Deep Geological Repository for Canada's Used Nuclear Fuel Project
Impact Assessment Agency of Canada
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May 8, 2026

RE: Environment North's Response to the Draft Tailored Impact Statement Guidelines and Draft Public Participation Plan – Deep Geological Repository (IAAC Reference No. 88774)

Thank you for the opportunity to provide comments in response to the Impact Assessment Agency of Canada's ("**Agency**") draft Tailored Impact Statement Guidelines ("**Guidelines**")[1] and draft Public Participation Plan ("**Participation Plan**")[2] for the proposed Deep Geological Repository ("**DGR**").

Environment North is a registered charitable organization based in Thunder Bay, Ontario. Our mandate is to benefit the community by protecting the environment and increasing the public's understanding of environmental issues. This organization works to improve and protect ecological sustainability and the socio-economic well-being of Northwestern Ontario through leadership, research, partnerships, education, advocacy, information and capacity building.

Please find enclosed a detailed chart prepared by Jenna Brunt at Legal Advocates for Nature's Defence, reflecting the voices of members and leaders of Environment North, who have extensive experience, knowledge, and long-standing involvement in nuclear waste advocacy and public participation in Northwestern Ontario.

As we detail below, the proposed DGR is unprecedented in scale, complexity, duration, and risk. The Guidelines must ensure that the impact assessment is a rigorous, transparent, and precautionary assessment – not an approval process. In particular, the Guidelines must be revised to:

1. Require a full project-scope assessment that captures existing nuclear sites, handling and loading activities, transportation corridors, and radiological risks from accidents and malfunctions;
2. Require a precautionary and independent assessment of alternatives that considers sustainability and cumulative, socio-economic, health, environmental, rights-based, and intergenerational effects;
3. Respect and uphold Indigenous rights, including by aligning the Impact Assessment process with the *United Nations Declaration on the Rights of Indigenous Peoples*, and the principle of free, prior, and informed consent.
4. Apply an environmental justice lens, including consideration of environmental racism, disproportionate burdens, meaningful participation, and impacts on future generations.

[1] Impact Assessment Agency of Canada, Draft Tailored Impact Statement Guidelines: Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel Project (10 April 2026) [**Guidelines**].
[2] Impact Assessment Agency of Canada, Draft Public Participation Plan: Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel Project (10 April 2026) [**Participation Plan**].

Thank you for considering our comments. We trust they will assist the Agency in determining the appropriate next steps under the *Impact Assessment Act*.

Sincerely,

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Review of the draft Tailored Impact Statement Guidelines
for the Deep Geological Repository Project by Environment North
to the Impact Assessment Agency of Canada

Issue	Language from the Tailored Impact Statement Guidelines	Justification or Rationale	Recommendation(s)
		Project Description (Section 2)	
The Guidelines do not clearly define the required description and scope of the Project, leaving room for the exclusion of integral components.	According to the Guidelines, "[t]he Impact Statement must: ○ describe the project, including key components and activities and their scheduling, timing of each phase, and total lifespan; ○ provide the geographic coordinates (i.e., longitude/latitude using international standard representation in degrees, minutes and seconds) from the centre of the main project site; and, ○ describe and quantify	The current "Project Overview" requirements in the Guidelines lack specificity, are ambiguous and, as drafted, narrowly focus on the physical repository site, failing to capture the full scope of the proposed DGR, which includes but is not limited to: ○ The transportation of used nuclear fuel from reactor sites to the proposed DGR site; ○ The handling, preparation, packaging, transferring, and emplacement of nuclear fuel waste bundles; and ○ Long-term monitoring of the repository, both pre- and post-closure. As proposed, the project would require transporting 5.9 million bundles of used nuclear fuel across thousands of kilometres from facilities in New Brunswick, Ontario, Québec, and Manitoba – daily over a period of approximately 50 years.[4] The transportation, handling, and monitoring of the nuclear fuel must therefore be expressly identified under the Project Overview section of the Guidelines, rather than left to be inferred by the reader.	**Recommendation No. 1:** Revise the Project Overview to require a <u>full</u> description of the proposed project that is inclusive of all directly linked and necessarily incidental activities, including but not limited to: ○ Transportation of used nuclear fuel from reactor sites to the proposed DGR site; ○ The handling, preparation, packaging, transfer, and emplacement of used nuclear fuel bundles; ○ Processing and management of nuclear fuel waste; ○ The Used Fuel Packaging Plant at the DGR site; ○ DGR design, components, and associated infrastructure; ○ Assessment of all areas of impact arising from all project phases and operations; ○ All infrastructure and corridor developments associated with transport, whether on existing nuclear sites or along the proposed routes; and ○ Upstream and interprovincial activities that are causally connected to the project; and

[4] Nuclear Waste Management Organization, Initial Project Description: Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel Project (December 2025) at 67 [**IPD**].

	the waste to be managed at the site and identify the current location of waste at interim storage facilities."[3]	While the Guidelines include a separate section on transportation planning later in the document, transportation and handling must be clearly recognized in section 2 of the Guidelines as an integral component of the project to ensure that it is fully captured within the scope of the impact assessment process.	○ Long-term monitoring of the repository, both pre- and post-closure.
The Guidelines do not require any further assessment of "alternatives to" the project, relying instead on the NWMO's 2005 *Choosing a Way Forward* study.	The Guidelines state: "In the Initial Project Description, the proponent described the 'alternatives to' the project that are technically and economically feasible to meet the need for the project and achieve its purpose. This analysis was carried out as part of their Choosing a Way Forward study process pursuant to the Nuclear Fuel Waste Act. IAAC and the CNSC determined that this information is sufficient and no additional information is required in the Impact	The Guidelines note that the proponent has already fulfilled its 'alternatives to" assessment through the *Choosing a Way Forward* study,[6] and that no additional information is required in the Impact Statement. However, reliance on this study alone is insufficient to meet the requirements under sections 22(1)(e) and 63 of the *IAA*. First, the *Choosing a Way Forward* study is outdated and did not evaluate the project's regional context, nor could it have considered current scientific, social, and Indigenous knowledge. Second, section 20 of the *Nuclear Fuel Waste Act* expressly contemplates that the selected approach may change over time, including in response to evolving circumstances or technological developments.[7] This signals that the approach adopted	**Recommendation No. 2**: The Guidelines must require that the Impact Statement include a current, comprehensive, evidence-based, and comparative assessment of "alternatives to" the project, not limited to the *Choosing a Way Forward* study, to deliver the best options in the overall lasting public interest. **Recommendation No. 3**: In laying out the "alternatives to" the project, the Guidelines must require that:[8] ○ The preferred alternative to the project must be those which maximize overall positive benefits and minimize adverse ones ○ The preferred alternative is viewed from broader perspectives, including a sustainability and a public interest lens ○ Preferred alternatives must not be restricted to technically and economically feasible options of the proponent

[3] Guidelines at 7.
[6] Nuclear Waste Management Organization, "Choosing a Way Forward: The Future Management of Canada's Used Nuclear Fuel" (November 2005) at 3, online: pdf <nwmo.ca/-/media/Reports---Reports/2680_nwmo_final_study_nov_2005.ashx?rev=64e653336cdd49faab6bfa004a278d43&sc_lang=en&hash=2F6066753C817AB77EA35A4AFC254D6B>.
[7] *Nuclear Fuel Waste Act*, SC 2002, c 23, s 20.
[8] Meinhard Doelle & John Sinclair, "Meaningful Public Participation in the Proposed Federal Impact Assessment Act (IAA)" (23 February 2018) at 233, online (blog): <blogs.dal.ca/melaw> [perma.cc/SW8W-4KDX].

	Statement related to "alternatives to."[5]	through the *Choosing a Way Forward* study (conducted over 20 years ago) was not intended to be fixed or exhaustive, and does not preclude consideration of a broader range of reasonable alternatives within the impact assessment process. At a minimum, the Guidelines must require the proponent to assess whether other technically and economically feasible alternatives exist in light of current scientific, social, and Indigenous knowledge, including an assessment of a "no-action" alternative and the potential for more suitable approaches to become available over time.	○ A 'no-action' or 'do nothing' alternative must be assessed, including how baseline conditions are expected to change over time, should the project not exist ○ Consider the interconnectedness and interdependence of human-ecological systems, which are necessary for fostering sustainability ○ Consider the well-being of present and future generations, which is necessary for fostering sustainability ○ Consider overall positive benefits and minimize adverse effects of a designated project; and ○ Apply the precautionary principle and consider uncertainty and risk of irreversible harm. ○ Degree of opposition as evidenced by the public record.
The Guidelines identify retrievability as a key project element but do not require a clear, comprehensive description of how used nuclear fuel will be monitored and kept retrievable over the long term.	The Guidelines state how the "Impact Statement must address key project elements in its alternative means analysis, including [...] the potential for the used nuclear fuel to be retrieved in the future."[9]	The retrievability of used nuclear fuel was contemplated in the selection of the Adaptive Phased Management ("**APM**") approach for the long-term management of nuclear fuel. The Government of Canada emphasized that the "APM will ensure the used nuclear fuel is monitored and retrievable" and is "designed to take advantage of emerging energy technologies."[10] In this context, further assessment and description of retrievability are necessary to support a complete understanding of the project and its long-term implications.	**Recommendation No. 4**: The Guidelines must require the Impact Statement to include a clear and comprehensive description of how used nuclear fuel will be monitored and remain retrievable over time, including both prior to and following repository closure, and how this capability will be maintained under changing conditions. **Recommendation No. 5:** The NWMO ought to incorporate the concept of 'rolling stewardship'[11] in planning for the continued monitoring and safety of the DGR, which involves: ○ Plans for the accurate transmission of

[5] Guidelines at 9.
[9] Guidelines at 10.
[10] Natural Resources Canada, "Canada's Nuclear Future: Clean, Safe, Responsible" (14 June 2007), online: Government of Canada <canada.ca/en/news/archive/2007/06/canada-nuclear-future-clean-safe-responsible.html>.
[11] Canadian Coalition for Nuclear Responsibility, *Nuclear Waste: Abandonment versus Rolling Stewardship*, online: pdf <ccnr.org/Rolling_Stewardship.pdf>.

			information from one generation to the next; ○ Plans for the transfer of responsibility from one generation to the next, e.g., a 'changing of the guard' every 20 years; ○ Plans to rapidly detect and correct any leakages or other problems; ○ Plans for the retrieval of waste as appropriate; and ○ Plans for continual adaptive management and monitoring.
The Guidelines fail to require robust assessment of socio-economic impacts.	For likely residual and cumulative adverse federal effects on Valued Components, the Impact Statement must: "describe the effect, using criteria most appropriate for the effect, including, as appropriate: … social contexts."[12]	Social considerations are among the changes required to be studied as part of the project's "effects" per section 2 of the *IAA*. They are also a required factor to be considered in assessing contributions to sustainability per s 22(1)(h). Yet, the Guidelines fail to meaningfully require an assessment of the broader social impacts associated with the proposed DGR and the transportation of used nuclear fuel across the country. Given the scale, duration, and divisive nature of the Project, these considerations cannot be treated as peripheral or secondary impacts.	**Recommendation No. 6:** The Guidelines must require a comprehensive assessment of the positive and adverse social impacts associated with the proposed DGR and the transportation of used nuclear fuel, including impacts related to social acceptance, stigma, fear, and risk perception, as well as resulting effects on local economies, tourism, community well-being, social cohesion, and community integrity.
The Guidelines must critically review future, potential and probable scenarios.	The IAAC's Generic Requirements for Impact Statements provide that a cumulative effects assessment must include: "a comparison of possible future scenarios with and without the project,	This direction is insufficient given the unprecedented temporal scale, uncertainty, and intergenerational risks associated with the proposed DGR. A meaningful impact assessment cannot be confined to a narrow or optimistic projection of future conditions. Rather, it must rigorously evaluate a range of credible future scenarios, including low-probability but high-consequence events, long-term institutional	**Recommendation No. 7:** The Guidelines must require the Impact Statement to rigorously evaluate a range of credible future, potential, and probable scenarios associated with the proposed DGR and the transportation of used nuclear fuel, including low-probability but high-consequence events, long-term institutional failure, climate instability, container degradation, failure of the multi-barrier system to withstand unforeseen geological changes,

[12] Guidelines at 10.

	reflecting the total cumulative effects and not just the project's contribution."[13]	failure, climate instability, container degradation, accidents during transportation, or changes in social licence and technology acceptability.	accidents during transportation, and changes in social licence and technology acceptability.
Assessment Methodology (section 4)			
The Guidelines rely on the concept of a "willing host community" without sufficient safeguards to ensure that "willingness" is informed, independent, and based on complete, unbiased, and accessible information. They also do not clearly ensure that other affected communities, including those downstream and along transportation corridors, have access to sufficient information and meaningful	The Guidelines state: "During the site selection process, as outlined in Moving Forward Together: Process for Selecting a Site for Canada's Deep Geological Repository for Used Nuclear Fuel, the proponent carried out various studies to determine that the preferred site was potentially suitable for a Deep Geological Repository (DGR), both from the perspective of identifying a willing host community, and from the perspective of identifying a site with the requisite technical characteristics to safely contain used nuclear fuel at depth over long periods of time (e.g.,	The Guidelines place significant weight on identifying a "willing host community" through the proponent's site selection process. However, reliance on this concept alone is insufficient without clear requirements demonstrating that host and affected communities have been provided with complete, balanced, and accessible information about the project, including its full scope, risks, uncertainties, and long-term implications. This is especially important because the proponent is not a neutral source of information and has provided financial support or funding to, or has funding relationships with, communities, institutions, or organizations involved in or affected by the Project. The Guidelines must require transparency and safeguards to ensure that participation remains informed and independent. This concern also extends beyond identified host communities. All potentially affected communities, including those downstream and along transportation corridors, must have meaningful opportunities to understand the Project, ask questions, and have their concerns considered before decisions are made.	**Recommendation No. 8**: The Guidelines must require that all potentially affected communities – including those downstream and along the transportation route – receive complete and accessible information about the Project's risks, uncertainties, and long-term implications throughout the full project lifespan. The Guidelines must also require the Impact Statement to describe how the engagement process safeguards procedural fairness, including rights to be informed, to have a say, and to have access to independent decision-making on an ongoing basis. **Recommendation No. 9**: The Guidelines must require that the Impact Statement disclose any proponent funding or financial arrangements with communities, institutions, or organizations involved in or affected by the Project to support transparency, accountability, informed participation, and public confidence in the assessment process.

[13] Impact Assessment Agency of Canada, "Generic Requirements for Impact Statements" (15 August 2025), online: <canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/generic-requirements-impact-statements.html>.

opportunities to participate in the assessment process.	Confidence in Safety – Revell Site – 2023 Update).”[14]		
The Guidelines unjustifiably limit meaningful Indigenous engagement with Indigenous peoples and communities.	The Guidelines define “Indigenous Nations and communities” as those Nations or communities listed in the Indigenous Engagement and Partnership Plan”[15], namely: 1) Eagle Lake First Nation; 2) Lac Des Mille Lacs First Nation; 3) Lac Seul First Nation; 4) Northwestern Ontario Métis Community; 5) Seine River First Nation; and 6) Wabigoon Lake Ojibway Nation.[16]	The Guidelines define “Indigenous Nations and communities” by reference to those listed in the Indigenous Engagement and Partnership Plan. However, the proposed DGR affects many Indigenous communities and rights-holders beyond those expressly listed, including those affected by transportation, downstream effects, and activities at or near interim storage facilities. This definition is inconsistent with the *IAA,* which was written with the implementation of the *United Nations Declaration on the Rights of Indigenous Peoples* in mind. This includes, for example, provisions in the *IAA* around consideration of Indigenous rights and Indigenous knowledge as well as Canada’s commitment to seek the free, prior and informed consent of Indigenous peoples in relation to decisions under the *IAA*.[17] In particular, section 22(1)(c) of the *IAA* requires the assessment to take into account: the impact that the designated project may have on <u>any Indigenous group</u> and any adverse impact that the designated project may have on the rights of the Indigenous peoples of Canada as	**Recommendation No. 10:** *Amend lines 340-341 to read:* “‘Indigenous Nations and communities’ refers specifically to those Nations, communities and/or rights-holders whose rights may be impacted by any stage of the project lifecycle (including packaging, handling, transport and/or storage of used nuclear fuel), including but not limited to those who have expressed that they may be impacted by the designated project and/or whose traditional or Treaty lands intersect with the locations of the interim storage facilities, proposed project site, and transportation routes.”

[14] Guidelines at 13.
[15] Guidelines at 11.
[16] Impact Assessment Agency of Canada, Draft Indigenous Engagement and Partnership Plan: Deep Geological Repository (DGR) for Canada’s Used Nuclear Fuel Project (10 April 2026) at 7.
[17] *IAA,* preamble, s 6(2), 22(1)(c),(g),(l)(q)

		recognized and affirmed by section 35 of the *Constitution Act, 1982*; (emphasis added) Furthermore, this narrow approach is fundamentally at odds with the *Choosing the Way Forward* report which identifies us as among the 'communities of interest.' As it sets out, communities of interest for engagement on the DGR include: Cities, towns, villages, municipalities and dispersed population in the vicinity of the site; the Aboriginal community within the affected traditional territory, transportation corridor communities, reactor site communities until all used nuclear fuel is re-located.[18] Accordingly, the Guidelines must ensure that all Indigenous communities and rights-holders who are affected by the proposed DGR are identified, engaged, listed, and considered throughout the assessment.	
The Guidelines omit a dedicated section that would require the proponent to describe public participation and the views expressed by affected	**The Guidelines are missing a section that requires the proponent to describe public participation and views.**	Other federal impact assessment guidelines, including those for the Webequie Supply Road[19] and Marten Falls Community Access Road Project,[20] include a dedicated section that requires the proponent to describe public participation and the views expressed by the public. The absence of an equivalent section in the Guidelines for the proposed project is a glaring omission and is inconsistent with the requirement under section 22(1)(n) of the *IAA* to consider comments received from the public.	**Recommendation No. 11**: The Guidelines must include a dedicated section titled "Description of Public Participation and Views," consistent with other federal impact assessment guidelines, requiring the Impact Statement to, at a minimum: ○ Describe public participation activities; ○ Summarize the issues, questions, comments, views, and concerns expressed by the public; ○ Explain how those views are being integrated into or contributing to decisions regarding the

[18] NWMO, "Choosing a Way Forward: The Future Management of Canada's Used Nuclear Fuel (Final Study)" (November 2005), p 227.
[19] Impact Assessment Agency of Canada, "Tailored Impact Statement Guidelines: Webequie Supply Road Project" (February 24 2020) at 21.
[20] Impact Assessment Agency of Canada, "Tailored Impact Statement Guidelines: Marten Falls Community Access Road Project" (February 24, 2020) at 21.

communities.		This project has generated significant public interest and concern, including from host communities, downstream communities, communities along the transportation corridors, Indigenous Nations, non-profit organizations, and members of the public. In this context, the Impact Statement must provide a transparent account of public participation, at a minimum, consistent with the requirements found in the Webequie Supply Road and Marten Falls Community Access Road guidelines. Without this requirement, there is no clear mechanism to ensure that public concerns are transparently documented and meaningfully considered in the Impact Statement.	project; and ○ How the public and Indigenous communities will be kept involved throughout the project's lifetime.
Physical Environment (section 5)			
The Guidelines do not clearly require the proponent to assess radiological risks associated with source-site activities and transportation of used nuclear fuel, and use discretionary language for key radiological health guidance.	The Guidelines state that: "The proponent *should* refer to Health Canada's Guidance for Evaluating Human Health Impacts in Impact Assessments: Radiological Impacts to ensure that it provides the information and analysis considered necessary to assess the project's impacts on human health"[21]	The proposed DGR project introduces additional radiological risks that extend beyond the repository site as a result of used nuclear fuel being handled, packaged, loaded, and transported from existing nuclear reactor sites to the proposed DGR site. These activities may create exposure pathways for workers, emergency responders, communities along the transportation routes and members of the public during transportation. These potential risks include ○ accidental releases during handling, loading or transport; ○ equipment failure; ○ public exposure during route transport, including proximity to transport vehicles during traffic delays or stops; and	**Recommendation No. 12**: The Guidelines must require the Impact Statement to include a detailed assessment of radiological risks associated with all source-site and transportation-related activities, including handling, packaging, and loading, and transport of used nuclear fuel from existing reactor sites to the proposed DGR site that sets out: ○ characterization of radiological hazards and exposure pathways; ○ assessment of accident, malfunction, leak, container breach, package failure, and contamination scenarios; ○ evaluation of routine and cumulative radiological exposures, including potential public, emergency responder, worker, or nearby

[21] Guidelines at 18.

		○ contamination pathways affecting air, water, and surrounding ecosystems.	resident exposure from proximity to transport vehicles during traffic delays, stops, accidents, malfunctions, or emergencies; ○ assessment of potential impacts to workers, emergency responders, communities along the transportation routes, watersheds, and surrounding ecosystems; ○ assessment of how radiological contamination could move through air, soil, surface water, groundwater, waterways, and watersheds following a transportation-related accident or malfunction; and ○ clear, accessible disclosure of mitigation measures and monitoring plans. **Recommendation No. 13**: *Amend lines 547-549 to read:* The proponent must refer to Health Canada's Guidance for Evaluating Human Health Impacts in Impact Assessments: Radiological Impacts to ensure that it provides the information and analysis considered necessary to assess the project's impacts on human health.[22]
Human Environment (section 7)			
The Guidelines do not clearly include communities along transportation corridors or downstream communities in the Section 7 health, social, and	Section 7 of the Guidelines identifies the groups to be included in the assessment of health, social, and economic conditions. These groups include, ○ individuals living in the project study area,	Communities along transportation corridors and downstream of the proposed site must be expressly included in Section 7 of the Guidelines because of the severe, long-lived and irreversible potential health, social, and economic effects extending far beyond the repository site. This includes potential risks and impacts related to transportation, accidents and malfunctions, as well as the accompanying need to study contamination pathways and cumulative effects.	**Recommendation No. 14**: *Add the following under line 2162:* ○ Individuals and communities living, working, travelling or otherwise spending time along the proposed transportation routes; and ○ Individuals and communities living or accessing lands downstream of the proposed DGR site.

[22] Guidelines at 18.

economic conditions assessment.	including Indigenous Peoples and members of the public (referred to collectively as local peoples); ○ broad populations living in the project study area (referred to as local communities); and ○ Indigenous Nations and communities.[23]		
The Guidelines do not clearly require the Impact Statement to assess the psychological, emotional, cultural and social cohesion effects of the proposed DGR, including effects associated with the proponent's site selection and consent-seeking process.	The Guidelines require the Impact Statement to: "[d]escribe current health conditions in the context of physical, mental and social well-being and incorporate a determinants of health approach that extends beyond biophysical health considerations."[24]	While the Guidelines recognize that the Impact Statement must assess effects on health, social, and economic conditions, including mental and social well-being, they do not clearly require these effects to be assessed in relation to the proponent's site selection and consent-seeking process. The proponent's site selection process and "willing host" model have generated considerable public concern, opposition, and division among affected communities. The impact statement must therefore assess the social consequences on the proposed DGR, including effects on community trust, social cohesion, polarization, fear or anxiety regarding the project, perceived risk to health and safety, regional identity, and concern for future generations.	**Recommendation No. 15:** The Guidelines must require the Impact Statement to assess the psychological, emotional, cultural, and social cohesion effects of the proposed DGR on potentially affected communities, including communities in proximity to and downstream of the Revell site, as well as communities along proposed or reasonably foreseeable transportation routes. This assessment must consider the impacts on community trust, social cohesion, polarization, fear or anxiety regarding the project, perceived risk to health and safety, regional identity, and concern for future generations.
Effects of Potential Accidents or Malfunctions (section 9)			
The Guidelines do	The Guidelines require	Since used nuclear fuel is proposed to be transported	**Recommendation No. 16**: The Guidelines must

[23] Guidelines at 39.
[24] Guidelines at 41.

not require a route-specific risk assessment of transportation risks, including accidents, malfunctions, delays, and disruptive events across all proposed or reasonably foreseeable transportation routes, especially in Northwestern Ontario.	the proponent to consider malfunction scenarios, including: ○ various degrees of barrier loss (e.g., container breach or failure, groundwater intrusion, corrosion, incomplete sealing of boreholes, etc.); and, ○ drilling equipment, shaft, ventilation or hoist failure.[25] The Guidelines also define accidents to include "those associated with human error, such as: ○ improper operation of equipment (both at the project site and during transportation); or ○ failure to follow health and safety requirements and other standards.[26]	from all current storage facilities in multiple provinces to the proposed DGR site, the assessment of transport-related accidents or malfunctions must apply to all proposed or reasonably foreseeable transportation routes from each interim storage facility to the proposed DGR site. Transportation-related accidents, malfunctions, or extended delays increase risks to human health, environmental health, and public safety. These risks cannot be properly assessed without considering the actual conditions of the transportation routes. Northwestern Ontario's transportation routes are particularly vulnerable to road closures, delays, severe weather, limited detour options, and constraints on emergency response. Given that used nuclear fuel transportation is project-related, the Guidelines must require the Impact Statement to assess those route-specific risks before transportation plans are accepted. A route-specific assessment must also consider the actual road geometrics, traffic volumes, accident-prone areas, and population proximity along proposed or reasonably foreseeable transportation routes.	explicitly require the proponent to assess route-specific transportation risks across all proposed or reasonably foreseeable transportation routes for used nuclear fuel. This assessment must include, at a minimum: ○ Accident history and collision-prone areas; ○ Major junctions and areas where accidents or delays could significantly disrupt the flow of traffic; ○ Road geometrics and route design features, including collectors and connecting roads, highway intersections, interchanges, shoulders, grades, curves, lane widths, traffic volumes, and population proximity; ○ Seasonal and extreme weather conditions, including winter storms, freezing rain, fog, heavy rainfall, flooding, washouts, wildfires and smoke, high winds, and other climate-related hazards; ○ Road maintenance, construction, closures, limited detour options, and potential extended delays; ○ Blockades and protests; and ○ Compounding scenarios where more than one hazard occurs at the same time.
The Guidelines do not require route-specific emergency response planning	The Guidelines require the Impact Statement to "describe an emergency response plan for a wide range of emergency	While the Guidelines require the Impact Statement to describe an emergency response plan and identify emergency response zones, they do not clearly require route-specific emergency response planning and	**Recommendation No. 17**: The Guidelines must require the Impact Statement to include route-specific emergency response planning and mapping for transportation-related accidents and malfunctions involving used nuclear fuel. At a

[25] Guidelines at 62.
[26] Guidelines at 62.

for transportation-related accidents or malfunctions, including incidents that may impact communities along highways, rail corridors, or downstream areas.	scenarios that are applicable to the designated project (i.e., the designated physical activity and those that are incidental to it)" (emphasis added).[27]	mapping for transportation-related accidents or malfunctions involving used nuclear fuel. Without route-specific planning and mapping, Indigenous communities, municipalities, and the public will lack sufficient information to understand how accidents or malfunctions would be managed in practice.	minimum, the Impact Statement must: ○ Identify all proposed and reasonably foreseeable transportation routes, including highways, rail corridors, transfer points, access points, alternate routes, water crossings, waterways, and downstream areas; ○ Identify all Indigenous Nations and communities, and municipalities and other potentially affected communities along or downstream of those routes; ○ Identify any gaps in emergency response capacity and resourcing for communities along each route, including distinctions among the provinces (MB, ON, QC and NB), gaps related to response times, local hospital capacity, fire and hazardous materials response, radiological response capacity, communications infrastructure, remote access constraints, and evacuation procedures; ○ Work with potentially impacted communities in the development of emergency preparedness plans and awareness campaigns; ○ Describe public warning and notification procedures, long-term monitoring, recovery, reporting, and public communication measures following any transportation- related accident or malfunction.
Planning for Transportation (section 10)			
The Guidelines do not expressly identify project-related	The Guidelines state: "The project subject to the impact assessment is the	This lack of conclusive language in the Guidelines leaves room for interpretation as to whether, and what aspects of transportation are included in the project scope. By specifying in the Guidelines that the project	**Recommendation No. 18:** *Amend lines 231-233 to read:* The project subject to the impact assessment is the designated physical activity (i.e., the construction and operation of a new facility for the long-term

[27] Guidelines at 64.

transportation as an incidental physical activity within the scope of the impact assessment.	designated physical activity (i.e., the construction and operation of a new facility for the long-term management or disposal of irradiated nuclear fuel or nuclear waste) and any incidental physical activities."[28]	subject to the IA includes project-related transportation as an incidental physical activity, the scope of the IA will be confirmed, providing clarity on the roles and responsibilities of the NWMO and the Agency.	management or disposal of <u>used</u> nuclear fuel or nuclear waste) and any incidental physical activities. <u>Project-related transportation is a physical activity that is incidental to the designated project, has the potential to result in non-negligible adverse effects within areas of federal jurisdiction, and includes the packaging, handling, loading, transfer, and transportation of used nuclear fuel along transportation routes from the interim storage facilities to the Project site</u>." **Recommendation No. 19**: The Guidelines must require that all aspects of project-related transportation, including, but not limited to, technical safety, package integrity, exposure levels, emergency response, Indigenous consultation and consent, public participation, transport speed and routing assumptions, and cumulative environmental, health, social, and economic effects be assessed in the Impact Statement before transportation plans are accepted or relied on in decision-making.
The Guidelines do not clarify what constitutes "project-related transportation."	Various transportation -related activities are mentioned in the Guidelines, indicating that the transportation of used nuclear fuel is within the project scope: 1) "Transportation of both nuclear and non-nuclear materials outside of the project site, including the	The Guidelines do not comprehensively list exactly what project-related transportation activities include. This Impact Statement must also address the transport containers or packages, and the capacity of the roads, bridges, rail lines, transfer points, and related infrastructure to safely accommodate the frequency, volume, weight, duration, and distance of used nuclear fuel transportation.	**Recommendation No. 20:** *Amend lines 248-251 to read:* in addition to those listed in the Initial Project Description, <u>project-related transportation, including activities specified under Section 10 (Planning for Transportation),</u> must be included within the list of project components and activities (as specified in Section 4 Assessment Methodology) considered within the Impact Statement. **Recommendation No. 21:** *Amend lines 2118-2122 to read:* Project-related transportation <u>is a physical activity that</u> has the potential to result in

[28]Guidelines at 7.

	construction activities associated with infrastructure upgrades, must be included within the list of project components and activities (as specified in Section 4 Assessment Methodology) considered within the Impact Statement."[29] 2) "Transportation activities related to this project include increased traffic to the project during site preparation and construction, as well as the transport of used nuclear fuel to the repository during the operation phase of the project."[30]		non-negligible adverse effects within areas of federal jurisdiction, and is incidental to the designated project. Project-related transportation activities include, but are not limited to, increased traffic to the project during site preparation and construction, the construction, use, maintenance, or upgrade of associated infrastructure required for the transportation of used nuclear fuel and for the movement of other materials and workers, the intended modes of transportation; transportation containers or packages; as well as the packaging, handling, loading, transfer, and transport of used nuclear fuel from the interim storage facilities to the repository during the operation phase of the project.
The Guidelines do not outline the geographic extent of transportation activities.	According to the Guidelines, the Impact Statement must: "Assess potential impacts of project-related transportation activities,	Specifying the geographic scope of the project is essential to ensuring that the transportation activities are studied and adverse effects are mitigated. Given the Agency's determination that "project-related transportation has the potential to result in adverse effects within areas of federal	**Recommendation No. 22:** *Amend lines 369-373 to read:* Assess potential impacts of project-related transportation activities, including the associated construction of infrastructure, that occur within a geographic extent that includes, at a minimum, the surrounding area of the interim storage facilities where the used nuclear fuel is currently stored and

[29] Guidelines at 8.
[30] Guidelines at 65.

	including the associated construction of infrastructure, that occur within a geographic extent that includes, at a minimum, the geographic bounding encompassing the railway spur for rail transport to the project site, and the Highway 17 turn-offs associated with road transport to the project site (i.e., the main access corridors to the project site coinciding with new infrastructure).”[31] The geographic scope of these plans is not specified: “These plans are general and therefore would apply everywhere that transportation may occur but do not specifically refer to any geographic extent.”[32]	jurisdiction, and is incidental to the project,”[33] the geographic extent must include the areas necessary to complete an assessment of adverse effects and cumulative effects of project-related transportation.	<u>will be packaged, handled and loaded, the transportation routes from the interim storage facilities to the Project site,</u> the geographic bounding encompassing the railway spur for rail transport to the project site, and the Highway 17 turn-offs associated with road transport to the project site (i.e., the main access corridors to the project site coinciding with new infrastructure). For additional clarity, the geographic extent must be reiterated under Section 10 (Planning for Transportation). **Recommendation No. 23:** *Add the following under line 2122:* The geographic extent of project-related transportation activities includes, at a minimum, the surrounding area of the interim storage facilities where the used nuclear fuel is currently stored and will be packaged, handled and loaded, the transportation routes from the interim storage facilities to the Project site, the railway spur for rail transport to the project site, and the Highway 17 turn-offs associated with road transport to the project site (i.e., the main access corridors to the project site coinciding with new infrastructure). **Recommendation No. 24:** *Amend lines 2144-2147 to read:* The impact assessment is a planning tool and as such, plans on how used nuclear fuel will be <u>packaged, handled and loaded from the interim storage facilities</u> to the project site, as well as an emergency response plan will be required. These

[31] Guidelines at 12.
[32] Guidelines at 66.
[33] Guidelines at 65.

			plans are general and therefore would apply everywhere that project-related transportation may occur including, at a minimum, the surrounding area of the interim storage facilities where the used nuclear fuel is currently stored and will be packaged, handled and loaded, the transportation routes from the interim storage facilities to the Project site, the railway spur for rail transport to the project site, and the Highway 17 turn-offs associated with road transport to the project site (i.e., the main access corridors to the project site coinciding with new infrastructure).
The Guidelines do not adequately take into account the conditions of the transportation route.	According to the Guidelines, "The proponent will be expected to assess potential adverse effects within federal jurisdiction using a range of representative transportation scenarios that could reasonably occur as a result of increased movement of materials and workers to and from the project site (e.g., transportation near waterbodies, under adverse weather conditions, effects of climate change, or other credible situations that could influence the nature	Environment North welcomes the Agency's determination that project-related transportation is within the project scope and therefore subject to the Impact Assessment, and that potential adverse effects from transportation are required to be assessed. As part of the assessment under Section 10.2 (Movement of materials and people), we submit that a comprehensive assessment of project-related transportation activities cannot be achieved without assessing the conditions of the transportation routes. Recognizing that the conditions of the transportation routes could also be affected by the environment, we submit that this must also be assessed under Section 11 (Effects of the Environment on the Project) and described in the impact statement.	**Recommendation No. 25:** *Amend lines 2167-2171 to read:* As project-related transportation is within the scope of the project (i.e. is incidental), the conditions of the transportation routes (including but not limited to potholes, topography, elevation changes and rockfall, proximity to water) must be studied and included in the impact assessment. Any operations, maintenance, improvement and upgrades to the provincial highways on which used nuclear fuel, construction materials and personnel would travel fall under the responsibility of the Ontario government. **Recommendation No. 26:** *Add the following under line 2236:* describe how environmental conditions, including natural hazards such as severe and/or extreme weather conditions, seismicity, glaciation, wildfires, seasonal changes, and other external events, could adversely affect project-related transportation and how this could result in effects to the environment, as well as to health, social and economic conditions;

	or severity of potential effects)." [34]		
The Guidelines rely on CNSC and Transport Canada regulatory requirements for transport and packaging safety without clearly requiring an impact assessment-level review of transportation package risks and related effects.	The Guidelines state that "Both CNSC and Transport Canada jointly regulate the transport and packaging of nuclear substances in Canada."[35] The Guidelines further state that the proponent will be "required to meet these regulations to ensure that the package design meets the stringent regulatory requirements, and all other requirements, for the safe transport of used nuclear fuel."[36]	The Guidelines rely on CNSC and Transport Canada regulatory requirements for transport package safety. It is important to note that the CNSC and Transport Canada regulatory regimes are narrower than the assessment required under the *IAA,* which has broader environmental, health, social, economic, cumulative, and sustainability considerations.	**Recommendation No. 27:** The Guidelines must require that the Impact Statement assess transport package safety within the broader framework of the *IAA*, including environmental, health, social, economic, cumulative, and sustainability impacts associated with project-related transportation. This assessment must not treat compliance with the CNSC or Transport Canada regulatory requirements as a substitute for considering the broader impacts and public interest factors required under the *IAA*.
The Guidelines do not explicitly require the Impact Statement to assess whether proposed transportation packages for used nuclear fuel have been adequately tested for safety under real-world transportation conditions.		The proponent's 2021 Preliminary Transportation Plan identifies different nuclear fuel package designs and four tests used to assess the safety of said package designs: the drop test, puncture test, thermal test, and immersion test.[37] Environment North is concerned that some proposed package designs are outdated or remain at a conceptual stage. We are also concerned that the testing (1) relies too heavily on computer model testing or international studies, (2) was not conducted using full-scale models, and (3) does not adequately reflect real-world transportation conditions, such as	**Recommendation No. 28:** The Guidelines must require the Impact Statement to disclose the testing methods, scale, assumptions, limitations, dates, and results for each proposed transportation package. Where testing has relied on scale models, computer analysis, older testing, or conceptual designs, these limitations must be clearly disclosed and assessed. **Recommendation No. 29**: The Guidelines must require that the Impact Statement disclose the roles, responsibilities, liabilities, and obligations of the consignors and carriers for used nuclear fuel transportation.

[34] Guidelines at 67.
[35] Guidelines at 65.
[36] Guidelines at 66.
[37] Nuclear Waste Management Organization, "Preliminary Transportation Plan" (December 2021).

		the road geometrics and high-collision and closure risks in Northwestern Ontario. The Impact Statement must therefore disclose the full details of the proposed package designs, as well as the testing methods, models, scales, assumptions, limitations, dates, and results based on each proposed transportation package. Where testing has relied on scale models, computer analysis, older testing, or conceptual designs, these limitations must be clearly disclosed and assessed. The Impact Statement must also disclose the roles, responsibilities, liabilities, and obligations of the consignors and carriers for used nuclear fuel transportation.	
The Guidelines must include an assessment of rail in their next Transportation Plan.	The Guidelines state that "the proponent must submit an update to their 2021 Preliminary Transportation Plan."[38]	The current Transportation plan must provide more than a conceptual description of possible transportation approaches. If the proponent intends to rely on rail corridors as an alternative for moving used nuclear fuel to the proposed DGR site, the Impact Statement must include evidence that this mode of transportation is feasible and available. This is particularly important where rail corridors are shared and operated by third parties. The Impact Statement should identify the proposed rail corridors, rail operators, transfer points, required agreements or authorizations, infrastructure constraints, and safety considerations.	**Recommendation No. 30:** The Guidelines must require that the updated Preliminary Transportation Plan include an evidence-based assessment of rail transportation options for used nuclear fuel. This assessment must identify proposed rail corridors, rail operators, transfer points, required agreements or authorizations, infrastructure constraints, and safety considerations.
Effects of the Environment on the Project (section 11)			

[38] Guidelines at 66.

The Guidelines do not require a comprehensive assessment of long-term DGR safety concerns, including over timeframes extending up to 1,000,000 years.	The Guidelines state: "The proponent *should* focus on credible near and far future events that have a reasonable probability of occurring and could lead to adverse impacts without appropriate management. The analysis should also consider induced natural hazards, where the probability of occurrence increases as a result of project- related activities" (*emphasis* added).[39] The Guidelines further state: "The proponent *may opt* to provide information in a format that allows for analysis over several timeframes, for example	According to the IPD, the proposed DGR is intended to "provide a permanent and safe disposal solution for used nuclear fuel" (emphasis added).[41] Given that the project is presented as a "permanent disposal solution," the Guidelines must require a comprehensive assessment of long-term DGR concerns, including over timeframes extending to 1,000,000 years. The Guidelines give the proponent too much discretion in determining how to address long-term safety concerns. Long-term DGR safety depends on the performance of both engineered and natural barriers over time, including container integrity, bedrock suitability, groundwater movement, and the ability to monitor, retrieve, and mitigate issues if unexpected conditions arise. There also remains scientific uncertainties[42] relevant to this assessment, including uncertainties related to copper-coated used fuel container corrosion.[43] These uncertainties must be addressed in the Impact Statement– with timeframes extending to 1,000,000 years– before the project is approved or relied on in decision-making.	**Recommendation No. 31:** *Amend lines 2211- 2214 to read:* The proponent must focus on credible near and far future events that have a reasonable probability of occurring and could lead to adverse impacts without appropriate management. The analysis must also consider induced natural hazards, where the probability of occurrence increases as a result of project- related activities. **Recommendation No. 32:** *Amend lines 2228-2231 to read:* The proponent must provide information in a format that allows for analysis over several timeframes, for example (1) during the construction and operational period up to closure; (2) up until 10,000 years after closure; (3) beyond 10,000 years over repeated glacial cycles; and (4) over the full 1,000,000-year safety case period. **Recommendation No. 33:** *Add the following under line 2260:* ○ Assess copper-coated used fuel container corrosion under changing repository conditions; ○ Assess bedrock suitability[44] and uncertainty, including fractures, faults, groundwater movement, and other potential pathways through which radioactive materials could escape;

[39] Guidelines at 68.
[41] Nuclear Waste Management Organization, "Initial Project Description - Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel Project" (December 2025) at v.
[42] Helen Wallace, "Rock Solid? A scientific review of geological disposal of high-level radioactive waste" (01 November 2025), online: <nonuclear.se/en/rock-solid-helen-wallace202511>.
[43] Colleen O Harper, Julie L Brown & Richard T. Amos, "Corrosion processes affecting copper-coated used fuel containers for the disposal of spent nuclear fuel: critical review of the state-of-knowledge" (2024) 8:124 *Materials Degradation*, online <nature.com/articles/s41529-024-00540-z>.
[44] James Brooks & Stephanie Liechtenstein, "A 1.9 billion-year-old bedrock will soon house the world's first permanent nuclear waste site" *The Akron Legal News* (15 April 2026), online <akronlegalnews.com/editorial/38238>.

	(1) during the construction and operational period up to closure; (2) up until 10,000 years after closure; (3) beyond 10,000 years over repeated glacial cycles."[40]		○ Provide a comparative analysis of international best practice, studies, and experience with DGRs in different bedrock and geological settings (e.g. Sweden and Finland); ○ Assess gas generation and pressure build-up and potential effects on container integrity; and ○ Assess any potential chemical changes within the repository environment and their potential effects on container integrity. ○ Demonstrate who will be financially responsible for long-term post-closure monitoring, maintenance, emergency response, and remediation efforts. ○ Assess long-term post-closure warning systems and measures, including durable, non-verbal warning symbols, markers, and other communication tools to warn and deter future generations of the presence and risks of the proposed DGR.
Contributions to Inform Decision Making (section 12)			

[40] Guidelines at 68.

The Guidelines do not clearly or accurately describe what information will inform the public interest analysis under section 63 of the *IAA*.	The Guidelines state: "IAAC, with the support of federal authorities, will analyze the project's likely effects in the context of Canada's environmental obligations relevant to this project, as well as the project's GHG emissions in the context of Canada's emissions targets and forecasts. Where the proponent is of the view that the likely effects of the project contribute to the Government of Canada's ability to meet its environmental obligations and/or its commitments in respect of climate change, the proponent is encouraged to substantiate this view in the Impact Statement by describing these likely effects and the extent of their contribution (e.g., net increase in biodiversity through habitat restoration; net GHG reductions domestically through carbon capture).	The Governor in Council will decide whether the adverse effects of the project are justified in the public interest in light of the factors listed in s. 63 of the *IAA*. These factors are not discretionary and must be reflected in the guidelines to reduce any ambiguity. The impact assessment must function as a rigorous assessment process rather than a streamlined approval process.	**Recommendation No. 34:** *Amend lines 2270-2272 to read:* The IAAC, with the support of federal authorities and based on the information provided by the proponent, will determine whether the project's adverse effects are likely to be, to some extent, significant under section 61(a) of the IAA, and will analyze the factors listed under section 63 of the IAA before making a determination under sections 60(1)(b) and 62(b) of the IAA. These factors include the impact that the project's adverse effects may have on any Indigenous group and the rights of Indigenous peoples, the extent to which the project's adverse effects contribute to Canada's ability to meet its environmental obligations and its commitments in respect of climate change, and the extent to which the project's adverse effects contribute to sustainability. **Recommendation No. 35**: The Agency must require the proponent to provide a summary of how it has considered the three public interest factors under section 63 of the *IAA*, and an explanation of whether and how the project will make a net contribution to the public interest.

The Guidelines only "encourage" the proponent to substantiate claims that the project contributes to Canada's environmental obligations of climate commitments.	"[45]	In the initial project description, the proponent claims that, if implemented, the proposed DGR would "support Canada's commitments to climate action and achieving net-zero by 2050 by ensuring nuclear energy remains a sustainable and socially responsible energy source."[46] However, the Guidelines only encourage the proponent to substantiate that the project contributes to Canada's environmental obligations or climate change commitments, rather than requiring such claims to be supported by evidence in the Impact Statement. Given that the proponent has already claimed that the project would support Canada's climate commitments, and given the ongoing debate about nuclear energy's role in meeting those commitments, this claim should not be assumed.	**Recommendation No. 36:** *Amend lines 2272-2277 to read:* Where the proponent is of the view that the likely effects of the project contribute to the Government of Canada's ability to meet its environmental obligations and/or its commitments in respect of climate change, the proponent must substantiate this view in the Impact Statement by describing these likely effects and the extent of their contribution (e.g., net increase in biodiversity through habitat restoration; net GHG reductions domestically through carbon capture, Canada's 2030 emissions-reduction target; Canada's 2050 net-zero commitment).
Project-related effects on Canada's ability to meet its environmental obligations must be assessed throughout the Guidelines.	The Agency must take into account the extent to which the effects of the designated project hinder or contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change, pursuant to s 22(1)(i), and 63(b) of the *IAA*. As currently drafted, the Guidelines only require the consideration of project-related effects on Canada's ability to meet its environmental obligations as part of the public interest analysis, as per section 12 of the Guidelines (Contributions to inform decision making). Canada's environmental obligations are not mentioned in sections 5 or 6 of the Guidelines, which are intended to assess the project's effects on the physical and biological environment. Given that the project-related effects on Canada's ability to meet its environmental obligations are required to be considered when conducting an IA as per section 22(1)(i) of the *IAA,* this must be reflected in the Guidelines.	**Recommendation No. 37:** *Add the following under line 451:* ○ Describe the extent to which the potential effects of the project hinder or contribute to the Government of Canada's ability to meet its environmental obligations, including those listed under section 12.2 of the TISGs (Environmental obligations) that are relevant to the physical environment **Recommendation No. 38:** *Add the following under line 885:* ○ Describe the extent to which the potential effects of the project hinder or contribute to the

[45] Guidelines at 70.
[46] Nuclear Waste Management Organization, "Initial Project Description - Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel Project" (December 2025) at vi.

			Government of Canada's ability to meet its environmental obligations, including those listed under section 12.2 of the TISGs (Environmental obligations) that are relevant to the biological environment
The Guidelines do not expressly require baseline assessment or quantification of greenhouse gas emissions ("GHG"), including cumulative emissions associated with project-related transportation.	The Guidelines require the proponent to "describe the effects of the project on the atmospheric environment" and "provide a detailed description of emissions sources of air pollution from the project listed under Section 5.5.1 Baseline conditions for all phases of the project."[47]	Given that transportation is within the scope of the proposed DGR, its potential effects on the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change must be studied during the impact statement phase, pursuant to section 22(1)(i) and 22(1)(p) of the *IAA*. This assessment must include GHG emissions associated with decades of transporting used nuclear fuel from current storage facilities to the proposed DGR site. The cumulative emissions will be significant and must be quantified and assessed, particularly in light of the 50+ year transportation period, long-distance interprovincial transport, idling during delays, route closures, detours, escort and support vehicles, emergency response scenarios, and any ancillary transportation activities required to support the movement of the waste. As part of Canada's climate change commitments, Canada reports emissions of seven GHGs: carbon dioxide, methane, nitrous oxide, sulphur hexafluoride, perfluorocarbons, hydrofluorocarbons and nitrogen trifluoride. Increased concentrations of these GHGs, primarily due to emissions resulting from human	**Recommendation No. 39:** *Add the following under line 579:* ○ Carbon dioxide (CO2); ○ Methane (CH4); ○ Nitrous oxide (N2O); ○ Sulphur hexafluoride (SF6); ○ Perfluorocarbons (PFCs); ○ Hydrofluorocarbons (HFCs); ○ Nitrogen trifluoride (NF3); **Recommendation No. 40:** The Guidelines must require the proponent to quantify direct and indirect GHG emissions from all project phases and components, including project-related transportation, and assess whether those emissions hinder or contribute to Canada's ability to meet its climate change commitments. This assessment must include the cumulative emissions associated with transportation of nuclear fuel from all current storage facilities over the 50+ year transportation period, including emissions associated with: ○ repeated and long-distance interprovincial transport; ○ idling, detours, route closures, and other delay-related emissions; ○ escort and support vehicles; ○ emergency response scenarios; and

[47] Guidelines at 19.

		activities such as the use of fossil fuels, contribute to climate change.[48] Although the Guidelines list contaminants for which the Impact Statement must provide baseline ambient air concentrations and quantify emission sources, this list does not explicitly include any of the seven greenhouse gases.	○ ancillary transportation activities required to support the movement of used nuclear fuel.
The Guidelines do not include a dedicated section requiring the proponent to assess climate change effects across all phases and components of the proposed DGR, including project-related transportation.	Other federal impact assessment guidelines, including those for the Webequie Supply Road[49] and Marten Falls Community Access Road Project,[50] include dedicated climate change requirements. The absence of an equivalent section in the Guidelines for the proposed project is a glaring omission and is inconsistent with the requirement under section 22(1)(i) of the *IAA*. Climate change is directly tied to the proposed DGR project because project-related activities, including site preparation, construction, operation, decommissioning, and project-related transportation, will result in GHG emissions over several decades. In this context, the Impact Statement must include a dedicated Climate Change section that, at a minimum, complies with the requirements found in the Webequie Supply Road and Marten Falls Community Access Road Tailored Impact Statement Guidelines.	**Recommendation No. 41:** ***Amend the Table under line 133:*** ○ *Add* 'Climate Change' as a Valued Component for the assessment of adverse effects on the Biological Environment ○ *Add the following to the corresponding Rationale for inclusion:* Project-related activities, such as site preparation, construction and operation, and project-related transportation could result in adverse effects to the biological environment by increasing greenhouse gas emissions. **Recommendation No. 42:** *Add a new subsection* titled "Climate Change" to the Guidelines that contains requirements comparable to the climate change requirements included in the Webequie Supply Road and Marten Falls Community Access Road Tailored Impact Statement Guidelines. This section must require the proponent to assess the effects of climate change across all project phases and components, including site preparation,

[48] Government of Canada, "Greenhouse Gas Emissions" (last modified April 15 2026).
[49] Impact Assessment Agency of Canada, "Tailored Impact Statement Guidelines: Webequie Supply Road Project" (February 24 2020) at 100.
[50] Impact Assessment Agency of Canada, "Tailored Impact Statement Guidelines: Marten Falls Community Access Road Project" (February 24, 2020) at 100.

		construction, operation, decommissioning, and project-related transportation.
The Guidelines are currently silent on environmental justice, including consideration of inequitable burdens that will be imposed on Indigenous Nations and communities across many territories.	The Integrated Review Team, as an agent of the Crown, has a legal obligation to prevent and address environmental racism and to advance environmental justice, including under the *National Strategy Respecting Environmental Racism and Environmental Justice Act*.[51] As recognized in that Act, "a disproportionate number of people who live in environmentally hazardous areas are members of an Indigenous, racialized or other marginalized community," and the failure to meaningfully involve those communities in environmental decision-making constitutes environmental racism.[52] Environmental racism is a form of racial discrimination and engages the protections of section 15(1) of the *Charter of Rights and Freedoms*.[53] Limiting the scope of the assessment or excluding critical components of the project—such as handling and transportation activities—risks perpetuating inequitable burdens on Indigenous communities while denying them meaningful participation in decision-making. This engages the proximity principle, which recognizes that waste should generally be managed as close as possible to its point of generation where safe and practicable, rather than transferring risks and long-term responsibilities onto other communities. Environmental racism must be understood through the lenses of distributional, procedural, and recognitional justice. The IA represents a critical opportunity to advance environmental justice; however, without explicit requirements in the Guidelines to assess environmental racism and injustice, there is a real risk that these issues will remain unexamined, and no analysis undertaken of the effects of the proposed development on Canada's responsibility to advance environmental justice and to assess, prevent, and address environmental racism.	**Recommendation No. 43:** The Guidelines must require the Impact Statement to demonstrate compliance with the *National Strategy Respecting Environmental Racism and Environmental Justice Act,* which requires meaningful involvement of communities impacted by environmental racism. This requires analysis of the effects of the proposed development on Canada's responsibility to advance environmental justice, and to assess, prevent, and address environmental racism across all project activities, including handling, packaging, interim storage and transportation of the high-level radioactive waste. This analysis must also consider the proximity principle and assess how the proposed project would shift risks, burdens, and long-term responsibilities from the communities where waste was generated onto Indigenous communities along the transportation route, downstream, and near the proposed DGR site.

[51] *National Strategy Respecting Environmental Racism and Environmental Justice Act*, SC 2024, c 11.
[52] *Environmental Justice Act*, preamble.
[53] Canadian Charter of Rights and Freedoms, Part I of the *Constitution Act, 1982*, being Schedule B to the *Canada Act 1982* (UK), 1982, c 11

The Guidelines are currently silent on security considerations.	Radioactive waste inherently transfers risks of proliferation and security to future generations. Despite this, the Draft Guidelines presently fail to require a dedicated security and threat assessment framework comparable to those required in other nuclear project assessment processes, including assessments requiring site selection threat and risk assessments ("SSTRA"), transportation security analysis, infrastructure vulnerability analysis, and lifecycle physical protection planning. The omission of such requirements is particularly concerning given the unique characteristics of the proposed DGR, including: ○ the long-term transportation of high-level radioactive waste through numerous jurisdictions and Indigenous territories; ○ the potential for sabotage, deliberate interference, terrorism, infrastructure failure, cyber threats, accidents, and extreme weather events; ○ the reliance on long-term institutional controls and emergency response capacity over extraordinarily long timescales; ○ and the irreversible consequences associated with potential containment failure or disruption of transportation systems. In raising this concern, we also note the Guidelines for the Wesleyville New Nuclear Project explicitly includes a section on Security. A failure to incorporate and expand upon this critical concern in this IA represents a clear lowering of the standard.	**Recommendation No. 44:** The Guidelines must add a new section with provisions requiring the proponent to: ○ undertake a comprehensive security and physical protection assessment addressing the full lifecycle of the Project, including site operations, transportation, storage, transfer, and post-closure institutional control periods; ○ the assessment must evaluate threats associated with sabotage, terrorism, deliberate interference, infrastructure failure, cyber threats, and emergency response limitations, including cumulative risks arising from the national transportation and management of used nuclear fuel; ○ the assessment must not be restricted solely to the repository footprint, but must include all transportation corridors, interim storage locations, transfer points, and related infrastructure forming part of the national radioactive waste management system.

Review of the Draft Public Participation Plan
for the Deep Geological Repository Project by Environment North
to the Impact Assessment Agency of Canada

Issue	Language in the draft Public Participation Plan	Justification/ Rationale	Recommendation(s)
		Objectives of Public Participation (section 3)	
The draft Public Participation Plan recognizes meaningful participation in broad terms, but lacks clear guidance needed to ensure that participation is, in fact, meaningful.	The draft Public Participation Plan states: "Public participation is meaningful. This means that the public is provided with: ○ inclusive and predictable opportunities to take part in the assessment; ○ the information they need to participate, in a timely manner and in a format that is accessible; and ○ the capacity and resources to	Meaningful public participation requires that all potentially affected communities be provided with timely, accessible information and meaningful opportunities to ask questions, understand all potential effects, and have their concerns considered before key decisions are made. This principle is central to the *IAA* and is particularly important in the context of the proposed DGR. Because the Public Participation Plan will "be reflected in the Review Panel's Terms of Reference,"[55] it is essential that the plan set out the principles that will guide meaningful participation throughout the assessment.	**Recommendation No. 1:** To support meaningful participation, the Public Participation Plan must be amended to reflect the following principles:[56] ○ Participation begins early in the decision process, is meaningful, and builds public confidence ○ Public input can influence or change the outcome of the project being considered ○ Opportunities for public comment are open to all interested parties, are varied and flexible, include face-to-face discussions, and involve the public in the design of an appropriate participation program ○ Formal processes for engagement, such as hearings and various forms of dispute resolution, are specified, and principles of natural justice and procedural fairness are considered in formal processes ○ Adequate and appropriate notice is provided ○ Ready access to the information and the decisions at hand is available and in languages

[55] Government of Canada, "Guidance: Public Participation under the Impact Assessment Act" (08 August 2025), online: <canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/guidance-public-particaption-impact.html#a5-3>.
[56] Meinhard Doelle & John Sinclair, "Meaningful Public Participation in the Proposed Federal Impact Assessment Act (IAA)" (23 February 2018) at 233, online (blog): <blogs.dal.ca/melaw> [perma.cc/SW8W-4KDX].

	participate in an informed manner."[54]		spoken, read, and understood in the area ○ Participant assistance and capacity building are available for informed dialogue and discussion ○ Participation programs are learning-oriented to ensure outcomes for all participants, governments and proponents ○ Programs recognize the knowledge and acumen of the public ○ Processes need to be fair and open in order for the public to be able to accept a decision
The draft Public Participation Plan does not identify sufficient outreach mechanisms to ensure that all interested participants are aware of public participation opportunities.		Meaningful participation depends on timely and effective notice of participation opportunities. Given the scale, complexity, and public importance of the proposed DGR, outreach should not rely on the Registry of existing contact lists. The Public Participation Plan must include proactive outreach tools to reach a broader audience.	**Recommendation No. 2:** The Public Participation Plan must include clear outreach mechanisms to increase awareness of participation opportunities, including but not limited to: ○ Adding or prompting all individuals and organizations that submitted comments on the Initial Project Description to the project distribution list for future notices, comment periods, information sessions, and hearing-related updates; ○ Sponsored social media and television notices; ○ Local radio and newspaper services for all potentially affected communities, including communities along the transportation route and downstream; ○ Community posters in all potentially affected communities, including communities along the transportation route and downstream; and ○ Direct outreach to potentially affected communities.
The draft Public Participation Plan	The draft Public Participation Plan states	While this commitment is important, it is not a sufficient replacement for a dedicated requirement in	**Recommendation No. 3**: The Public Participation Plan must require a transparent, public-facing

[54] Participation Plan at 2.

does not clearly explain nor provide a mechanism for how public views will be "tracked, meaningfully considered, and inform decision-making."	that, "[p]ublic views heard throughout the process are tracked, *meaningfully considered*, and inform decision-making." (emphasis added)[57]	the Guidelines requiring the proponent to describe public participation and views in the Impact Statement. Without a clear reporting requirement, it is unclear how public comments have been accurately recorded, meaningfully considered, or reflected in the project assessment. This concern is highlighted by the absence of previous comments or issues being raised, which have not yet been clearly addressed in the process. A general statement like this does not provide sufficient accountability.	tracking mechanism that identifies public comments and concerns, explains how they were considered, and demonstrates how they informed decision-making in order to ensure transparency and maintain public confidence in the process.
Public Participation Tools (section 5)			
The draft Public Participation Plan refers to information and documents being provided "in a format that is accessible," but does not clearly define what accessibility means, especially in the context of remote, northern communities.	Under the heading Public Participation Tools, the draft public participation plan lists: "Sharing summaries of key documents, fact sheets, infographics, and presentation materials in an accessible format."[58]	Meaningful participation requires more than making information formally available. In order for participation to be meaningful, all potentially affected communities must be able to access, understand, and respond to information about the project. This is particularly important for some northern and remote communities, where participation may be impacted by limited or unreliable internet access, geographic distance, lack of transportation, technical complexity, language barriers, and unequal access to resources. In these circumstances, centralized or online formats present practical barriers to meaningful participation. In light of these factors, the public participation plan must therefore explain how accessibility will be ensured in practice. This includes whether materials will be	**Recommendation No. 4**: The Public Participation Plan must define accessibility to include: ○ plain-language materials; ○ translation materials where necessary; ○ offline and paper access to documents; ○ community-based information sessions; ○ sufficient review periods; ○ adequate participation supports – including supports to address geographic barriers, travel costs, transportation options, and unreliable internet access.

[57] Participation Plan at 3.
[58] Participation Plan at 4.

		written in plain language, translated where appropriate, made available offline or in paper form, and shared through community-based information sessions. The public participation plan must also address how all potentially impacted communities – especially communities along the transportation corridor and downstream – will be made aware of participation opportunities.	
Activities and Public Participation Approach (section 6)			
The draft Public Participation Plan suggests that comments will be invited only on the Summary of the Impact Statement, not the full Impact Statement.	The draft Public Participation Plan states that the "IAAC and the CNSC will invite comments on the Summary of the Impact Statement. The Impact Statement will be posted to the registry and a notification email will be sent to the distribution list."[59]	The Impact Statement will be the primary document setting out the environmental, health, social, and economic effects of the proposed DGR. Public participation at this stage should not be limited, or appear to be limited, to the Summary of the Impact Statement. The Impact Statement is also expected to be an extensive, complex, and highly technical document, supported by detailed studies, appendices, and supporting materials. The public comment must therefore be long enough to reflect the volume and complexity of the full Impact Statement, not only its summary. This is necessary to ensure that all potentially impacted communities and the public have a fair and meaningful opportunity to review, understand, and provide informed comments on the information used in the assessment.	**Recommendation No. 5**: *Amend the draft Public Participation Plan to read:* IAAC and the CNSC will invite comments on the Impact Statement**,** including the Summary of the Impact Statement. The Impact Statement will be posted to the registry, and a notification email will be sent to the distribution list. **Recommendation No. 6**: The Public Participation Plan must require that the length of the public comment period for the Impact Statement reflect the extensive, complex, and technical nature of the full Impact Statement, including its technical appendices and supporting materials, to ensure that the public and affected communities can meaningfully review and respond. **Recommendation No. 7**: The Agency must ensure that the proponent understands that they ought to request to extend timelines within the impact assessment process in order to ensure the public and affected communities can meaningfully review and respond to technical documents within the

[59] Participation Plan at 10.

			Impact Statement, pursuant to section 2 of the *Information and Management of Time Limits Regulation*.
The draft Public Participation Plan does not clarify how the IAAC and CNSC will engage with the public to prepare for the Impact Assessment Phase.	The draft Public Participation Plan states that the "IAAC and the CNSC will engage with the public to prepare for the Impact Assessment. Phase."[60]		**Recommendation No. 8:** The Public Participation Plan must clarify how the IAAC and CNSC will engage with the public to prepare for the Impact Assessment Phase.
The draft Public Participation Plan creates unclear language regarding the appointment of review panel members.	The draft Public Participation Plan states: "The review panel members may be appointed and may attend cultural training with Indigenous Nations and communities and orientation activities" (*emphasis* added).	The draft Public Participation Plan creates uncertainty by stating that '[t]he review panel members *may* be appointed"(*emphasis* added). This discretionary language does not align with s. 41(1) of the *IAA*, which states that the Agency "**must** [...] appoint as a member one or more persons who are unbiased and free from any conflict of interest relative to the designated project and who have knowledge or experience relevant to the designated project's anticipated effects or have knowledge of the interests and concerns of the Indigenous peoples of Canada that are relevant to the assessment" (**emphasis** added). The Public Participation Plan should therefore be amended to clarify that review panel members will be appointed in accordance with the *IAA*.	**Recommendation No. 9**: *Amend the draft Public Participation Plan to read:* The review panel members <u>will</u> be appointed and <u>must</u> attend cultural training with Indigenous Nations and communities and orientation activities, <u>in alignment with the Truth and Reconciliation Commission's 27th Call to Action.</u>"
The draft Public Participation Plan treats cultural training for review		The draft Public Participation Plan makes cultural training for review panel members appear discretionary, rather than a mandatory component to support respectful and informed engagement with Indigenous	

[60] Participation Plan at 10.

panel members as discretionary.		Nations and communities. Given the nature of the proposed project and its potential impacts on Indigenous communities, cultural training must be required in order to ensure that review panel members are better equipped to engage respectfully and to understand the context of Indigenous rights, laws, knowledge systems, and concerns. This is also consistent with the Truth and Reconciliation Commission's Call to Action 27.	
The review panel composition must support an independent, informed, and culturally competent assessment.	The draft Public Participation Plan contemplates the "[e]stablishment of the review panel and its mandate in the Terms of Reference."[61]	Under section 41(1) of the *IAA*, the Agency "must [...] appoint as a member one or more persons who are unbiased and free from any conflict of interest relative to the designated project and who have knowledge or experience relevant to the designated project's anticipated effects or have knowledge of the interests and concerns of the Indigenous peoples of Canada that are relevant to the assessment."[62] On April 19, 2026, the Agency and the CNSC hosted a public information session to inform the public about the proposed project. They stated that, in accordance with the IAA, the panel will consist of 3 members: 1 from the CNSC and 2 appointed by the agency. Given the nature of the proposed DGR and its impacts on Indigenous communities, the Public Participation Plan must confirm that the panel will include at least one Indigenous panel member.	**Recommendation No. 10**: The Public Participation Plan must require that the review panel include at least one Indigenous member.
The draft Public Participation Plan	The draft Public Participation Plan states	Information sessions are a practical safeguard for meaningful participation. They allow the public and	**Recommendation No. 11**: *Amend the draft Public Participation Plan to read:* The review panel must

[61] Participation Plan at 11.
[62] *IAA*, s. 41(1).

makes important review panel participation opportunities discretionary.	that "[t]he review panel *may* organize information sessions to explain activities and timelines elated to the review panel process." (*emphasis* added)[63]	Indigenous communities to understand the review panel's role and ask any questions they may have. Because information sessions help make participation meaningful in practice, they must not be discretionary.	organize information sessions to explain activities and timelines related to the review panel process. **Recommendation No. 12**: The Public Participation Plan must outline clear requirements for review panel information sessions. At a minimum, it must require that these sessions: ○ Be held early enough in the review panel process to allow participants to understand key timelines and participation opportunities; ○ Be offered in accessible formats to support meaningful participation (including in-person and online participation options); ○ Be broadly publicized in advance; and ○ Provide meaningful opportunities for participants to ask questions. **Recommendation No. 13**: The Public Participation Plan must outline what information will be shared at these information sessions, including but not limited to: ○ The review panel's role and mandate; ○ Key stages and timelines in the review panel process; ○ Opportunities for public participation; ○ How participants may submit comments; and ○ How the public record will be used throughout the review panel process and decision-making process.
	The draft Public Participation Plan states that, "[t]he review panel many hold a	It is our understanding that public hearing procedures shape how participants are able to engage in the review panel process, outlining, for example, the registration requirements, details surrounding written and oral	**Recommendation No. 14**: *Amend the draft Public Participation Plan to read:* The review panel must hold a comment period on the draft public hearing

[63] Participation Plan at 11.

	comment period on the draft public hearing procedures."[64]	submissions and questioning, the format and location of hearing sessions, and how the public record will be managed, among other things. Given the important role the public hearing procedure plays in shaping participation, it must be subject to public review and comment before it is finalized to ensure the process is fair, transparent, and accessible to all participants.	procedures.
The draft Public Participation Plan creates a gap in public participation by ending public engagement before participants have an opportunity to review and comment on the review panel's draft report.	The draft Public Participation Plan states that, "[f]ollowing the close of the review panel record, the review panel will prepare its report. The report will contain the review panel's rationale, conclusion and recommendations."[65] There are also "[n]o engagement activities during the [decision-making] phase."[66]	The review panel's report is a key document in the decision-making process because it will set out the panel's rationale, conclusions, and recommendations to the Governor in Council. This report will be the first time participants see how the panel has interpreted the evidence, weighed competing views, addressed Indigenous rights and public concerns, and framed its conclusions and recommendations. If there is no public comment period on the draft report or during the decision-making phase, participants have no opportunity to correct errors or omissions before that report is finalized and relied on by the Governor in Council. Although section 28 of the *IAA* expressly requires a comment period on a draft report only where the Agency conducts the assessment, this safeguard is equally important and should be applied in a review panel process.[67] Moreover, this report must explain how public feedback	**Recommendation No. 15**: The Public Participation Plan must contain an explicit public comment period on the review panel's draft impact assessment report in order to support transparency, accuracy, and meaningful public participation before the report is finalized and relied on in the public interest determination. **Recommendation No. 16**: The Public Participation Plan must require that the Impact Assessment Report include a summary of public comments received and explain how public feedback was considered and used to inform key stages of the impact assessment process, including the final Tailored Impact Statement Guidelines, the Review Panel's Terms of Reference, the Impact Statement, and public hearings.

[64] Participation Plan at 11.
[65] Participation Plan at 12.
[66] Participation Plan at 12.
[67] *IAA* at 28(1); Government of Canada, "Guidance: Public Participation under the Impact Assessment Act" (08 August 2025), online: <canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/guidance-public-particaption-impact.html#a5-3>.

		was used to inform key stages of the impact assessment process. This is consistent with the Agency's website, which states how "[t]he Impact Assessment Report must include a summary of the comments received from the public. This allows the public to see how their comments influenced the impact assessment process."[68]	
The draft Public Participation Plan narrows post-decision public engagement by transferring the lead role for public engagement from the IAAC to the CNSC.	The draft Public Participation Plan states that "IAAC transfers the lead role for public engagement in the regulatory oversight of the project to the CNSC."[69]	The Public Participation Plan must ensure that post-decision public engagement continues to reflect the principles and scope of public participation as reflected in the *IAA*. The IAAC remains "responsible for promoting, monitoring and enabling compliance with the Impact Assessment Act and any decision statements issued by the Minister of Environment, Climate Change and Nature."[70] This is especially important because the *IAA* reflects broader public interest considerations, including social, economic, health, and environmental factors. In contrast, the CNSC-led engagement framework does not provide the same socio-economic and public interest framework. The Public Participation Plan should therefore clarify that CNSC-led engagement in post-decision public engagement is not a substitute for the IAAC's continued public engagement role under the *IAA*.	**Recommendation No. 17**: The Public Participation Plan must clarify that the IAAC will maintain a public engagement role after the decision on matters arising under the Impact Assessment Act, including the decision statement, compliance, enforcement, amendments, follow-up, and monitoring. Given the proposed 160-year project lifespan and the intended "permanent" isolation of high-level radioactive waste, the Public Participation Plan must also explain how meaningful public access to information, participation opportunities, and oversight will be maintained over the full life of the project and into the post-closure period.
Appendix			
The "viewing centres" listed in Appendix 2 of the	Table 2 in the Appendix addresses viewing centres that	The Public Participation Plan must ensure that viewing centres are not limited to communities closest to the proposed site or within a narrow geographic area. Many	**Recommendation No. 18**: The Public Participation Plan must be amended to require viewing centres, or equivalent accessible document-review options,

[68] Government of Canada, "Guidance: Public Participation under the Impact Assessment Act" (08 August 2025), online: <canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/guidance-public-particaption-impact.html#a5-3>.
[69] Participation Plan at 13.
[70] Impact Assessment Agency, "Compliance Promotion and Enforcement" (23 February 2026), online: <canada.ca/en/impact-assessment-agency/corporate/compliance-promotion-enforcement.html>.

draft Public Participation Plan do not include all communities that have expressed interest in the project.	contain copies of key documents. Namely: ○ Ignace Public Library ○ Ignace Municipal Office ○ Dryden Public Library ○ Dryden City Hall ○ Dryden Native Friendship Centre ○ Sioux Lookout Public Library ○ Thunder Bay City Hall ○ Dyment Recreation Hall	communities along the transportation route, downstream, or otherwise potentially affected by the proposed project require accessible opportunities to review key project documents, including the Impact Statement and supporting materials. This is particularly necessary to support meaningful participation for communities and members of the public who face barriers to accessing large technical documents online.	in all communities that have expressed interest in the project.