

## Comments on Modernizing Canada's Draft Policy for Radioactive Waste Management and Decommissioning

Overall, the Draft Policy for Radioactive Waste Management and Decommissioning is disappointing and fails to provide the detailed regulatory framework that will allow it to meet any of the three principles that are listed as priorities:

- (i) health, safety, security and protection of the environment;
- (ii) openness, transparency and inclusive engagement to encourage the timely development of the necessary infrastructure for effectively dealing with all of Canada's radioactive waste and decommissioning activities; and
- (iii) global excellence in the fields of radioactive waste management and decommissioning.

The Draft Policy does not reflect the information, analysis and content provided during any of the consultation sessions that I attended during 2021. Instead, it contains a lot of rhetoric and not much substance. Many vague, subjective, undefined, and ambiguous terms and phrases are used, such as: "openness, transparency and inclusive engagement", "encourage the timely development", "ensure optimal protection" (1.6), "as far as practicable" (1.8), "solutions that are commensurate with their risks" (1.9), "within an appropriate timeframe" (1.10), "recognizing that alternative approaches may be justified" (1.10), "encourage the timely development of", "effectively manage" (2), "recognizes and fulfills its obligations" (2.3), "respecting international guidance" (3.3) and "implementation of alternative approaches" (3.3).

These vague terms and phrases are used instead of requirements to adhere to standards and criteria. Aspirations to meet the Draft Policy's three principles, including "global excellence", are not supported by the content of this document.

Following are some further comments on the content of the Draft Policy:

- **The federal government must establish an independent, arms length, radioactive waste management and decommissioning agency.** Section 1.2 erroneously states that the "federal government has established a legislative and regulatory regime, centered on an independent nuclear regulator, to oversee and regulate radioactive waste management and decommissioning". The removal of Linda Keen, president and CEO of the Canadian Nuclear Safety Commission (CNSC), January 15, 2008 by an Order-in-Council "without reason or cause" contradicts this statement. She was removed following a regulatory decision, made by the CNSC, that the Prime Minister and the nuclear industry disagreed with. In addition, in order to avoid any actual or perceived conflict of interest, the members of an independent regulatory agency must be unconnected to the nuclear industry. The CNSC does not meet these criteria.
- **The federal government needs to accept the responsibility for developing and implementing a plan to maintain institutional control**

**re preserving records, knowledge and memory of radioactive waste for hundreds of thousands, potentially millions, of years.** The rhetoric in section 1.4 is too vague and lacks even basic information on how the federal government will ensure *“that responsibility for maintaining institutional controls over the very long term is assigned to an appropriate entity”*. At a minimum, the “appropriate entity” (ie: Ministerial Department) should be named in the Draft Policy and provided with sufficient resources to draft and implement a plan.

- **Section 1.5 falsely assumes that it is possible to:**
  - 1. eliminate the weapons proliferation risk inherent in the process of extracting plutonium from used nuclear reactor fuel (aka “reprocessing”)**
  - 2. deploy reprocessing technology in a manner that respects environmental considerations.**

There is considerable evidence that reprocessing spent nuclear fuel creates nuclear weapons proliferation risks and international relations concerns, and that reprocessing facilities are highly contaminating of the local environment. In addition, security concerns surrounding the extraction of plutonium would contradict the Draft Policy’s commitment to “openness, transparency and inclusive engagement”. Discussion on reprocessing plutonium should not be included in this Draft Policy document. Debate re lifting the ban (imposed by Prime Minister Pierre Elliot Trudeau) on extraction of plutonium belongs in the Parliament.

- **An detailed strategy for radioactive waste management and decommissioning should be developed by the federal government, overseen by an independent regulatory agency, after the Policy for Radioactive Waste Management and Decommissioning is completed.** This strategy needs to include legally binding regulations for waste management facilities and decommissioning activities. It also needs enforcement mechanisms to make sure that the regulations are followed. Allowing waste producers and owners to develop the strategy, as outlined in section 2.2, compromises all three principles listed above, especially the prioritization of “health, safety, security and protection of the environment”.
- **The federal government must acknowledge and respect the five principles for radioactive waste management formulated by the Anishinabek/Iroquois Alliance:** no abandonment; monitored and retrievable storage; better containment, more packaging; away from major water bodies; no imports or exports of radioactive wastes.
- **The federal government needs to develop common national standards for characterizing, classifying and documenting radioactive waste, in compliance with, or exceeding, International Atomic Energy Agency standards. It also needs to maintain meticulous records documenting:**
  - **How much radioactive waste there is in Canada.**
  - **What exactly it consists of.**

- **When, where and how it has been, and continues to be produced, stored, packaged, contained and transported in Canada.**
- **What contaminants, such as heavy metals, are packaged with the radioactive waste.**

Currently, Canada is not compliant with its international obligations to provide a detailed report on its radioactive waste every three years. Canada only reports its volume of waste with no comprehensive inventory of various amounts, types and levels of radioactivity. The Draft Policy contains no commitment to address this, develop national standards or maintain meticulous records.

- **The federal government needs to ensure that:**
  - **radioactive waste packages and unpackaged radioactive waste comply with established requirements and criteria, are properly emplaced in a well-monitored storage or long-term management facility, and are in a form that can be retrieved should problems arise.**
  - **there is no transport of radioactive wastes unless there has been full public consultation and transparency about a destination for that waste, which should be a secure approved long term management facility.**
- **The federal government should respect international guidance in the area of radioactive waste management and decommissioning and thus ban the *in situ* decommissioning (entombment) of reactors in respect of the directives of the International Atomic Energy Agency. This applies to both current reactors and new reactors of any size.**
- **The federal government should ban the import and export of radioactive waste.**
- **Radioactive waste is an intergenerational burden and management of the waste produced to date will be a burden to thousands of future generations.** Section 2.2 makes the false assertion that the Policy for Radioactive Waste Management and Decommissioning can “avoid shifting responsibility for these activities to future generations”.
- **Radioactive waste must be stored, contained and managed indefinitely.** It can never be disposed of, as referred to in section 3.4.

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