nuclear reactors in Canada, Energy Policy, Volume 192, 2024, https://doi.org/10.1016/j.enpol.2024.114228 at 5.1.
[103] *IAA*, s 22(a)(i).
[104] *MiningWatch Canada v Canada (Fisheries and Oceans)*, 2010 SCC 2 at para 40 [***MiningWatch***].
[105] *MiningWatch* at para 40.

project for their impact on the environment.[106] By allowing transport - and by extension, emergency preparedness - to be excluded from the IA as the NWMO suggests in its visioning document, neither the Agency nor the public will have the means to ensure an accurate and comprehensive review of the project's actual adverse environmental effects.

vi. The NWMO must follow through on their stated commitments to demonstrate the safety of the transportation system.

The NWMO ought to now be well-informed of the environmental, health and social concerns regarding the transport of high-level nuclear waste as for more than 15 years, they have been conducting public consultations regarding transportation concerns, including potential for radiation exposure as a result of an accident, contamination of water sources, general environmental contamination, and inadequate road and rail facilities especially in rural and northern areas increasing the likelihood of accidents.[107]

While the NWMO has stated that safe transportation of used nuclear fuel requires "sufficient effort, resources, preparation, oversight and continued vigilance,"[108] we ask that the Agency ensure they follow through on their commitments, including but not limited to:

- "[D]emonstrating the safety of any transportation system to the satisfaction of citizens before beginning to transport used nuclear fuel"[109];
- Addressing the wide range of priorities, questions and concerns heard to date from Canadians and Indigenous Peoples about the transportation of used nuclear fuel"[110];
- "[E]ngaging with and [seeking] input from Canadians, Indigenous peoples and organizations with a shared interest in future transportation"[111];
- Ensuring that their transportation approach is "informed by public input and dialogue" and "subject to ongoing review and public reporting"[112];
- Including, in their transportation program, "public engagement activities to address people's priorities, questions and concerns"[113]; and
- Collaborating with "many communities of interest" for the "design and development of transportation plans, the mode of transport, routes, security and safety measures and emergency preparedness"[114].

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[106] *National Wildlife Federation v. Appalachian Regional Com'n, 677 F. 2d 883 at 888 (C.A.D.C., 1981), quoting Kleppe v. Sierra Club*, 427 U.S. 390 (1976) 40 C.F.R. 1508.25; *O'Reilly v. U.S. Army Corps of Engineers*, 477 F. 3d 225 at 236 (5th. Cir. 2007), quoting Fritiofson v. Alexander, 772 F. 2d 1225 at 1241 (5th Cir.1985)
[107] NWMO, Backgrounder: Transportation (2009), p 2 [**Backgrounder: Transportation**].
[108] Backgrounder: Transportation, p 7.
[109] Backgrounder: Transportation, p 7.
[110] NWMO, webpage: *Transporting Used Nuclear Fuel*.
[111] NWMO, webpage: *Transporting Used Nuclear Fuel*.
[112] NWMO, webpage: *Transporting Used Nuclear Fuel*.
[113] NWMO, webpage: *Transporting Used Nuclear Fuel*.
[114] NWMO, "Choosing a Way Forward: The Future Management of Canada's Used Nuclear Fuel - A Summary" (2005), p 6.

An IA provides the best available opportunity for the NWMO to follow through on their commitments to ensure the inclusion of affected communities and build public trust that the transportation of the high-level waste will be done safely.

vii. The nuclear industry and government decision-makers are aware of the risks of transporting radioactive waste.

Industry and government are well-informed of the risks of transporting nuclear waste and thus, they cannot now seek to exclude these critical factors from review by way of an IA. The risks of transporting radioactive waste were recently addressed in federal court in *Kebaowek First Nation et al v Attorney General of Canada and Canadian Nuclear Laboratories,* where the court acknowledged that transportation-related risks are valid considerations that must be assessed within the broader context of a project's environmental impacts.

In this case, the federal court found that the Minister of the Environment erred in concluding that "all reasonable alternatives that would reduce the impact on the species [at risk]" had been considered pursuant to s 73(3)(a) of the *Species At Risk Act* (*"SARA"*), which is required before a permit can be issued allowing for otherwise prohibited activities to be conducted. The judge found that the nuclear proponent Canadian Nuclear Laboratories ("CNL") had not considered all reasonable alternatives as CNL limited their site selection options to just three sites located close to CNL, before selecting Chalk River Laboratories to be the site for the Near Surface Disposal Facility ("NSDF").

During the hearing, CNL explained that these three sites were identified as:

> The only viable options after evaluating key technical, safety, and regulatory requirements, especially when considering factors such as minimizing the transportation of highly toxic nuclear waste, leveraging existing waste disposal infrastructure, and possessing sufficient geological knowledge of the sites (emphasis added).[115]

CNL emphasized that "transportation-related impacts were a critical factor" in selecting Chalk River to be the NSDF site, because "road mortality is a primary threat to species such as the Blanding's Turtle", "the risk of waste spillage may increase with transportation distance" and "minimizing transportation is the most effective way to reduce harm to at-risk species" (emphasis added).[116]

The Minister of the Environment, in granting the permit under *SARA,* agreed that transporting nuclear waste would "significantly increase the air emissions, the risk for wildlife-vehicle collisions, transportation costs and the impact on Chimney Swifts".[117] Despite finding that the Minister erred in

[115] *Kebaowek First Nation et al v Attorney General of Canada and Canadian Nuclear Laboratories,* 2025 FC 472 at para 44 [***Canadian Nuclear Laboratories***].
[116] *Canadian Nuclear Laboratories* at para 46.
[117] *Canadian Nuclear Laboratories* at para 55.

concluding that all reasonable alternatives for the NSDF site location had been considered, the federal court agreed that "transportation-related risks, such as the road mortality of Blanding's Turtle, are valid considerations [that] must be assessed within the broader context of the sites' direct ecological impact".[118]

This case is a timely example of industry and government's acknowledgement of the risks of transporting radioactive waste, supporting a finding that the DGR must undergo an IA that adequately assesses these risks.

viii. Vehicle and package maintenance activities are within the Project scope and cannot be separated from transportation.

According to the Deep Geological Repository Transportation System Conceptual Design Report, it is assumed that package maintenance activities and vehicle maintenance activities will be conducted at a maintenance facility at the DGR.[119] This is confirmed by the DGR, which states that the Project will include surface facilities for receiving, handling and packaging the used fuel[120] and a repair garage, warehouse and storage facilities to receive, store and dispense materials, consumables and equipment necessary to support operations and to service vehicles.[121]

However, it remains unclear how the used nuclear fuel will be packaged for transport. There are two existing package designs (i.e. Used Fuel Transportation Package and Dry Storage Container Transportation Package) for used fuel from sites owned by Ontario Power Generation (i.e. Bruce, Pickering and Darlington) but the transportation package - known as the Basket Transportation Package - for the used nuclear fuel coming from the other sites (i.e. Point Lepreau, Gentilly, Chalk River, Whiteshell and Douglas Point) was still under development as of 2021.[122]

Without knowing how the waste will be packaged and transported, and with the Basket Transportation Package still in the conceptual stage, it is not possible for the NWMO to plan for and construct maintenance facilities at the DGR. This supports our assertion that the transportation of waste is a necessary component of the project, and an IA will ensure that such questions - which are inherent and directly linked to the project - can be studied and their outcomes, publicly justified.

ix. Including transportation-related GHG emissions within the project scope is necessary to meet the requirements of the Strategic Assessment of Climate Change.

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[118] *Canadian Nuclear Laboratories* at para 52.
[119] Ashton Taylor (prepared by AECOM Canada Limited under contract to NWMO), "Deep Geological Repository Transportation System Conceptual Design Report" (September 2021), p 19-21 [**Conceptual Design Report**].
[120] IPD, p vii.
[121] IPD, p 60.
[122] Preliminary Transportation Plan, p 6-7; Conceptual Design Report, p 19. We have not been able to confirm whether this package design has been finalized or whether it is still under development as of February 4, 2026.

As expanded on in section II(d) of this submission, a transport-inclusive IA (and corresponding upstream GHG emissions assessment) is required if the DGR's impacts on Canada's ability to meet its commitments in respect of climate change are to be adequately assessed, quantified and understood. However, an upstream GHG emissions assessment would incorrectly assume that transportation-related emissions are not directly linked to the DGR.[123] LAND submits that the DGR's climate change-related impacts can be better understood if the GHG emissions caused by transportation is accounted for in the net GHG emissions calculation (rather than the upstream GHG emissions calculation) - and this can only happen if transportation is included in the scope of the IA.

Including transportation within the project scope would mean that the emissions from transportation would be considered "direct emissions" and therefore accounted for in the net GHG emissions calculation.[124] This would allow for a more holistic understanding of the project's impacts on climate change because, for instance:

- Transportation-related emissions would have to be accounted for in the NWMO's plan to achieve net-zero emissions by 2050 (which is required because the DGR is expected to have a lifetime beyond 2050 and must demonstrate how the net GHG emission equation will equal 0 by 2050)[125]; and
- The project's Decision Statement can include enforceable GHG emissions-related conditions, such as mitigation measures and other requirements to reduce or control a project's GHG emissions.[126]

Both of these requirements would not apply if the GHG emissions were considered to be upstream GHG emissions. Therefore, to support Canada's ability to meet its environmental obligations and commitments in respect of climate change as required by the *IAA*,[127] LAND strongly urges the Agency to include transportation-related GHG emissions in the scope of the project.

IV. CONCLUDING REMARKS

Thank you for your consideration of our comments. We urge the Agency to exercise its discretion under section 16 of the *IAA* and require a full IA for the DGR that includes transportation routes and risks, respects Indigenous rights, ensures environmental protection and advances environmental justice. We

[123] SACC, s 3.2.1. (states that upstream GHG emissions include "the domestic and non-domestic emissions associated with all stages of production, from the point of extracting the resources up to, *but not including,* the activities within the scope of the project under review" (emphasis added)).
[124] SACC, s 3.1.1 (states that direct GHG emissions include emissions generated by transportation of products *if* transportation is included in the scope of the project).
[125] SACC, s 5.3 (states that the plan to achieve net-zero emissions does not apply to upstream GHG emissions).
[126] SACC, s 7 (states that GHG emissions-related conditions would only be applicable to a project's net GHG emissions, not to upstream activities even if an upstream GHG assessment was conducted).
[127] *IAA,* preamble.

also ask that the Agency require the NWMO to provide comprehensive responses to all of our questions and gaps raised herein.

The IA process offers a methodology that can address many if not all of the issues we raised in this submission. Now, the Agency must ensure the project does not proceed in the narrow way NWMO has set out in its IPD. To do so would be particularly egregious, as it would expose citizens and communities to significant risks without an accompanying rigorous and participatory assessment process for this first-of-its-kind project, involving the most toxic form of pollution known on the planet.

Sincerely,

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