

May 27, 2021

Jim Delaney
Director
Uranium and Radioactive Waste Division
Natural Resources Canada
580 Booth Street
Ottawa, ON K1A 0E4

Subject: **Modernizing Canada's Radioactive Waste Policy**

Thank you for the opportunity to participate in this important national policy review process, which has engaged many of our members and partners in recent months.

The Canadian Nuclear Association (CNA) has been the national voice of the Canadian nuclear industry since 1960. Working with our approximately 100 diverse members, the CNA promotes the industry nationally and internationally, works with governments on policies affecting the sector and endeavors to increase awareness and understanding of the value nuclear technology brings to the environment and economy as well the impact it has on the daily lives of Canadians.

We have read the discussion papers and the written submissions by our members and partners, including AECL, OPG, NB Power, Bruce Power and the SMR Technology Forum. The engagement phase of the process, including the roundtable discussions, provided good opportunities for the various players to share their views. As the engagement phase reaches its end, the CNA would like to offer some high-level observations and to add some points that, in our view, bear further emphasis.

1. Canada's Policy Framework is Appropriate, but would Benefit from More Flexibility

We note a strong sense within Canada's nuclear industry that the existing Radioactive Waste Management Policy is appropriate and is well applied. At the same time, change is ongoing both in the nuclear fuel cycle and across the energy industries.



Canada's Policy framework would benefit from greater flexibility in the future as it responds to the demonstration and deployment of new reactor types, including the anticipated development of fusion technology, and the ongoing evolution of medical applications. The CANDU Owners Group SMR Technology Forum (COG SMRTF) have addressed this need in some detail in their written submission.

Particularly where technologies and business practices are evolving with considerable speed, efforts to make policy and regulation more flexible can deliver considerable public benefits. Experience in recent decades in air travel, communications and financial services has demonstrated that greater flexibility has not resulted in a decrease in safety performance or eroded consumer protection. Canada's nuclear industry and Canada's policy and regulatory frameworks should rely on and benefit from such experience.

2. While Waste Minimization is Important, Disposal Options will Always be Needed

Canada's nuclear industry is proud to be held to very high standards and this is reflected in the importance waste minimization has been given in this policy discussion. Minimizing waste is good business and the industry, where reasonably practical, will continue to consider and implement technologies and practices that can reduce volumes of waste, including used fuel. That being said, there is a need for reasonable expectations about how much minimization will be achievable. In this, as in other human activities, all of which produce some waste, zero waste is physically unattainable.

Therefore, the policy must recognize, that halting waste management and disposal projects will not eliminate or reduce wastes because zero waste is physically unachievable. This is also true in other clean energy industries, such as solar industry in which panel elements are not, and will not be for the foreseeable future, fully recyclable. Disposal of some by-products and wastes will always be necessary.

The policy must set reasonable public expectation in line with this reality. To this end, it is particularly important not to obscure the final nature of a site (such as, for example, mine and mill tailings) by describing the site as "storage," when not only has it been assessed and approved as final, but also no further disposal step is feasible or contemplated.

3. Jurisdiction matters: Uranium Mine and Mill Waste should be Left Out of this Review

Jurisdictional issues can have great practical consequences for industry. In Canadian energy policy and regulation, federal-provincial jurisdictional conflict has for decades pushed regulatory questions into the political sphere, blocked practical business decisions, and suppressed opportunities for workers and communities. Canada's federal and provincial governments have never been in greater need of each other's cooperation than today.

CNA understands that the Policy Review was to identify gaps in, or requirements to update, Canada's Radioactive Waste Management Policy. The Canadian Nuclear Safety Commission classifies uranium mine and mill wastes as "normally occurring radioactive materials" that ultimately become the purview of the provinces. This should take these wastes outside the scope of the federal policy review.

At a minimum, the review should acknowledge that there are no current identifiable gaps in the federal waste management policy as it relates to uranium mine and mill wastes and that no changes to the federal Radioactive Waste Management Policy, or the radioactive waste management classification system as it relates to uranium mine and mill wastes, are required.

CNA would make a related argument at the international level. International commitments are important, and forums, such as the International Atomic Energy Agency (IAEA) provide Canada with many opportunities to shape the world for the better. At the same time, international bodies like the IAEA can only be as strong and sound as their member states, and they have finite expertise and resources. Creating new pathways, or widening existing pathways, to IAEA inspections and safeguards in Canada may not be in the Canadian or global public interest, as it can misdirect IAEA resources to sub-optimal uses while potentially burdening Canadian players with unnecessary costs in the absence of any identified new or additional risks or safety benefit to Canadians.

If the policy review suggests major changes to the Radioactive Waste Management Policy or the waste classification system for uranium mine and mill waste this will pave the way for the IAEA to "safeguard" these facilities where there is no realistic risk that such wastes have any potential use in the nuclear weapon industry. There are legitimate concerns that this could end up imposing wasteful inefficiencies and costs on both Canada and the IAEA itself.

An example of these inefficiencies is the safeguarding of radioactive wastes with a low uranium concentration. Requiring industry to manage the accountability associated with these wastes, which have no realistic opportunity for proliferation, is very time consuming and requires more oversight from both the CNSC and IAEA. Industry has also seen a substantial increase in the time required to manage these waste inventories over the past year to fulfill IAEA demands that have no foundation in a risk-based or evidence-based regime

More generally, for the same reasons, as long as the IAEA has finite resources and as long as there are more problematic nuclear safety and proliferation issues in the world, Canada should be cautious about inviting, encouraging or facilitating IAEA inspections beyond the minimum required to demonstrate Canada's support for the IAEA and its principles.

Thank you again for the opportunity to participate in Modernizing Canada's Radioactive Waste Policy. We look forward to the next phases of the process.

Sincerely,

[Redacted signature]

[Redacted name]

Canadian Nuclear Association