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Deep Geological Repository for Canada's Used Nuclear Fuel Project
Impact Assessment Agency of Canada
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Re: Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel Project (Ref. No. 88774) – Comments on the Proponent's Initial Project Description

Please be advised that the Canadian Environmental Law Association (“CELA”) has been retained as counsel by We the Nuclear Free North (“WTNFN”) in relation to the above-noted project. On behalf of our client WTNFN, CELA submits these comments to the Impact Assessment Agency of Canada (“Agency”) on the Initial Project Description (“IPD”) of the Deep Geological Repository (“DGR”) for Canada’s Used Nuclear Fuel (Ref. No. 88774).

These comments should be read in conjunction with the additional comments submitted under separate cover to the Agency by WTNFN.

Moreover, given the inadequacy of a 30-day comment period on such a voluminous IPD (i.e. over 1,200 pages), our client hereby reserves the right to provide supplementary submissions to the Agency about the IPD, the DGR project, and its potential environmental impacts.

A. OVERVIEW

In summary, the Nuclear Waste Management Organization (“NWMO”) proposes to store 5.9 million used fuel bundles in perpetuity in a DGR facility approximately 750 metres below ground in northwestern Ontario. Nuclear fuel waste is highly radioactive and inherently dangerous to all living organisms. The time scale of the health, safety and environmental risks posed by used fuel waste is hundreds of thousands of years.¹ No similar project has proceeded in Canada or has been completed or fully operated internationally.

WTNFN, along with other non-governmental organizations, First Nation communities, and members of the public, are gravely concerned about the adverse environmental, social and health impacts that may be caused by all aspects of the NWMO proposal, including the long-distance transportation of used fuel waste to the DGR facility. A credible, evidence-based and rigorous analysis of the direct, indirect, and cumulative effects of this risk-laden project is therefore

¹ Nuclear Waste Management Organization, *Initial Project Description, Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel Project*, December 2005 (“IPD”), Appendix D: Nuclear Waste Management Organization, *Choosing a Way Forward: The Future Management of Canada's Used Nuclear Fuel*, (“*Choosing a Way Forward*”) p. 15 (PDF p. 775).

warranted through an impact assessment pursuant to section 16 of the *Impact Assessment Act*, SC 2019, c 28, s 1 (“*IAA*”).²

Accordingly, WTNFN submits that the Agency’s screening decision under section 16 of the *IAA* must unequivocally conclude that an impact assessment is required in relation to this project in light of the potential for the project to cause significant adverse effects within federal jurisdiction.

In this regard, WTNFN submits that there is no reasonable basis for the Agency to decide that there are means other than an impact assessment, for instance licensing under the *Nuclear Safety and Control Act*, SC 1997, c 9 (“*NSCA*”) or other federal or provincial legislation, for addressing the project’s adverse effects within federal jurisdiction, and its direct or incidental adverse effects, that may be caused by the carrying out of the project, pursuant to section 16(2)(f.1) of the *IAA*.³

The determination that an impact assessment is required in this case should, in turn, lead to a referral by the Minister under section 43 of the *IAA*, so that an integrated review panel will conduct the impact assessment, hold public hearings, and submit a report to the Minister.⁴

However, for the reasons set out below, WTNFN submits that the IPD is fundamentally deficient and clearly unacceptable because it:

- does not meet the legislative and regulatory requirements of the *IAA* in relation to the preparation, content and submission of an IPD;
- lacks sufficient detail, information, and data about key operational components of the project;
- contains questionable assumptions, significant errors and omissions, and inaccurate or misleading statements about the project and its potential impacts;
- provides numerous unsubstantiated conclusions and speculative predictions about the potential environmental, socio-economic, and human health impacts of the project if approved;
- glosses over or unduly constrains the critically important environmental planning factors required under section 22 of the *IAA*, including “need”, “alternatives to”, “alternative methods” (including site selection), which were essentially decided or predetermined prior to the commencement of the IA process, and in the absence of meaningful public and Indigenous consultation;
- the NWMO’s project-related decision-making, as reflected in the IPD, especially the exceedingly narrow approach to “need” and “alternatives to”, is not logical, traceable or replicable; and,
- there is not sufficient scope in the IPD that would allow for any ultimate determination about significant adverse effects or the “public interest”, pursuant to section 61(1) of the *IAA*.⁵

² [Impact Assessment Act](#), SC 2019, c 28, s 1 (“*IAA*”), s 16(1).

³ *IAA*, s.16(2)(f.1)

⁴ *IAA*, s. 43

⁵ *IAA*, s. 61(1)

WTNFN therefore submits that the Agency should reject the inadequate IPD and send the NWMO back to the drawing board to reconsider, revise, and resubmit an updated IPD that meets the requirements of the *IAA*, the regulations, and related guidance documents.⁶

In the alternative, if the Agency proceeds to prepare a Summary of Issues and directs the NWMO to respond to them, then it is imperative that the forthcoming Detailed Project Description be considerably broadened to properly identify and fully assess the potential of the NWMO's proposal to cause adverse effects upon Indigenous rights and interests, the natural environment and ecological features and functions, and human health and safety during all stages of the project.

B. Description of We the Nuclear Free North

WTNFN is a northern Ontario alliance of environmental groups, non-governmental organizations, community groups and individual Indigenous people, primarily from Treaty 3 territory. It consists of approximately 2,500 supporters.

C. The IPD Does Not Satisfy Prescribed Requirements

Section 10 of the *IAA* provides as follows:

10 (1) The proponent of a designated project must provide the Agency with an initial description of the project that includes the information prescribed by regulations made under paragraph 112(1)(a).⁷

Section 3 of the *Information and Management of Time Limits Regulations*, SOR/2019-283 ("*Information Regulations*") specifies that an initial project description must address all matters listed in Schedule 1 of the regulation.⁸ Parts A to F of Schedule 1 identify approximately two dozen matters that must be included in an initial description of the project, organized under the following sub-headings:

- general information
- project information
- location information
- federal, provincial, territorial, Indigenous and municipal involvement
- potential effects of the project
- summary⁹

(1) General Comments

⁶ *IAA*, s. 15(1.1)

⁷ *IAA*, s. 10(1)

⁸ *Information and Management of Time Limits Regulations*, SOR/2019-283, ("*Information Regulations*"), s. 3.

⁹ *Information Regulations*, Schedule 1, Parts A-F

The Agency's *Guide to Preparing an Initial Project Description and a Detailed Project Description* indicates that upon receipt of a proponent's initial description of the project, the Agency will review it for completeness and will post the IPD within 10 days on the Registry for public review and comment.¹⁰

NWMO provided the Agency with a draft copy of the IPD for review by the Agency and the Government Review Team on August 15, 2025.¹¹

In this case, the result of the Agency's internal review of the "completeness" of NWMO's IPD has not been posted on the Registry. However, since the IPD was posted on the Registry and the public comment period is currently underway, WTNFN infers that the Agency must have concluded that the December, 2025 version of the IPD met all prescribed requirements.

If so, WTNFN submits that the Agency's determination of the completeness of the IPD is premature, unreasonable, and erroneous. To reach such a conclusion, it appears that the Agency has undertaken a superficial review of whether the prescribed sub-headings were present in the IPD, rather than perform a careful analysis of the substantive adequacy of the IPD content.

Section 6(3) of the *IAA* provides that the Government of Canada, the Minister, the Agency and federal authorities must, in the administration of the *IAA*, exercise their powers in a manner that ensures that processes are "fair, predictable and efficient" and "adheres to the principles of scientific integrity, honesty, objectivity, thoroughness and accuracy".¹² In the future, it would be highly advisable and undoubtedly prudent for the Agency to await public and Indigenous comment before declaring whether or not an IPD is complete. This is also true in relation to the forthcoming Detailed Project Description if and when filed by the NWMO.

Further particulars about the inadequate content of the NWMO's IPD are set out below.

(2) Specific Comments

Section 3 of the *Information Regulations* requires the initial description of a project to be "representative of the project at the time the information is provided" and "include the information related to any option that the proponent is considering in respect of any item in the description of the project."¹³ However, the NWMO's IPD provides little detail about the proposed project, and even less detail about the need for the project, alternatives to the project, and alternative means for carrying out the project.

i. No detailed discussion of "need for" or alternatives to the project

There is no detailed analysis or discussion of the "need for" and "alternatives to" the project, contrary to the requirement in Schedule 1, Part B, sections 7 and 12(b) of the *Information*

¹⁰ Impact Assessment Agency of Canada, [Guide to Preparing an Initial Project Description and a Detailed Project Description](#), Introduction. ("*Guide to Preparing an Initial Project Description*")

¹¹ IPD, p. iv (PDF p. 5)

¹² *IAA*, s. 6(3)

¹³ *Information Regulations*, s. 3

Regulations and sections 22(1)(d), (e) and (f) of the *IAA*.¹⁴ Thus, there is no detailed analysis of other means of permanent placement of high-level nuclear waste, including permanent placement at new waste facilities constructed at the interim sites, or other potential technologies or alternative locations for a deep geological repository, contrary to Schedule 1, Part B, section 12(a) of the *Information Regulations*.¹⁵

WTNFN submits that the alleged “need” for the NWMO proposal has not been proven to date, and that “need” should therefore be carried forward as a live issue in the impact assessment process. On this point, the IPD merely asserts in a single sentence, without explanation or elaboration, that the project is “required” for the transition from interim storage to permanent disposal:

The need for the Project arises from the requirement to transition from interim storage to a permanent, passive disposal solution that ensures long-term safety, minimizes environmental risk, and upholds intergenerational responsibility.¹⁶

The nature or source of this so-called “requirement” is not specified in the IPD, but presumably it may be a reference to the 2007 federal decision to embrace Option 4 as the preferred alternative. If so, this choice does not represent an evidence-based demonstration of need. To the contrary, it is simply a reflection of political priorities at the time and does not allow the NWMO to avoid a comprehensive assessment of “need” and “alternatives to” under the auspices of the *IAA*.

With respect to any discussion of alternatives to the project, the IPD relies on its *Choosing a Way Forward Study*, completed outside of the *IAA* process.¹⁷ However, no caselaw or authority has been cited by the NWMO to support its proposition that a governmental fiat obviates the legal requirement for a proponent to consider alternatives to the project under the *IAA*. WTNFN further submits that since previous NWMO studies confirmed that Option 2 (i.e. permanent placement at nuclear reactor sites) was feasible, the environmental impacts of this alternative must be considered and compared to Option 4 during the *IAA* process.

Another alternative method that has been omitted from the IPD is the possibility of interim storage at the DGR site via shallow caverns or repositories prior to final emplacement in the deep repository. While the NWMO’s 2005 report featured on-site interim storage, the IPD is unclear whether or not this proposal is still part of the NWMO proposal. At the very least, the proponent must clarify whether interim storage is – or is not – part of the project to be carried out at the proposed site.¹⁸

The “need” and “alternatives to” analysis are among the most important threshold issues in any impact assessment process, particularly in relation to large-scale, costly, complex, and

¹⁴ *Information Regulations*, Schedule 1, Part B, ss. 7, 12(b); *IAA*, ss. 22(1)(d), (e), and (f)

¹⁵ *Information Regulations*, Schedule 1, Part B, s. 12(a).

¹⁶ IPD, p. 41 (PDF p. 68).

¹⁷ IPD, pp. 76-89 (PDF pp. 103-116)

¹⁸ IPD, p. 82 (PDF p. 109), p. 84 (PDF p. 111); see also *Choosing a Way Forward*, pp. 23-29 (PDF pp. 783-789), pp. 31-34 (PDF pp. 791-794), p. 44 (PDF p. 804)

environmentally risky undertakings such as the NWMO proposal. As succinctly noted by the Joint Board in a hearing decision under Ontario's *Environmental Assessment Act*:

Where an undertaking involves the risk of environmental harm, it remains a fundamental and traditional principle that the undertaking should be necessary in order to be approved.¹⁹

While this principle was expressed by the Joint Board in relation to a large landfill proposal, it is equally applicable to the NWMO proposal under the *IAA*. If the NWMO cannot prove that there is demonstrable public need for its risk-laden project or that it is environmentally superior to other alternatives to the project, then it should not be approved and the public should not be exposed to its risks.

i. The IPD lacks adequate detail and discussion of alternative means

As described in more detail below, the IPD has improperly excluded key phases of the project, including the removal of high-level nuclear waste from interim storage and the handling, re-packaging and loading of that material onto trucks or rail cars at the interim storage sites, and the subsequent transportation of high-level nuclear waste for thousands of kilometres from the seven interim storage sites to the centralized site over a period of 50-60 years.²⁰

There is also an alarming paucity of detail about the proposed industrial activities at the DGR site, especially in relation to the used fuel packaging plant, the storage of low-level and intermediate-level waste generated at the site, and the construction and operation of the underground repository. For instance, with respect to the used fuel packaging plant, the IPD description of the facility does not adequately describe what will be involved: “[The used fuel packaging plant] will incorporate multiple robotic/remote processing systems contained within hot cells (containment structures) to remove the used fuel from the transportation package and repackage it into the UFCs that will be emplaced in the DGR”.²¹ This is not a description with enough detail to allow for a meaningful analysis of the possible adverse effects of this facility. Reference is made in the IPD to further study and analysis of operations at the site, rather than meeting the requirements in the *Information Regulations*.²²

The safety analysis is also inadequate. For instance, there is no safety analysis which would examine whether re-packaging the high-level nuclear waste twice, once at the interim storage facilities and with a currently unknown process, and again after transportation to the used fuel packaging plant, is more likely to cause malfunctions or accidents, as well as environmental exposures, as opposed to a different approach (i.e. transferring used fuel waste into final containers at the interim storage sites rather than at the DGR site).²³ In WTNFN's view, the above-ground re-packaging plant arguably poses some of the greatest environmental, human health, and occupational safety risks, but receives scant attention or analytical detail in the IPD.

¹⁹ *Re West Northumberland Landfill Site* (1996), 19 C.E.L.R. (N.S.) 181 (Ont. Jt. Bd.) at para 88.

²⁰ IPD, pp. vii, 1 (PDF pp. 8, 28)

²¹ IPD, p 59 (PDF p. 86)

²² IPD, pp. 59-60 (PDF pp. 86-87), pp. 60-66 (PDF p. 87-93), pp. 66-68 (PDF pp. 93-95)

²³ *IAA*, s 22(1)(a)(i); IPD, p. 67 (PDF p. 94);

It is also unclear from the IPD why alternative methods of transferring the used fuel waste have not been included in the IPD.²⁴

Another significant issue that is insufficiently addressed in the IPD is the proposed on-site handling and treatment of radioactive water at the re-packaging plant at the DGR site. The IPD seems to assume that subsurface water pumped to surface will not become contaminated with radionuclides over time. On this point, the IPD discloses little or no information about the NWMO's proposal for storing and treating radioactive liquid wastes generated at the site. This concern also extends to the low- and intermediate-level radioactive waste generated on-site.

The IPD does not currently address the effects of malfunctions or accidents in any detail, despite malfunctions and accidents being a critical factor to consider in any impact assessment pursuant to section 22(1)(a)(i) of the *IAA*.²⁵ Likewise, the cumulative effects of the proposal have not been analyzed in any detail in the IPD, nor have the climate impacts of the proposal.²⁶

In short, the minimum requirements of an IPD have not been met by the NWMO, and the IPD should not be accepted by the Agency.²⁷

In the alternative, WTNFN requests that pursuant to s.15(2)(a) of the *IAA*, the Agency should require the NWMO to provide a more detailed project description which meets the requirements of the *Information Regulations* prior to a decision being rendered on whether to proceed with an impact assessment.²⁸

D. A Comprehensive Impact Assessment Must be Conducted by a Review Panel and with a Full Public Hearing

(1) The Impact Assessment Should be Conducted by a Review Panel and Include a Full Public Hearing

Section 43(a) of the *IAA* provides that the Minister must refer the impact assessment of a designated project to a review panel if it includes physical activities regulated by the *NSCA*.²⁹ A full public hearing is warranted in relation to the NWMO's proposed project.³⁰

(2) An Impact Assessment Must be Conducted

The proposed DGR is classified as a designated project under the *IAA* regulations.³¹ Pursuant to section 16 the *IAA*, a decision on whether an impact assessment is required must consider the adverse effects within federal jurisdiction – or the direct or incidental adverse effects – that may

²⁴ Nuclear Waste Management Organization, [Technical Program for Long-Term Management of Canada's Used Nuclear Fuel – Annual Report 2024](#), November 2025, pp. 6-7

²⁵ *IAA*, s. 22(1)(a)(i)

²⁶ *IAA*, ss. 22(1)(a)(ii) and (iii), 22(2)(1)

²⁷ *Information Regulations*, Schedule 1, Part B; *IAA*, s. 22.

²⁸ *IAA*, s. 15(2)(a).

²⁹ *IAA*, s. 43(a).

³⁰ *IAA*, s. 51(1)(c).

³¹ [Physical Activities Regulations](#), SOR/2019-285, s. 28(b).

be caused by the carrying out of the designated project, and any adverse impact on the rights of Indigenous peoples pursuant to section 35 of the *Constitution Act, 1982*.³² Ultimately, there must be sufficient information for a decision pursuant to section 61(1) of the *IAA*.³³

Moreover, the complexity of safely managing high-level nuclear waste created by nuclear power plants has always been a highly contentious and technically difficult environmental challenge, as demonstrated by the passage of the *Nuclear Fuel Waste Act*, SC 2002, c 23 (“*NFWA*”), legislation created specifically to address this unique environmental hazard.³⁴

The purpose of the *IAA* is to anticipate, identify, assess, prevent and mitigate significant adverse effects of designated projects on areas of federal jurisdiction.³⁵ The mandatory governmental duties in section 6(2) of the *IAA* require respect for the rights of Indigenous peoples in Canada and consideration of Indigenous knowledge, cumulative effects of physical activities, the precautionary principle, and cooperation among jurisdictions and with the Indigenous peoples of Canada.³⁶ Overall, the *IAA* entails a “look before you leap” approach, which is particularly important in this case where the leap involves the permanent placement of dangerous materials for hundreds of thousands of years.

An impact assessment is needed to carefully analyze the full breadth of factors listed in section 22 of the *IAA* for all stages of the proposed project.³⁷ Despite claims that the NWMO is following “best practices,”³⁸ this is a nascent field and there are no operating deep geological repositories for high-level nuclear waste anywhere in the world. In fact, there are several significant differences between the NWMO proposal and the DGR-type facilities proposed in other jurisdictions.

For example, while other jurisdictions such as France have insisted that retrievability and reversibility of the permanent placement of waste be integrated as an essential design feature, this does not appear to form part of the NWMO proposal.³⁹

Similarly, other jurisdictions, such as Scotland, have adopted the “proximity principle,” which posits that radioactive waste should be managed as close as possible to the site where it was generated.⁴⁰ However, the proximity principle is not reflected in the current NWMO proposal, which instead contemplates long-distance transportation of used fuel waste to a facility located thousands of kilometres away from current interim storage sites. Moreover, the long-term monitoring of the NWMO facility after 160 years is far from certain in this case, especially since

³² *IAA*, s. 16(2).

³³ *IAA*, s. 61.

³⁴ *Nuclear Fuel Waste Act*, SC 2002, c 23 (“*NFWA*”)

³⁵ *IAA*, s. 6(1).

³⁶ *IAA*, s. 6(2).

³⁷ *IAA*, s. 22.

³⁸ IPD, p. viii (PDF p. 9), p xii (PDF p. 13), pp. 260-261 (PDF pp. 287-288)

³⁹ European Union, Council Directive 2011/70/Euratom (19 July 2011), *Community Framework for the Responsible and Safe Management of Spent Fuel and Radioactive Waste*, para 23; French Republic, ASN Opinion 2016-AV-0267 of 31st May 2016 on the reversibility of deep geological disposal of radioactive waste, 31 May 2016, p. 3; Andra, “[Retrievability of the Waste Package Disposed of in Cigéo](#)”.

⁴⁰ Scotland, [Scotland’s Higher-Activity Radioactive Waste Policy](#), 20 January 2011, s. 2.01.04, 2.01.06.

the NWMO has stated that the extended monitoring period will be determined in part based on society's desire at the time.⁴¹

In addition, while other jurisdictions have proposed to use ramps for the purpose of emplacing used fuel waste, the NWMO proposal relies upon shafts built into bedrock. Similarly, while other jurisdictions have opted to emplace the final containers in floors, the NWMO proposal does not utilize this method.⁴²

On this point, WTNNF notes that the IPD is essentially devoid of detail about emplacing the final containers or about closing the underground rooms once filled to capacity. There is insufficient information about the remote equipment to be used for emplacement purposes, or about related occupational health and safety risks. In contrast, the NWMO's 2021 conceptual report attempted to characterize some of the underground facilities, detail which is conspicuously absent from the IPD.⁴³

In these circumstances, it cannot be seriously contended that the NWMO is merely following international "best practices" when there is, in fact, considerable variability in DGR approaches in different countries, and the NWMO proposal is materially different from what has been proposed in other jurisdictions.

In this regard, the NWMO has attempted to create a list of potential adverse effects in section 19.2 of the IPD.⁴⁴ However, the analysis remains preliminary and cursory, often relies on desktop reviews of baseline conditions, and excludes several integral stages of the project, such as the handling, re-packaging and loading of high-level waste at the interim sites, and the transportation of high-level nuclear fuel waste for thousands of kilometres to the site.⁴⁵

There is also a dearth of detail about the activities to be conducted at the DGR site, including in particular the used fuel packaging plant and the placement of the re-packaged high-level waste in the underground repository.

Of particular concern to the public is the possibility of accidents and spills at all stages of the project. Section 22(1)(a)(i) of the *LAA* requires consideration of the effects of malfunctions or accidents that may occur. In examining a novel, untested and unprecedented technology for permanent placement of high-level waste in Canada, and the handling and permanent placement of very dangerous materials, this analysis becomes an important focus of any impact assessment.

An impact assessment is also required in this case because of the potential adverse impact of the project on the rights of Indigenous peoples, including Indigenous communities with section 35 interests in land near the interim storage sites currently containing high-level nuclear waste,

⁴¹ IPD, p. 70 (PDF p. 97), p. 72 (PDF p. 99).

⁴² IPD, p. 30 (PDF p. 57), p. 62 (PDF p. 89).

⁴³ NWMO, [Deep Geological Repository Conceptual Design Report Crystalline/ Sedimentary Rock](#), September 2021, pp. 72–85 (PDF pp. 94-107)

⁴⁴ IPD, pp. 192-194 (PDF pp. 219-221)

⁴⁵ See, for example, IPD, pp. 44-49 (PDF pp. 71-76), pp. 65-68, (PDF pp. 92-95), pp. 87-89 (PDF pp. 114-116), pp. 192-193 (PDF pp. 219-220), p. 194 (PDF p. 221).

Indigenous communities living along the transportation routes, and Indigenous communities with section 35 interests at or near the site, including downstream from the site.⁴⁶ The NWMO's IPD has omitted many Indigenous communities with potential section 35 interests in this project. Even with respect to the Indigenous communities it has included in the IPD, it admits that uncertainty remains regarding potential effects on Indigenous Peoples based on baseline data collection to date and therefore it cannot be ruled out that the project may carry a non-negligible risk of significant effects.⁴⁷

E. The Initial Project Description is too Narrowly Scoped

(1) Key Principles

(a) *United Nations Declaration on the Rights of Indigenous Peoples*

The preamble of the *IAA* commits the Government of Canada to implementing the *United Nations Declaration on the Rights of Indigenous Peoples* ("UNDRIP").⁴⁸ Canada has also incorporated UNDRIP in the *United Nations Declaration on the Rights of Indigenous Peoples Act*, SC 2021, c 14 ("UNDRIP Act"). Sections 22(1)(c), (g), (l) and (q) of the *IAA* expressly requires consideration of the rights, knowledge and cultures of Indigenous peoples.

Article 29(2) of UNDRIP states:

States shall take effective measures to ensure that no storage or disposal of hazardous materials shall take place in the lands or territories of indigenous peoples without their free, prior and informed consent.⁴⁹

The Federal Court of Canada found in *Kebaowek First Nation v Canadian Nuclear* that the Canadian Nuclear Safety Commission erred in law by failing to apply UNDRIP to its analysis of the duty to consult and accommodate in relation to section 35 of the *Constitution Act, 1982*.⁵⁰

In relation to NWMO's proposal, Grand Council Treaty #3 resolved that the Chiefs in Assembly continued to support the Elders Declaration that makes clear that a Deep Geological Repository for the storage of nuclear waste will not be developed at any point in the Treaty #3 Territory and that their decision-making and mandate must be respected.⁵¹

Similarly, Anishinabek Nation stated that "in their Reconciliation Policy, the NWMO commits to "seeking free, prior, and informed consent of impacted Indigenous peoples before proceeding

⁴⁶ *IAA*, s. 16(2)(c).

⁴⁷ IPD, p. xii (PDF p. 13).

⁴⁸ *IAA*, preamble

⁴⁹ *United Nations Declaration on the Rights of Indigenous Peoples Act*, SC 2021, c 14, Schedule, Article 29(2).

⁵⁰ [Kebaowek First Nation v Canadian Nuclear Laboratories](#), 2025 FC 319, at para 57; [The Constitution Act, 1982](#), Schedule B to the Canada Act 1982 (UK), 1982, c 11 ("Constitution Act, 1982"), s. 35.

⁵¹ Grand Council Treaty #3, [Resolution of the Grand Council Treaty #3](#), Position on Nuclear Waste and Resource Development in Treaty #3, Resolution CA-24-14, October 3, 2024, Resolutions 1-2.

with development of a deep geological repository”, but are proceeding without having sought or received the consent of Anishinabek First Nations,” including neither seeking nor receiving the consent of First Nations of Anishinabek Nation along the transportation route.⁵² Anishinabek Nation states:

1. Restate our opposition to the transportation and burial of radioactive wastes including the transportation of high-level nuclear fuel waste through our territories; and
2. Direct the Grand Council Chief to call upon the federal Minister of the Environment and Climate Change, the federal Minister of Energy and Mines and the Impact Assessment Agency to ensure that the transfer, transportation, and processing of nuclear fuel waste – which is integral and incidental to the NWMO’s nuclear waste project – is fully described and examined as part of the federal Impact Assessment Process.⁵³

The Chiefs of Ontario’s *Resolution Against Nuclear Waste Transportation and Burial*, Resolution 25/33S states that although the NWMO commits to seeking the free, prior and informed consent of impacted Indigenous peoples before proceeding with development of a deep geological repository, it is “proceeding without having sought or received consent of many First Nations that could be affected by the proposed repository.”⁵⁴ The resolution also highlights the widespread opposition to the transportation and burial of nuclear waste.⁵⁵ The Chiefs of Ontario therefore resolved that the Chiefs in Assembly:

1. Are opposed to the transportation and burial of radioactive wastes in First Nations territory without free, prior, and informed consent of all of the impacted First Nations, including the transportation of high-level nuclear fuel waste in Ontario.
2. Call upon the responsible federal Ministries to meet with the Nations that are affected and remain opposed.
3. Call upon the federal Crown and its agents, including the IAAC, to ensure that First Nations along potential transportation routes are adequately resourced and supported to participate in all stages of the Impact Assessment and licensing processes, with sufficient technical and administrative capacity to engage its membership, technical experts, and the Crown and its agencies.⁵⁶

In addition, in its *Final Report on 2024 Dialogue Sessions and Recommendations to the Nuclear Waste Management Organization*, the Assembly of First Nations highlighted the significant concerns of First Nations using the same watershed as the project, and First Nations along the transportation routes. The report recommends that “it is essential that the perspectives of all First

⁵² Anishinabek Gimaag-Maawnjidiwaa, *Nuclear Waste Transportation and Burial in Anishinabek Nations Lands, Naaknigan - #2005-25*, paras 4-5. (“Anishinabek Nation Resolution”)

⁵³ Anishinabek Nation Resolution, Resolutions 1-2.

⁵⁴ Chiefs of Ontario, *Resolution Against Nuclear Waste Transportation and Burial*, Resolution 25/33S, November 18-19, 2025, para 3. (“Chiefs of Ontario, *Resolution Against Nuclear Waste*”)

⁵⁵ Chiefs of Ontario, *Resolution Against Nuclear Waste*, para 4.

⁵⁶ Chiefs of Ontario, *Resolution Against Nuclear Waste*, Resolutions 1-3.

Nations who rely on the same watershed as the proposed site, as well as those along the transportation route, be respected and fully integrated, in a manner that honors their inherent right to self-determination”.⁵⁷ The Assembly of First Nations also states that free, prior, and informed consent from all impacted First Nations is imperative.⁵⁸

The *Information Regulations* require the IPD to list all the Indigenous groups that may be affected by the carrying out of the project, a summary of any engagement undertaken with the Indigenous peoples of Canada, including a summary of key issues and the results of the engagement, and a brief description of any plan for future engagement.⁵⁹ WTNFN supports the above-noted recommendations and resolutions of Indigenous communities impacted by this project and calls for the appropriate application of UNDRIP and the requirements of the *IAA* and the *Information Regulations* in this case.

(b) The Precautionary Principle

The *IAA* requires application of the precautionary principle.⁶⁰

The precautionary principle is a fundamental principle in Canadian environmental law. It is a tool for statutory interpretation which recognizes the inherent difficulty with requiring the public or Indigenous communities to prove causation. It promotes more, not less, environmental and health protection.

In *114957 Canada Ltée (Spraytech, Société d'arrosage) v Hudson (Town)*, the Supreme Court of Canada adopted the definition of the precautionary principle as enunciated in para. 7 of the Bergen Ministerial Declaration on Sustainable Development (1990):

In order to achieve sustainable development, policies must be based on the precautionary principle. Environmental measures must anticipate, prevent and attack the causes of environmental degradation. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.⁶¹

The precautionary principle calls for preventative, anticipatory measures to be taken when an activity raises threats of significant harm to the environment, wildlife or human health even if a cause-and-effect relationship has not been fully established.⁶² The application of the precautionary principle is particularly important in relation to this project because of the NWMO's recognition that there is inherent uncertainty and risk in moving forward with this

⁵⁷ Assembly of First Nations, [Final Report on 2024 Dialogue Sessions and Recommendations to the Nuclear Waste Management Organization](#) (“Final Report on 2024 Dialogue Sessions”), p. 12.

⁵⁸ *Final Report on 2024 Dialogue Sessions*, p. 12.

⁵⁹ *Information Regulations*, Schedule 1, Part A, s. 4

⁶⁰ *IAA*, s. 6(2).

⁶¹ *114957 Canada Ltée (Spraytech, Société d'arrosage) v Hudson (Town)*, 2001 SCC 40, [2001] 2 SCR 241 at para 31.

⁶² Birnie, Boyle, and Redgwell, *International Law & the Environment*, 3rd ed. (United States: Oxford University Press, 2009) at 155-156.; C. Smith, “The Precautionary Principle and Environmental Policy, Science Uncertainty and Sustainability” (2000) 6:3 *International Journal of Occupational and Environmental Health* 263.

proposal, including because of the long timeframes involved and the possibility that the project will encounter major changes in science, technology, institutions, values, political perspectives, and economic and financial considerations.⁶³ The NWMO has stated that it cannot advance proof of the actual performance of the DGR system over thousands of years, despite the ongoing risk from the high-level nuclear waste during that time frame.⁶⁴

However, the NWMO is improperly invoking the precautionary principle to justify limiting its study of the safety, environmental and design elements of the proposed project.⁶⁵ By improperly stating that the precautionary principle justifies more limited study of the project now, and that more detailed safety, environmental and design documentation are not needed until later phases of licensing, the NWMO is purposefully creating even more scientific uncertainty and risk.⁶⁶ The Agency should reject this flawed approach as contrary to the *IAA* and demand a full analysis to the extent of current knowledge of the environmental, health, design and safety of the project. Any remaining risk or uncertainty would support more careful environmental protection and preventative measures, not a “wait-and-see” approach or a postponement (or avoidance) of rigorous analysis of long-term risks and impacts.

(c) Environmental Justice Must be Considered as Part of the Impact Assessment

The impact assessment should incorporate consideration of environmental justice as part of the analysis of health, social and economic conditions pursuant to s. 22(1)(a) of the *IAA*.⁶⁷

A key consideration of environmental justice is fairness between communities in Ontario. WTNFN has consistently raised fairness concerns about the risks of transportation and permanent placement of high-level nuclear waste being borne by Northern Ontario communities, whereas the benefits of nuclear energy production have disproportionately been experienced in Southern Ontario.

The Assembly of First Nations highlighted similar concerns:

First Nations participants expressed significant concerns about the transportation and storage of used nuclear fuel in Canada, emphasizing a range of perspectives. One critical issue is the distribution of benefits. While both northern and southern Ontario benefit from nuclear power, the southern regions—where nuclear energy production primarily occurs—receive a disproportionately larger share of these benefits. In contrast, northern regions bear the risks associated with the storage and transportation of nuclear waste but receive far less in return. **This imbalance is viewed as unfair and unjust, exacerbating existing disparities and prompting calls for a more equitable distribution of both benefits and risks** [emphasis added].⁶⁸

⁶³ *Choosing a Way Forward*, pp. 15, 18 (PDF pp. 775, 778)

⁶⁴ *Choosing a Way Forward*, p. 31 (PDF p. 791)

⁶⁵ IPD, p. viii (PDF p. 9)

⁶⁶ IPD, p. xii (PDF p. 13)

⁶⁷ *IAA*, s. 22(1)(a).

⁶⁸ *Final Report on 2024 Dialogue Sessions*, p. 10.

A fulsome analysis of environmental justice principles and fairness is needed as part of the impact assessment of the NWMO proposal.

(d) Analysis of the Cumulative Effects of the Proposed Project

A key requirement of the *IAA* is to analyze the cumulative impacts of a project.⁶⁹ There is no similar requirement under the *NSCA*. The IPD does not include a preliminary cumulative effects analysis. Section 22(1)(a)(ii) requires the impact assessment to analyze “any cumulative effects that are likely to result from the designated project in combination with other physical activities that have been or will be carried out”.⁷⁰ The environmental burdens of this project must be analyzed in the impact assessment alongside other environmental, health and economic stressors in the region.

(2) The IPD Must Incorporate All Phases of the Project

(a) The Re-location, Re-packaging and Loading of High-Level Nuclear Waste Into Transport Vehicles Must be Included in the Project Description

The NWMO project under review in the *IAA* process must include assessment of the potential impacts arising from the removal of high-level waste from the interim storage sites and the handling, re-packaging and loading of nuclear fuel waste into transport vehicles. This phase of the project has improperly been excluded from the IPD entirely despite it being a critical first step of the proposed project to relocate and store the high-level nuclear waste in a new location. During the removal, re-packaging and loading of high-level nuclear fuel, there is a significant omnipresent risk of adverse federal effects to health, safety and the environment, as well as the potential for accidents or malfunctions.⁷¹

The corresponding removal of used fuel from the transportation vehicle and re-packaging of the nuclear fuel waste at the used fuel packaging plant after it has been transported to the DGR site is considered part of the project in the IPD.⁷² There is no principled or legal basis to exclude the similar activities at the initial phase of the project from the impact assessment.

(b) Long-Distance Transportation of High-Level Nuclear Waste Should be Included in the Project Description

i. Transportation of high-level radioactive waste is a key public concern

WTNFN echoes the serious public concerns raised to date about the proposed exclusion of transportation from the project description. As of mid-afternoon on February 4, 2026, 144 public comments have raised unresolved concerns about the transportation of nuclear fuel waste.⁷³

⁶⁹ *IAA*, ss. 6(2), 22(1)(a)(ii).

⁷⁰ *IAA*, s. 22(1)(a)(ii).

⁷¹ *IAA*, s. 22(1)(a)(ii) and (iii)

⁷² IPD, pp. 59-60 (PDF pp. 86-87).

⁷³ Impact Assessment Agency of Canada, Canadian Impact Assessment Registry, “[Deep Geological Repository \(DGR\) for Canada’s Used Nuclear Fuel Protect](#)”. (“Agency Registry”)

Pursuant to section 22(1)(n) of the *IAA*, the overwhelming public support for inclusion of transportation of high-level nuclear waste in the project description and impact assessment process should be accepted and acted upon by the Agency.

WTNFN also notes that this issue has repeatedly been raised as a key concern by Indigenous communities, including by Anishinabek Nation⁷⁴, Chiefs of Ontario⁷⁵, and Assembly of First Nations.⁷⁶

ii. A project description which excludes transportation is inconsistent with the *Nuclear Fuel Waste Act*

The *Nuclear Fuel Waste Act*, SC 2022, c 23 (“*NFWA*”) governs the establishment of the NWMO and Canada’s proposal to manage nuclear fuel waste in the long-term. However, the NWMO’s proposed project description pursuant to the *IAA*, which seeks to exclude the handling, loading and transportation of nuclear fuel from nuclear facilities in Canada to the DGR site, is inconsistent with its mandate pursuant to the *NFWA*.

Section 2 of the *NFWA* defines “management” in relation to nuclear fuel waste, as the long-term management by means of storage or disposal, including **handling, treatment, conditioning or transport for the purpose of storage or disposal**.⁷⁷ The purpose of the *NFWA* is defined in section 3. It requires the Governor in Council to make a decision on the “**management** of fuel waste that is based on a comprehensive, integrated and economically sound approach for Canada”.⁷⁸ By definition, the decision on the management of the fuel waste necessarily includes handling, treatment, conditioning or transport of the nuclear fuel waste.

Likewise, the establishment of the NWMO and the activities governed by the *NFWA*, including the study of proposed approaches and the annual reports on the NWMO’s activities, relate to the **management** of nuclear fuel waste, which includes the handling, treatment, conditioning or transport of nuclear fuel waste.⁷⁹

The project description under the *IAA* should not exclude key phases of the NWMO’s proposal to manage nuclear fuel waste pursuant to the *NFWA*.

iii. NWMO has Previously Indicated that Transportation of High-Level Fuel to the Site was Part of the Project to be Assessed

The NWMO’s proposal to exclude transportation of high-level nuclear waste from the impact assessment contradicts its previous assurances to the public.

⁷⁴ Anishinabek Nation Resolution, ss. 2, 5-8, 10-14, Resolutions 1, 2

⁷⁵ Chiefs of Ontario, *Resolution Against Nuclear Waste*, paras 3-8, 10-14, Resolutions 1-3.

⁷⁶ *Final Report on 2024 Dialogue Sessions*, pp. 7, 9-10, 19, Recommendation 1 (pp. 12-13), Recommendation 4 (pp. 15-16), Recommendation 7 (pp. 17-18)

⁷⁷ *NFWA*, s. 2.

⁷⁸ *NFWA*, ss. 2 and 3.

⁷⁹ *NFWA*, ss. 6, 12(1), 18(a).

In the IPD, the NWMO includes previous consideration of transportation of the used nuclear fuel. With respect to public health and safety, the NWMO states that a key principle is that the public should be safe from the threat of injuries or deaths due to accidents during used nuclear fuel transportation.⁸⁰ With respect to the principle of community well-being, NWMO has stated that implications for the well-being of communities on the transportation corridor should be considered in the selection and implementation of the management system and related infrastructure.⁸¹

NWMO published *Moving Forward Together: Planning Framework for the Transportation of Used Nuclear Fuel*, in December 2021 and made the following observation:

Transportation is an essential step in the implementation of Canada’s plan. **The used fuel must be transported from where it is currently stored today, on an interim basis, to a centralized location.** While the transportation of used nuclear fuel occurs on a small scale in Canada today, the transportation of all Canada’s used nuclear fuel will be a **significant undertaking** – one that we want Canadians and Indigenous peoples to provide input to and help us plan.⁸² [emphasis added]

NWMO also noted: “Planning and implementing the transportation program is an important component of APM [adaptive phased management]”.⁸³ NWMO committed to involving people in the process of developing transportation plans, particularly Indigenous peoples who have historically not been heard on these issues.⁸⁴ It committed to demonstrating social safety to the public because transportation of used fuel bundles will go through many traditional territories, municipalities and communities.⁸⁵

Ultimately, NWMO stated in its Transportation Plan that “once a site is selected, the regulatory process for the project begins. This includes submission of impact assessment studies and a license application for the site. **The transportation plan, or elements of the plan, will be considered in the regulatory process**”.⁸⁶ [emphases added]

iv. NWMO is Engaging in Prohibited Project-Splitting

Transportation of high-level nuclear waste from the interim storage sites to the DGR site is a key phase and an integral component of the project. On the facts, it is irrefutable that transporting used fuel waste to the DGR site is a fundamental aspect of, and functionally related to, the project. NWMO is improperly engaged in “project-splitting”, which should be rejected by the Agency.

⁸⁰ IPD, p. 85 (PDF p. 112).

⁸¹ IPD, p. 86 (PDF p. 113).

⁸² NWMO, *Moving Forward Together: Planning Framework for the Transportation of Used Nuclear Fuel*, in December 2021, p. 2 (PDF p. 4). (“*Moving Forward*”)

⁸³ *Moving Forward*, p. 5 (PDF p. 7).

⁸⁴ *Moving Forward*, p. 2 (PDF p. 4).

⁸⁵ *Moving Forward*, p. 3 (PDF p. 5).

⁸⁶ *Moving Forward*, p. 30 (PDF p. 32).

In short, there is no independent utility or societal value in transporting used fuel waste throughout Ontario or elsewhere in Canada. This risky physical activity would not be undertaken by or for the NWMO but for the DGR project.

Put another way, transporting used fuel waste to the DGR site is not merely ancillary or subordinate to the DGR project. To the contrary, the DGR cannot fulfill its stated purpose unless and until the used fuel waste is actually transported to the facility.

In *MiningWatch Canada v. Canada (Fisheries and Oceans)*, the Supreme Court of Canada determined that the responsible authority should assess the whole project as proposed by the proponent, rather than limit the review to certain components of the project.⁸⁷ Otherwise, a proponent could engage in “project splitting” by representing just part of a project as the whole undertaking, or proposing several parts of a project as independent projects in order to circumvent additional assessment obligations.⁸⁸

In *Tsleil-Waututh Nation v Canada (Attorney General)*, the Federal Court of Appeal considered the environmental assessment of the proposed expansion of the Trans Mountain pipeline system.⁸⁹ The Board’s decision to exclude Project-related marine shipping did not grapple with the relevant criteria and appeared to be based on a rationale that is not supported by the statutory scheme.⁹⁰ The unjustified exclusion of Project-related marine shipping from the definition of the Project resulted in successive deficiencies in the Board’s report to the Governor in Council, such that it could not qualify as a report under the environmental assessment legislative scheme and it was unreasonable for the Governor in Council to rely on it.⁹¹

In a decision of the Newfoundland Court of Appeal in *Labrador Inuit Assn v Newfoundland (Minister of Environment and Labour)*, the Court of Appeal held that any doubts about whether the phrase “mining development” encompassed more than the work on the actual proposed mine were dispelled by the use of the term “associated activities”.⁹² The Newfoundland Court of Appeal included within the scope of a joint federal and provincial environmental assessment of a mining project the infrastructure required for the project, including roads and an air strip.⁹³ The Project Description submitted by a proponent to the Minister “cannot be determinative of the scope of the project to be reviewed”.⁹⁴

In CELA’s experience, the proposed haul routes for a new landfill, and their impacts and risks, are considered as part of the environmental assessment process. There is no basis to exclude similar activities where the transported waste is high-level nuclear waste.

⁸⁷ [MiningWatch Canada v. Canada \(Fisheries and Oceans\)](#), 2010 SCC 2, [2010] 1 SCR 6, para 35.

⁸⁸ *MiningWatch*, para 40.

⁸⁹ [Tsleil-Waututh Nation v Canada \(Attorney General\)](#), 2018 FCA 153

⁹⁰ *Tsleil-Waututh*, para 409

⁹¹ *Tsleil-Waututh*, para 470, 764-766

⁹² [Labrador Inuit Assn. v. Newfoundland \(Minister of Environment and Labour\)](#), [1997] N.J. No. 223 (CA), para 59

⁹³ *Labrador Inuit Assn*, para 61

⁹⁴ *Labrador Inuit Assn*, para 69

v. Incidental Activities are Included in an Impact Assessment

In the alternative, even if transportation of used nuclear fuel is classified as an “incidental activity” pursuant to the definition of “designated project” in section 2 of the *IAA*, it is clear that transportation should be included within the scope of the project to be evaluated in an impact assessment.⁹⁵ The Agency’s *Guide to Preparing an Initial Project Description and a Detailed Project Description* provides the following criteria to determine whether an activity is “incidental” to the designated project:

- (1) The nature of these activities, and whether they are subordinate or complementary to designated projects
- (2) Whether these activities are within the care and control of projects’ proponents
- (3) If these activities are to be undertaken by third parties – the nature of the relationship between projects’ proponents and such third parties, and in particular, whether or not the proponents have an ability to “direct or influence” the conduction of these activities
- (4) Whether these activities are solely for the benefit of proposed projects’ proponents, or whether they are available for other proponents as well, and
- (5) Any federal and/or provincial regulatory requirements for these activities.⁹⁶

WTNFN submits that several of these factors weigh heavily in favour of including transportation of high-level radioactive waste within the project description for the purposes of the forthcoming impact assessment.

Factor 1 favours inclusion of transportation within an impact assessment. NWMO’s claims that the transportation activities are ongoing and would be expected regardless of the project are misleading and inaccurate.⁹⁷ High-level radioactive waste is currently stored at interim storage facilities at seven nuclear sites and is not being moved off-site in any appreciable scale or volume. But for the proposal to move the high-level waste to a centralized facility as per the project proposal, there would be no mass transportation of the high-level fuel waste for thousands of kilometres to the DGR site.

WTNFN further notes that the transportation routes in this case are lengthy, often between 1,700-2,900 kilometres from the interim storage sites to the DGR site.⁹⁸

Factors 2 and 3 also weigh in favour of including transportation within the impact assessment because transportation of the used nuclear fuel would be in the care and control of the NWMO.

⁹⁵ *IAA*, s 2.

⁹⁶ *Guide to Preparing an Initial Project Description*. Part B: Project Information.

⁹⁷ IPD, p. 50 (PDF p. 77).

⁹⁸ NWMO, Preliminary Transportation Plan, December 2021, p .12 (PDF p. 14).

The NWMO states that it would “assume management responsibility of the used fuel when it is transported from the reactor sites to the central facility for long-term management”.⁹⁹

Factor 4 also weighs in favour of including transportation as part of the project description. The transportation of the high-level fuel is solely for the benefit of the project. There are no other proponents of similar projects and this project is proceeding under the *NFWA*. The NWMO confirmed that no off-site transportation of used fuel is required for extended storage of the wastes at nuclear reactor sites.¹⁰⁰

Factor 5 requires consideration of the regulatory regime that applies to transportation of the nuclear fuel waste. However, the type of analysis required by the *IAA* is not similar or redundant to what is required in other fora. Only the *IAA* requires a cumulative effects analysis and the analysis of the need for and alternatives to the project, alternatives means of conducting a project, and the effects of malfunctions or accidents, along with the other factors in s.22 of the *IAA*.¹⁰¹

In *Tsleil-Waututh*, the proponent similarly argued, and the National Energy Board improperly found, that marine-related shipping should be excluded from the project description because it would be considered by the *National Energy Board Act*.¹⁰² The Board was not required to have regulatory authority over shipping in order to include it as part of the project under the environmental assessment process.¹⁰³ The Federal Court of Appeal overturned this decision to exclude marine shipping, because the Board had not grappled with the relevant criteria under environmental assessment legislation, and appeared instead to rely on a rationale that is not supported by the statutory scheme.¹⁰⁴ The unjustified exclusion of Project-related marine shipping from the definition of the Project resulted in successive deficiencies, such that the Board was found not to have produced a “report” under the legislative scheme and it was unreasonable for the Governor in Council to rely on it.¹⁰⁵

The NWMO has similarly argued in the IPD that transportation of high-level fuel waste is excluded because it is regulated by the CNSC.¹⁰⁶ This purported justification does not address the *IAA* legislative scheme or the requirements of section 22 of the *IAA* or the Agency’s *Guide to Preparing an Initial Project Description and a Detailed Project Description*. In this case, the NWMO is improperly seeking to exclude analysis of the serious health, safety and risks of the long-haul transportation of the high-level fuel waste, and is effectively engaging in project-splitting, which should be firmly rejected by the Agency. This purported exclusion is particularly objectionable since long-range transportation of used fuel waste has not routinely occurred in Canada to date, and is the subject of considerable public and Indigenous concern, and therefore warrants the close public and governmental scrutiny provided by the IA process.

⁹⁹ IPD, pp. 77, 81, 83 (PDF pp. 104, 108, 110).

¹⁰⁰ IPD, p. 79 (PDF p. 106).

¹⁰¹ *IAA*, s. 22.

¹⁰² *Tsleil-Waututh*, para 397

¹⁰³ *Tsleil-Waututh*, para 401-402

¹⁰⁴ *Tsleil-Waututh*, para 409

¹⁰⁵ *Tsleil-Waututh*, para 470, 764-766

¹⁰⁶ IPD, p. vii (PDF p. 8)

(c) The Project Description Pursuant to the IAA must include “Site Characterization”, Decommissioning, Closure and Post-Closure Monitoring

The NWMO is improperly seeking to minimize or reduce the scope of the project listed in the *Physical Activities Regulations* by claiming that “site characterization, decommissioning, closure and post-closure” do not independently trigger the IAA.¹⁰⁷

Although the word decommissioning is not used in the *Physical Activities Regulation* to describe this project, Schedule 1, Part B of the *Information Regulations* requires the project description to include “a list of all activities, infrastructure, permanent or temporary structures and physical works to be included in and associated with the construction, operation and decommissioning of the project¹⁰⁸ and the anticipated schedule for the project’s construction, operation, **decommissioning and abandonment**, including any expansions of the project.¹⁰⁹

The particular terminology and phased approach to licensing pursuant to the *NSCA* provides no legal basis for limiting the scope of the project description or the IA process under the IAA, nor does it support improper project-splitting to avoid analysis of some of the most serious environmental, health and social impacts associated with the NWMO Proposal.

Site characterization consists of examining the site for suitability for the project, including environmental, health, social and economic conditions. The IAA analysis requires the site to be “characterized” in order to assess the potential for adverse federal effects. The NWMO’s attempt to distinguish “site characterization” as being outside the scope of the IPD or the IA process should be rejected by the Agency.

WTNFN further submits that the IA process for the proposed project must also assess the long-term impacts of the project, especially in the context of the health and safety risks of storing high-level nuclear fuel that remains dangerous for hundreds of thousands of years. The safe operation of a DGR necessarily includes the long-term integrity and safety of the storage approach long after the 160 year operation of the DGR facility.

(d) The Impact Assessment Must Include a Thorough Examination of the Need for, Alternatives to, and Alternatives Means of Carrying out the Project

Among other factors, section 22(1)(d), (e) and (f) of the IAA requires the impact assessment of a designated project to examine: (1) the purpose of and need for the designated project; (2) the alternative means of carrying out the designated project that are technically and economically feasible, including through the use of best available technologies, and the effects of those means; and (3) any alternatives to the designated project that are technically and economically feasible and are directly related to the designated project.¹¹⁰

¹⁰⁷ IPD, p. 43 (PDF p. 70).

¹⁰⁸ *Information Regulations*, Schedule 1, Part B(9).

¹⁰⁹ *Information Regulations*, Schedule 1, Part B(11).

¹¹⁰ IAA, ss. 22(1)(d), (e) and (f).

Likewise, Schedule 1, Part B of the *Information Regulations* requires the project description to include a “statement of the purpose of and need for the project, including any potential benefits”¹¹¹, a list of “potential alternative means of carrying out the project that the proponent is considering and that are technically and economically feasible, including through the use of best available technologies”, and a list of “potential alternatives to the project that the proponent is considering and that are technically and economically feasible and directly related to the project”.¹¹²

In this case, however, the NWMO’s IPD does not adequately identify and describe alternatives to or alternative means to carry out the project. Instead, the NWMO is relying on past studies, in particular the *Choosing the Way Forward* study, which did not address the factors listed in section 22 of the *IAA*.¹¹³ A full analysis with public input on alternatives is needed to meet the requirements of the *IAA*.

For instance, the geological setting of the high-level DGR’s proposed location (i.e. crystalline rock) was unfavourably compared to a different location proposed by Ontario Power Generation (“OPG”) for a DGR for low- and intermediate-level radioactive waste in sedimentary rock near the Bruce nuclear generating station. In particular, the OPG’s *Study of Alternate Locations Main Submission (December 2016)* contained the following statements:

- Crystalline rock is typically fractured.¹¹⁴ A greater level of site characterization activity would be needed in crystalline rock than in sedimentary rock in order to characterize the nature of the fractures, define the performance targets for engineered barriers, and assess the properties of the rock in detail for the design and safety case.¹¹⁵
- Additional engineered barrier(s) would likely be required because of the fractured, more permeable nature typical of crystalline rock.¹¹⁶
- The additional handling and transportation of waste to the DGR at the crystalline alternate location of up to 2,000 km one-way represents a likely effect on air quality and greenhouse gases (although impacts on air quality are not likely to be significant).¹¹⁷ The transportation of wastes will also result in the emission of between 1.2 – 11.7 kt of GHGs over the operational life of the facility.¹¹⁸

¹¹¹ *Information Regulations*, Schedule 1, Part B (7).

¹¹² *Information Regulations*, Schedule 1, Part B(12).

¹¹³ IPD, p. 76 (PDF p. 103).

¹¹⁴ Ontario Power Generation, [OPG’s Deep Geological Repository Project for Low & Intermediate Level Waste: Study of Alternate Locations Main Submission](#), December 2016, (“*Study of Alternate Locations*”), p 31 (PDF p 31)

¹¹⁵ *Study of Alternate Locations*, p. 22 (PDF p. 22).

¹¹⁶ *Study of Alternate Locations*, p. 31 (PDF p. 31)

¹¹⁷ *Study of Alternate Locations*, p. 46 (PDF p. 46)

¹¹⁸ *Study of Alternate Locations*, p. 47 (PDF p. 47)

- The crystalline alternate location would have higher water ingress in both the shafts and underground excavations.¹¹⁹
- The potential effects of a DGR at the crystalline location on the aquatic environment is likely higher because there is an increased likelihood of direct habitat removal.¹²⁰
- Transport would result in an increased potential for wildlife strikes.
- It is likely that the margin of safety would be lower than that of the DGR Project at the Bruce Nuclear site if the crystalline rock was more permeable.¹²¹
- The DGR at a crystalline alternate location would also introduce new radiological exposure pathways as the alternate location was not previously a nuclear site; this would be expected to persist through post-closure.¹²²

OPG concluded that the environmental effects of a DGR at a crystalline location (as opposed to a proposal for a DGR at the Bruce site) “are likely to be much higher”.¹²³

The full range of alternatives to the project, including the type of storage and the location of the storage is needed for a robust analysis of the DGR, especially in light of a previously unfavourable comparison of a DGR in a crystalline location as opposed to other locations.

There is also a lack of sufficient detail about alternative means to conduct this project, in part because the first two phases of the project have improperly been excluded from the IPD, but also because of a lack of meaningful information about how the facilities on site at the DGR will actually work. A robust analysis of each phase of the NWMO project is required under the *IAA*.

(e) 160 Years is not a Reasonable Timeframe for the Project

High-level nuclear waste will remain radioactive and a potential health, safety and security risk for hundreds of thousands of years. The NWMO has previously made this clear in its reports, for instance in *Part One A Responsible Path: Our Conclusions*, and *Choosing a Way Forward The Future Management of Canada’s Used Nuclear Fuel (Final Study)*.¹²⁴

As stated in NWMO’s report *Choosing a Way Forward*, “the relative performance of any proposed solution must look out to these geological time frames. Any decision taken today will be implemented over a number of decades, at least. Undoubtedly the program will encounter major changes in science and technology, institutions, values, political perspectives, and

¹¹⁹ *Study of Alternate Locations*, p. 48 (PDF p. 48)

¹²⁰ *Study of Alternate Locations*, p. 51 (PDF p. 51)

¹²¹ *Study of Alternate Locations*, p. 54 (PDF p. 54)

¹²² *Study of Alternate Locations*, p. 54 (PDF p. 54)

¹²³ *Study of Alternate Locations*, p. 54 (PDF p. 54)

¹²⁴ *Choosing a Way Forward*, pp. 15, 18 (PDF pp. 775, 778)

economic and financial considerations.”¹²⁵ In short, the NWMO admitted that it cannot obtain advance proof of the actual performance of the system over thousands of years.¹²⁶

The NWMO in *Choosing a Way Forward* also found that both a short-term and longer-term perspective were needed. As the NWMO highlighted, in the long-term period beyond 175 years, “the vagaries of environmental conditions above ground, combined with human-induced or natural stresses on the environment make any assessment of human-ecological interactions extremely speculative”.¹²⁷

However, the NWMO’s IPD has now narrowly proposed that the project scope is approximately 160 years: 10 years for construction of the facilities, 50-60 years to transport 5.9 million fuel bundles from nuclear sites to the DGR and place it underground, and 100 years to monitor the site.¹²⁸

WTNFN submits that this operational and monitoring timeframe is much too short for *IAA* purposes and insufficiently responsive to the significant risks posed by the project for millennia. Despite the methodological difficulties in this case, the impact assessment must identify, evaluate and mitigate the adverse effects of the project for a longer time frame to reflect the uncertainty and risk over hundreds of thousands of years.

(f) The Scope of the Project Should be Strictly Limited to 5.9 Million Used Fuel Bundles

The NWMO’s IPD clearly states that the project “does not include any capacity beyond the 5.9 million bundles of fuel”.¹²⁹ The project which is being considered for public comment only includes high-level nuclear fuel from the current nuclear fleet.¹³⁰ The *IAA* process should clearly limit the scope of the project to be assessed to this proposed capacity and to this type of waste.

However, the NWMO has improperly stated in the IPD that the capacity of the project may be greatly expanded in the future both to include increases in the inventory of high-level nuclear waste and to include low-level and intermediate-level nuclear waste. Thus, NWMO states that “increases in the proposed inventory would require approval from host communities and applicable regulators” and that once the high-level nuclear fuel is placed in the DGR, they may seek to store additional nuclear waste in the DGR, including low-level waste and intermediate level waste.”¹³¹

The Hosting Agreement between the NWMO and Ignace appears to contemplate a different and even broader project, including “small modular nuclear reactors that have filed a license to construct application with the CNSC on or prior to the Effective Date” and “any low and

¹²⁵ *Choosing a Way Forward*, p. 18 (PDF p. 778)

¹²⁶ *Choosing a Way Forward*, p. 31 (PDF p. 791)

¹²⁷ *Choosing a Way Forward*, p. 159 (PDF p. 919)

¹²⁸ IPD, p. 73 (PDF p. 100)

¹²⁹ IPD, pp. 70, 73 (PDF pp. 97, 100).

¹³⁰ IPD, p. 41 (PDF p. 68).

¹³¹ IPD, p. 73 (PDF p. 100)

intermediate-level nuclear waste produced by operation of the Project that is not further reduced, reused or recycled, or sent to another licensed disposal facility at the end of the Operations Phase”.¹³²

However, absolutely no detail or analysis has been provided to allow for this type of large expansion of the DGR facility, nor to examine the safety of storing waste with different properties and created using new nuclear technologies. This open-ended “bait-and-switch” approach should be rejected by the Agency. The project description should clearly delineate what is being analyzed and what is not, and that a further expansion of the volume or type of waste included at the facility must be subject to a new impact assessment.

(g) Consideration of NWMO’s Commitment to an Informed and Willing Host Community

The NWMO has consistently committed to only proceeding with the project with an “informed and willing host community”.¹³³ It has secured an agreement with Wabigoon Lake Ojibway Nation (“WLON”), whose territory the site is proposed to be located on, and the Township of Ignace.¹³⁴ However, it is unclear how it has defined the concept of an informed and willing host, who should be included as an informed and willing host, and how any communities could be considered “informed” at this early stage of decision-making and with so many key details yet to be determined.¹³⁵ An assessment of the claims that NWMO has secured willing and informed hosts should be assessed, pursuant to section 22(1)(a) of the *IAA*.

The NWMO has repeatedly claimed that WLON and the Township of Ignace are “willing and informed” hosts for the DGR.¹³⁶ However, they also acknowledge that WLON is exercising its jurisdiction through its Regulatory Assessment and Approval Process to review and decide on development within its territory.¹³⁷ Thus, WLON is described as having 87.4% of participating members express a willingness to “proceed into regulatory phases of the project”.¹³⁸

Other key concerns are raised by reviewing the Hosting Agreement between NWMO and the Corporation of the Township of Ignace. The project scope is not defined in the same way as it is defined in the IPD, for instance in relation to the proposed storage of nuclear waste from small modular nuclear reactors and other low and intermediate level wastes.¹³⁹ The Hosting Agreement also defines adaptive phased management (“APM”) as including the following key attributes: “(a) ultimate centralized containment and isolation of Canada’s used nuclear fuel in a deep geological repository; (b) phased and adaptive decision-making; (c) continuous monitoring; (d)

¹³² [Hosting Agreement between the Nuclear Waste Management Organization and the Corporation of the Township of Ignace](#), 2024, (“Hosting Agreement”), Article 2.2.1

¹³³ NWMO, *Guiding Principles*: Online at < <https://www.nwmo.ca/Site-selection/How-It-Was-Developed/Guiding-Principles>> Last viewed February 2, 2026.

¹³⁴ IPD, p. vi (PDF p. 7)

¹³⁵ Hosting Agreement, Articles 2.2.2, 2.2.3, 2.2.4

¹³⁶ IPD, pp. i, vi (PDF pp. 2, 7)

¹³⁷ IPD, p. 3 (PDF p. 30)

¹³⁸ IPD p. 7 (PDF p. 34); see also IPD, p. 15 (PDF p. 42)

¹³⁹ Hosting Agreement, Articles 2.2.1 – 2.2.4

retrievability; and (e) citizen engagement. [emphasis added]” Retrievability is not proposed as part of the IPD by the NWMO.¹⁴⁰

There are many Indigenous nations with potential section 35 interests in the project. The analysis of who must be a willing and informed host is currently too narrow. Many Indigenous communities have serious concerns about and interests in this project, including Indigenous communities downstream from the project and Indigenous communities on the transportation route. As discussed above, Grand Council Treaty #3, Anishinabek Nation, and Chiefs of Ontario have expressed clear opposition to the transportation or disposal of high-level waste in the territories of their members. The views of other Indigenous communities, including those with potential 35 rights engaged by the project, must be part of this assessment.

It is also disputed that the Township of Ignace has authority or jurisdiction to be a host for this project where it is not legally responsible for the site of the DGR project and where the site falls outside of its boundaries. According to the IPD, the Township of Ignace is approximately 35 km to the southeast of the proposed site.¹⁴¹ According to the Agency’s Description of the Project on its Registry, Ignace is 43 kilometres northwest of the Ignace.¹⁴²

The NWMO has identified several communities closer to or the same distance from the proposed site, including the community of Borups Corners (approximately 10 km to the northeast), the community of Dymont (approximately 13 km to the northwest), the community of Dinorwic (approximately 28 km to the northwest), and the Local Service Board (LSB) of Wabigoon Village (Wabigoon) (approximately 35 km to the northwest).¹⁴³

The *IAA* process should also consider the perspective and willingness of larger communities that are only a small distance farther from the site than the Township of Ignace, including the City of Dryden, which is approximately 40 km to the northwest and downstream of the site, the municipality of Sioux Lookout, which is approximately 50 km to the north of the site, and other communities downstream or along the transportation route.¹⁴⁴

(h) Climate Impacts of the Full Scope of the Project

The climate impacts of the project must be considered as part of the overall project.¹⁴⁵ Currently, the NWMO has claimed that the project supports Canada’s climate action.¹⁴⁶ However, this dubious statement – and the climate impacts of the project itself -- must also be considered in the *IAA* process, including the long-haul transportation of the nuclear fuel waste and the greenhouse gas emissions of all of the facilities at the proposed site.¹⁴⁷

¹⁴⁰ Hosting Agreement, Article 1.1

¹⁴¹ IPD, p. 96 (PDF p. 123).

¹⁴² Agency Registry

¹⁴³ IPD, p. 96 (PDF p. 123).

¹⁴⁴ IPD, p. 96 (PDF p. 123).

¹⁴⁵ *IAA*, s. 22(1)(i).

¹⁴⁶ IPD, pp. xiii, 1 (PDF pp. 14, 28)

¹⁴⁷ *Information Regulations*, Schedule 1, part E, s. 23

F. Conclusion

This proposal seeks to address the final management and permanent placement of high-level nuclear fuel waste, which is highly radioactive and dangerous for hundreds of thousands of years, from seven existing nuclear facilities. The proposal has generated serious public and Indigenous concern and opposition. A prudent and precautionary “look before you leap” approach to this project is needed under the *IAA* to ensure that the health and safety of the community, and the environment, is protected for current and future generations.

The NWMO’s IPD does not provide sufficient detail and should be rejected by the Agency. In the alternative, the Agency should require a more Detailed Project Description to be filed by the proponent.

A full, detailed and rigorous analysis of the full range of short- and long-term adverse effects of the proposed project is warranted under the *IAA*. The project seeks to store dangerous materials in a new way. There is an indisputable and significant potential for adverse effects within federal jurisdiction, including from spills, accidents, malfunctions, and malevolent acts. By any objective standard, a comprehensive impact assessment is warranted in this case.

The NWMO’s IPD does not adequately describe the full scope of the project and gives short shrift to the important factors required by the *Information Regulations* and mandated by section 22 of the *IAA*.¹⁴⁸ In particular, the long-range transportation of high level nuclear waste thousands of kilometres to the DGR site must be included in the project to be assessed under the *IAA*.

Please contact the undersigned if you have any questions or require further information about this submission.

Yours truly,

CANADIAN ENVIRONMENTAL LAW ASSOCIATION



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¹⁴⁸ *IAA*, s. 22.