



Algonquins of Pikwakanagan First Nation

June 28, 2021

Seamus O'Regan
Minister of Natural Resources Canada
nrcan.radwastereview-examendechetsradioactifs.nrcan@canada.ca

Re: Algonquins of Pikwakanagan First Nation's Submission on Canada's Radioactive Waste Policy Review

Algonquins of Pikwakanagan First Nation (AOPFN) is writing to submit comments to Natural Resources Canada (NRCan) on Canada's Radioactive Waste Policy Review (RWPR).

We want to start by thanking NRCan for supporting our involvement in the RWPR. Our submission is based on a scoping meeting with AOPFN's Advisory Committee (AAC) held on June 8, 2021, a review of NRCan's plans and past approaches to radioactive waste, and over 60 years experience with nuclear developments in our territory.

This letter is organized as follows. First, we provide background on our experience with, and priorities for, radioactive waste management. Second, we emphasize the importance of aligning Canada's Radioactive Waste Policy (RWP) with the United Nations *Declaration on the Rights of Indigenous Peoples (UNDRIP)*, including Free, Prior, and Informed Consent (FPIC), and the principle of having a "Willing Host" for radioactive waste disposal facilities. Finally, we provide detailed responses to NRCan's RWPR questionnaire.

All of AOPFN's recommendations are in bold text and are numbered for convenience (not order of priority). They are also listed in Appendix 1 at the end of the document.

AOPFN's comments herein are provided notwithstanding that additional, face-to-face, and detailed consultation is necessary between Canada and our nation prior to revising Canada's RWPR. We look forward to hearing back from NRCan about setting up a nation-to-nation consultation and reconciliation process to accomplish this.

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1. AOPFN's experience with radioactive waste

AOPFN have lived in our unceded traditional territory since time immemorial, practicing our ways and living according to our laws and culture. AOPFN continues to assert and exercise AOPFN aboriginal title and aboriginal rights to, and in all parts of, AOPFN unceded traditional territory. AOPFN has an obligation to our members to plan for the future and to ensure self-determination, self-reliance, and self-governance. AOPFN is committed to respecting and protecting our unceded traditional territory and the interests of all our members and, therefore, AOPFN understands the value of establishing relationships while ensuring our Algonquin aboriginal rights, title, and interests are fully recognized, respected, and protected.

Since the 1940s, AOPFN territory has seen the rise of one of Canada's largest nuclear sectors. Until very recently, this has proceeded with no input or consent from AOPFN. The use and disposal of radioactive materials on our territory has had adverse impacts on the environment and constitutes an infringement of our Algonquin aboriginal rights, title, and interests to a degree that has yet to be assessed, let alone recognized or compensated for. Canada's nuclear sector has brought change to our lands and waters, barred access to our traditional areas, and caused real and perceived health risks.

To mitigate further impacts to our rights and interests, to ensure our consent is sought going forward, and establish nation-to-nation relations, AOPFN has developed requirements and principles with respect to the nuclear sector and all projects within it in our territory. The principles reflect our expectations as a nation to share openly and transparently with Canada and all proponents who would seek to build, conduct, and decommission nuclear sector-related projects in our AOPFN traditional territory. [REDACTED]

Recommendation #1: NRCAN consider and integrate AOPFN's requirements and principles related to nuclear sector projects when modernizing Canada's RWP.

2. Aligning Canada's Radioactive Waste Policy with the *United Nations Declaration on the Rights of Indigenous Peoples*

AOPFN supports NRCAN's plans to align Canada's RWP with the *UNDRIP* and to do so in partnership with Indigenous Nations, "through inclusive growth and sharing in Canada's natural resources prosperity and development".¹ According to NRCAN, this relationship would include "...business opportunities, the development of programs and policies, a review of projects, and braiding and weaving Indigenous Knowledge to complement, enhance, supplement, and strengthen western science".²

¹ Government of Canada. 2021. About the Policy Review: <https://www.rncanengagenrcan.ca/en/content/about-policy-review>

² Government of Canada. 2021. About the Policy Review: <https://www.rncanengagenrcan.ca/en/content/about-policy-review>

Two articles of *UNDRIP* are particularly relevant to the RWP: Article 29(2) and Article 32. Article 29(2) requires consent for the storage or disposal of hazardous materials on Indigenous lands or territories, declaring:

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.³

Article 32 requires states to consult and cooperate with Indigenous peoples to obtain consent before approving projects affecting Indigenous lands or territories:

States shall consult and cooperate in good faith with the Indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploration of mineral, water or other resources.⁴

In the past and to the present day, proponents and the site owners, including the Canadian Crown corporation, Atomic Energy of Canada Limited (AECL), have not committed fully to respecting AOPFN's right of FPIC in relation to either of the above *UNDRIP* clauses. This is in opposition to the expectations of *UNDRIP*, to AOPFN's stated expectations in relation to governance and stewardship of our unceded territory, as well as to Canada's commitment to reconciliation with Indigenous peoples. This issue remains a gap in the RWP that must be addressed.

Recommendation #2: Canada will need to work collaboratively with Indigenous groups to determine how to integrate FPIC in Canada's RWP. To begin this process, we support the establishment of a nation-to-nation decision-making table that brings together relevant government departments and interested Indigenous governments. The table will be tasked with jointly developing, reviewing, and implementing the modernized policy. This table will help align Canada's RWP with the principles of *UNDRIP*, especially FPIC, and with principles put forward by Indigenous peoples, including AOPFN's nuclear sector principles.

In addition, AOPFN has the right to be a "Willing Host" for any radioactive waste disposal facility in our unceded territory. We understand "Willing Host" to be best practice in the siting of radioactive waste disposal facilities. Currently, Canada's RWP is silent on this issue as well.

Recommendation #3: In consultation with Indigenous groups impacted by the nuclear sector, NRCan should integrate specific reference to the "Willing Host" principle in the RWP as it relates to the siting of permanent radioactive waste disposal facilities.

3. AOPFN's Responses to NRCan's Policy Review

This portion of our letter provides responses to NRCan's questionnaire. It is organized around the four main policy themes identified by NRCan: a. waste minimization, b. waste storage facilities, c. decommissioning, and d. waste disposal. In each instance, *NRCan's question is in italics and grey highlights*, with AOPFN's initial response below.

³ United Nations. 2008. United Nations *Declaration on the Rights of Indigenous Peoples*: https://www.un.org/esa/socdev/unpfi/documents/DRIPS_en.pdf p. 11

² United Nations. 2008. *UNDRIP*: https://www.un.org/esa/socdev/unpfi/documents/DRIPS_en.pdf p. 12

a. *Waste Minimization*

What are your views on waste minimization? Should Canada continue to use the concept of the waste hierarchy?

We agree that waste minimization should be integrated into a modernized RWP. In particular, we note the critically important role that waste minimization should play until such time that permanent radioactive waste disposal facilities become available in Canada. Given that such facilities have yet to be approved or developed, AOPFN considers it irresponsible to authorize any new developments to generate additional radioactive wastes. In this respect:

Recommendation #4: Canada's modernized RWP specify that future undertakings generating radioactive wastes will be authorized to proceed *only if* appropriate disposal facilities have also been approved. AOPFN acknowledges this requirement would only be viable if sufficient time is provided to allow for the approval of the facilities and therefore, supports a delay period until the requirement would come into effect. Nonetheless, we assert that such a requirement is necessary to promote the timely development of final disposal facilities, which is an urgent matter that should be high on the federal government's priority list.

What should be the role of government, regulatory and waste owners with respect to minimizing radioactive waste?

AOPFN anticipates that most facilities generating radioactive wastes in Canada endeavour to reduce the quantity of waste they generate. However, it is also our understanding that such reductions are essentially voluntary and that there are no formal regulatory requirements and/or incentives prompting waste generation to be reduced to the greatest degree possible (i.e., minimized as opposed to simply reduced). There is, therefore, an opportunity for government and regulatory authorities to implement "carrot and stick" approaches to minimize radioactive waste generation. In other environmental contexts, effective approaches have included regulatory instruments and monetary incentives/penalties (as in the case of carbon pricing). AOPFN is unaware of any reasons why similar approaches would not be effective in minimizing the generation of radioactive waste generation. We therefore strongly recommend:

Recommendation #5: Regulatory instruments and financial incentives to minimize radioactive waste be integrated when modernizing Canada's RWP.

Are there other principles, beyond those identified by the International Atomic Energy Agency, that you feel are important to consider when designing and implementing a waste management program?

The discussion papers provide insufficient information for AOPFN to confirm which specific principles Canada is proposing to incorporate into the modernized policy. For example, the International Atomic Energy Agency (IAEA) has identified numerous principles that are applicable to designing and implementing a waste management program. The following statement indicates that Canada intends to comply with guidance issued by the IAEA when modernizing Canada's RWP:

“As a member of the International Atomic Energy Agency (IAEA) member and in keeping with international requirements, Canada is committed to developing policies based on international practices and IAEA guidance for radioactive waste in a manner that protects human health and the environment without imposing undue burdens on future generations.”⁵

However, AOPFN notes there have been circumstances where Canada has made decisions that are contrary to IAEA guidance. For example, the IAEA concluded that *in-situ* disposal (ISD) of radioactive wastes: “...*may be considered a solution only under exceptional circumstances (e.g., following an accident).*”⁶ Despite this clear IAEA guidance, Canada (through the site owner, AECL, and the site operator, Canadian Nuclear Laboratories Limited (CNL) is proposing to use ISD for the final decommissioning of the reactor at the Nuclear Power Demonstration Project near Rolphton in AOPFN territory.

With respect to principles beyond those identified by the IAEA, we draw attention to the principles outlined by other organizations charged with the management of radioactive wastes. For example, the Nuclear Waste Management Office (NWMO) process is based on the principle of ensuring that radioactive waste disposal facilities will be constructed only in situations where the local communities have self-identified as “willing hosts” and fully understand the impacts of the potential impacts of the project. We note that Ontario Power Generation (OPG) has adopted a similar principle when determining where and how to dispose of its low and intermediate level radioactive wastes.

This implies that Canada’s modernized Radioactive Waste Management Policy should include a principle that radioactive wastes will only be disposed of on the lands of Indigenous people if their approval has been provided. In contrast, Canada has already indicated its intent to dispose of wastes from the Rolphton NPD reactor without the consent of the local Indigenous groups.

In summary, based on the discussion papers and precedent, there is a lack of clarity regarding which principles Canada is proposing to incorporate into its modernized RWP. We therefore recommend that:

Recommendation #6: NRCan clearly articulate its proposed principles in a draft document and, where they deviate from principles established by others (IAEA, NWMO, *UNDRIP*, OPG, etc.) that an appropriate rationale be presented. Only once NRCan provides this information can AOPFN indicate whether the principles are appropriate and comprehensive.

See also AOPFN recommendations #2 and #3 and Appendices 1 and 2, which include additional principles identified by AOPFN that should be meaningfully integrated into the RWP.

1 Government of Canada. 2021. About the Policy Review: <https://www.rncanengagenrcan.ca/en/content/about-policy-review>

⁶ IAEA. 2014. Decommissioning of Facilities: General Safety Requirements. IAEA Safety Standards, General Safety Requirements Part 6, No. GSR Part 6

b. Waste Storage Facilities

What are your views on how radioactive waste is currently stored in Canada?

All current storage of radioactive waste in AOPFN territory is without AOPFN consent and often without AOPFN knowledge. This is completely unacceptable. AOPFN is very concerned that the quantity of radioactive waste requiring storage has continued to accumulate for more than 75+ years, without any facilities being developed to ultimately dispose of such wastes⁷. Further, based on the current status of planning activities for radioactive waste disposal facilities, we consider it unlikely that this situation will change in the foreseeable future. In the opinion of AOPFN, constantly increasing the quantity of radioactive waste requiring storage without making meaningful progress on a national final disposal strategy represents an acute policy failure on the part of the Federal Government and relevant regulatory authorities.

This policy of indefinite storage of increasing amounts of waste in non-permanent facilities is fundamentally unsustainable and therefore unacceptable to AOPFN. In this respect, we strongly recommend that:

Recommendation #7: The modernized RWP include concrete measures to accelerate the creation of permanent waste disposal facilities, without infringing on the rights of potentially impacted parties and communities.

What should be the roles and responsibilities of government, the regulator, and waste owners with respect to radioactive waste storage?

As noted above, AOPFN has concerns regarding the generation of such wastes prior to the establishment of appropriate final disposal facilities. To avoid this situation, we previously recommended that governments and regulators develop policies and practices that:

- (a) Minimize/eliminate new radioactive waste generation unless there are appropriate permanent waste disposal facilities (see recommendations 4 and 5); and
- (b) Prioritize the development of permanent waste disposal facilities (recommendation 7)

In addition, Indigenous groups need to start being respected as governance and stewardship bodies rather than mere "stakeholders", in relation to the transportation, storage, decommissioning and ultimate disposal of radioactive waste. [REDACTED]

¹ With the exception of tailings and waste rock produced by uranium mining.

Recommendation #10: Decommissioning decision-making processes under the modernized policy framework should be based on clearly defined end-state objectives established in a joint forum between Canada, proponent and impacted Indigenous groups, prior to the development of decommissioning proposals (in all but emergency situations). In particular, those objectives should be aligned with likely long-term land-uses that will exist after decommissioning.

Further, and consistent with the precautionary principle, it should be assumed that those future land uses may include scenarios that include: a) extensive human use (including residency) in the vicinity of residual radionuclides; b) that physical containment and institutional controls may not perform as intended; and c) that land users are unaware of any associated risks.

d. Waste Disposal

What do you feel are important policy considerations that should influence the choice of disposal approaches by waste owners and should be considered as part of Canada's radioactive waste policy?

Recommendation #11: The modernized RWP should address the following waste disposal considerations:

- **Precautionary Principle:** The selection of preferred waste disposal approaches must give due consideration to uncertainty related to future land use and the performance of waste disposal facilities. To mitigate the risks associated with this uncertainty, the policy must be grounded in the precautionary principle.
- **Temporal Scope:** The design of radioactive waste disposal facilities should be based on an explicitly defined temporal scope. That temporal scope should correspond to the predicted duration of the radioactive waste hazard. Selected radioactive waste disposal approaches must be proven to perform effectively throughout the entire temporal scope, without active care and maintenance.
- **Resiliency:** Selected radioactive waste disposal approaches must be proven to be resilient under the full range of potential environmental conditions that could credibly occur during the temporal scope. These include but are not limited to geomorphic change (e.g., through glaciation or hydrology) and climate change.
- **Passive Management:** To the greatest degree possible, radioactive waste disposal approaches should not require active care and maintenance and/or institutional controls to limit radioactivity exposures to humans or other biota.

What should the roles and responsibilities of government, the regulator, and waste owners with regards to radioactive waste disposal facilities, including: Funding, Closure of a disposal facility and its institutional control, and Indigenous and Public Engagement and involvement in site selection and post-closure?

Recommendation #12: Rules and responsibilities related to each of the following need to be built into the updated RWP:

- **Funding:** The policy must ensure that adequate funding is provided by the proponent or owner to manage the long-term hazards of radioactive wastes. This includes both the initial capital costs of constructing disposal facilities and any long-term investments that may be necessary to ensure wastes remain appropriately contained in the future. All required funds should be deposited in a form (e.g., financial trust) that prevents it from being reappropriated for other purposes. This requirement should also apply to government-funded waste-disposal projects; government priorities change over time and there needs to be assurances that sufficient funds are secured for long-term management of radioactive wastes.
- **Consent:** Consistent with best practices in radioactive and hazardous waste management, facilities should only be constructed at locations where there is a “willing host” for the facilities, especially from rights-holding Indigenous groups. Government and regulators should only authorize projects to proceed when consent is achieved.
- **Compensation:** Any communities that have the potential to be impacted by radioactive waste disposal (whether voluntarily or not) should be adequately compensated for all such impacts. Compensation should be provided for both bio-physical impacts and psycho-social impacts experienced by the communities. Government and regulators should only authorize projects to proceed in instances where adequate compensation has been provided.

Closure and Next Steps

As a rights-holding First Nation with a legacy of impacts from Canada's historical approach to radioactive waste management in our unceded territory, AOPFN is committed to – and has a right to – work with NRCAN and any other relevant government agencies to ensure that the path Canada takes to modernize its approach to radioactive waste is truly based on the principles of reconciliation and UNDRIP committed to by the federal government.

We look forward to working with NRCAN to establish this goal and to further discussing how to implement the recommendations provided in this letter.

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Algonquins of Pikwakanagan First Nation

cc: Chief and Council, Algonquins of Pikwakanagan First Nation

APPENDIX 1

AOPFN Recommendations to NRCan

Recommendation #1: NRCan consider and integrate AOPFN's requirements and principles related to nuclear sector projects when modernizing Canada's RWP.

Recommendation #2: Canada will need to work collaboratively with Indigenous groups to determine how to integrate FPIC in Canada's RWP. To begin this process, we support the establishment of a nation-to-nation decision-making table that brings together relevant government departments and interested Indigenous governments. The table will be tasked with jointly developing, reviewing, and implementing the modernized policy. This table will help align Canada's RWP with the principles of *UNDRIP*, especially FPIC, and with principles put forward by Indigenous peoples, including AOPFN's nuclear sector principles.

Recommendation #3: In consultation with Indigenous groups impacted by the nuclear sector, NRCan should integrate specific reference to the "Willing Host" principle in the RWP as it relates to the siting of permanent radioactive waste disposal facilities.

Recommendation #4: Canada's modernized RWP specify that future undertakings generating radioactive waste will be authorized to proceed *only if* appropriate disposal facilities have also been approved.

Recommendation #5: Regulatory instruments and financial incentives to minimize radioactive waste be integrated when modernizing Canada's RWP.

Recommendation #6: NRCan clearly articulate its proposed principles in a draft document and, where they deviate from principles established by others (IAEA, NWMO, *UNDRIP*, OPG, etc.), that an appropriate rationale be presented. Only once NRCan provides this information can AOPFN indicate whether the principles are appropriate and comprehensive.

Recommendation #7: The modernized RWP include concrete measures to accelerate the creation of permanent waste disposal facilities, without infringing on the rights of potentially impacted parties and communities.

Recommendation #8: Canada integrate requirements into the RWP for proponents to seek explicit permissions of impacted Indigenous groups prior to transporting and storing radioactive wastes through or in their traditional territories.

Recommendation #9: The following critically important policy considerations should be incorporated into Canada's modernized RWP⁹:

- Intergenerational Impacts – Consistent with IAEA and other environmental guidance, decommissioning strategies should not result in undue environmental, health and safety, financial and other impacts to future generations.
- Institutional Care – Decommissioning strategies should rely on long-term institutional care only in situations where approaches that have more passive long-term care requirements are not technically viable and effective.
- Consolidation – To the greatest degree possible, radioactive wastes should be disposed in a small number of centralized, permanent and purpose-built facilities.

Appendix 1 continued

- Willing Hosts – Decommissioning strategies must be acceptable to local communities, as confirmed through plebiscites, referenda or other similar mechanisms.
- Compensation – Impacted communities should be adequately compensated.
- Indigenous Interests – The modernized policy framework must fully conform with Canada’s international commitments as they relate to Indigenous interests. This includes *UNDRIP* which requires that Canada “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”.
- In-Situ Decommissioning – In-situ decommissioning needs to be recognized as a poor to unacceptable choice for ultimate disposal of nuclear reactors, including “legacy” reactors, in keeping with IAEA’s guidance on this topic, and the reality that this is the creation of a permanent, unplanned, near surface, radioactive waste disposal facility that is by definition more risky than deep geological deposition.

Recommendation #10: Decommissioning decision-making processes under the modernized policy framework should be based on clearly defined end-state objectives established in a joint forum between Canada, proponents and impacted Indigenous groups, prior to the development of decommissioning proposals (in all but emergency situations). In particular, those objectives should be aligned with likely long-term land uses that will exist after decommissioning.

Further, and consistent with the precautionary principle, it should be assumed that those future land uses may include scenarios that include: a) extensive human use (including residency) in the vicinity of residual radionuclides; b) that physical containment and institutional controls may not perform as intended; and c) that land users are unaware of any associated risks.

Recommendation #11: The modernized RWP should address the following waste disposal considerations:

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- Passive Management: To the greatest degree possible, radioactive waste disposal approaches should not require active care and maintenance and/or institutional controls to limit radioactivity exposures to humans or other biota.

Recommendation #12: Roles and responsibilities related to each of the following need to be built into the updated RWP:

- Funding: The policy must ensure that adequate funding is provided by the proponent or owner to manage the long-term hazards of radioactive wastes. This includes both the initial capital costs of constructing disposal facilities and any long-term investments that may be necessary to ensure wastes remain appropriately contained in the future. All required funds should be deposited in a form (e.g., financial trust) that prevents it from being reappropriated for other purposes. This requirement should also apply to government-funded waste-disposal projects; government priorities change over time and there needs to be assurances that sufficient funds are secured for long-term management of radioactive wastes.
- Consent: Consistent with best practices in radioactive and hazardous waste management, disposal facilities should only be constructed at locations where there is a “willing host” for the facilities, especially from rights-holding Indigenous groups. Government and regulators should only authorize projects to proceed when consent is achieved.
- Compensation: Any communities that have the potential to be impacted by radioactive waste disposals (whether voluntarily or not) should be adequately compensated for all such impacts. Compensation should be provided for both bio-physical impacts and psycho-social impacts experienced by the communities. Government and regulators should only authorize projects to proceed in instances where adequate compensation has been provided.

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