

Presentation of the Ralliement contre la pollution radioactive to the House of Commons Environment Committee

February 15, 2022

A. Our recommendations

The Government of Canada is the main promoter of the nuclear industry that it itself created. Its approach remains the same:

- exploit all the profitable aspects of the nuclear industry
- postpone all the costs of waste management as far as possible
- deny any risk of nuclear weapons proliferation

This is a **fundamental conflict of interest** that we must try to mitigate as much as possible.

1) To achieve that, there must be a clear separation between the departments and agencies responsible for promoting the nuclear industry and those responsible for protecting the health and safety of the public and the environment.

Radioactive waste management should no longer be the responsibility of Natural Resources Canada but rather of the Department of Environment and Climate Change. The Canadian Nuclear Safety Commission (CNSC) would still retain its expertise, budget and current mandate, but under the Department of Environment and Climate Change. The new radioactive waste management agency should be independent of the nuclear industry.

2) Canada must keep the polluter-pays rule but couple it with much more prescriptive regulations. Current CNSC regulations leaves it up to polluters to propose solutions. This is putting the fox in charge of the chicken coop!

3) All licensees (owners or holders of substances contaminated with radioactive elements) should be required to provide a detailed inventory of all radioactive contaminants with a detailed description of their radioactivity. The current lax regulations let the owners of radioactive waste adopt their own waste classification, in heterogeneous ways, so it is difficult to identify risks and solutions required across Canada.

4) Canada must give the highest priority to finding a solution for intermediate-level radioactive waste. For example, the NPD reactor near Rolphton cannot be dismantled but only entombed because there is no waste disposal site for intermediate-level

radioactive waste. This is contrary to the directives of the International Atomic Energy Agency.

5) We recommend that Canada ban all imports of foreign radioactive waste, even for used radioactive medical sources, which are generally short-lived and which should remain in the countries that purchased them. It is unacceptable that Canada collects almost all the Cobalt-60 waste on the planet to bury it on the edge of the Ottawa River. It is also unacceptable that Chalk River imports all the radioactive tritium waste from discarded self-illuminating light sources in the United States.

6) We recommend that the Canadian Nuclear Safety Commission stop misleading the public by including highly radioactive waste among low-level waste. Cobalt-60 sources are an example. Inventories of intermediate-level radioactive waste have been drastically reduced by modifying the definitions of waste types. This is unethical and irrational.

7) We recommend a regional environmental risk assessment for the Ottawa River sites. There is concern that so much radioactive waste from across Canada is being transported to Chalk River. This increases the radioactive risks in a region that already has too much radioactive waste and poses a threat to the quality of drinking water for millions of people in Ontario and Quebec.

B. Key issues of mismanagement of radioactive waste

- In 1945, Canada commissioned its first nuclear reactor at Chalk River. Now, 75 years later, Canada does not yet have a single permanent management site for any category of radioactive waste: low-level, intermediate-level or high-level. There is only interim storage for 50 years.
- Worst of all, nothing is planned for intermediate-level radioactive waste. The NPD reactor near Rolphton cannot be dismantled because there is no waste disposal site to receive such radioactive debris. This is why Canada now wants to entomb this reactor in concrete in situ, which is contrary to the directives of the International Atomic Energy Agency.
- The Canadian Nuclear Safety Commission is charged with protecting our citizens and our environment against the excesses and risks of nuclear energy and radioactive pollutants. However, last year the Commission was campaigning for new small modular nuclear reactors to be exempted from environmental assessments in Bill C-69. Thus, there will be no independent public assessment of the dangers of radioactive pollution hazards from such reactors. With such a duplicitous defender, public health is not protected.

- The Department of Natural Resources Canada has undertaken a consultation on radioactive waste management policy in Canada. However, this consultation is biased because many important recommendations from citizens have been completely ignored, perpetuating the status quo of mismanagement. In addition, the Minister gave the NWMO a mandate to consult the population about a radioactive waste strategy before the policy has been defined. We have never been told about the strategy that the NWMO and the nuclear industry jointly developed five years ago. The new strategy proposed by the NWMO would cover only about 10% of Canada's radioactive waste, as those projects previously outlined are not covered, nor are future wastes from small modular nuclear reactors taken into account. This is a very narrow mandate.

C. Concerns about the projects at Chalk River

- There were two major nuclear accidents at Chalk River, in 1952 and 1958, and radioactive wastes have been slowly leaking through the soil into the Ottawa River ever since. There is serious concern about large quantities of radioactive wastes from across Canada that are being transported to Chalk River and grouped there.
- The Near Surface Disposal Facility (NSDF) project at Chalk River is designed to isolate from the biosphere 1 million cubic metres of "low activity radioactive waste." The Canadian Nuclear Safety Commission (CNSC) has never asked for any proof that this facility will significantly reduce the radioactive contamination of the site. In fact, 99.9% of the radioactivity of the buried waste will be from radioactive waste already packaged and in interim storage; these wastes come from every part of Canada and even from abroad in the case of used radioactive sources. The Canadian Nuclear Laboratory (CNL) has chosen to use the NSDF to save money and time, but some of the wastes will last longer than the installation.
- Even worse, 98% of the radioactivity in the NSDF will be due to Cobalt-60, a significant risk for the site's workers. This Cobalt-60 comes from used, sealed medical sources from everywhere in the world and collected by Canada to bury in Chalk River. None of the four successive versions of the environmental impact study referenced this fact. The Commission is well aware that Chalk River will be the planet's dumping ground for Cobalt-60 but has never disclosed it to the general public, contrary to its legal responsibility to provide Canadians with credible and unbiased information.
- Some sources of Cobalt-60 are so radioactive that they are classified as intermediate-level waste. They need to be enclosed in shielded containers to protect workers. The NSDF at Chalk River is supposed to store only low-level radioactive waste. The problem is that the acceptance criteria for future waste do not set any maximum

level for the radiation from Cobalt-60; this is unacceptable and against international guidelines! The Ralliement contre la pollution radioactive asked CNL to modify these criteria. They promised to do so almost a year ago. We are still awaiting a copy of the revised NSDF WAC (Waste Acceptance Criteria) to clarify specific aspects of the IAEA guidelines, which will be applied in the acceptance of disused sources.

We urge you to diligently examine these serious issues. Parliament must exercise its duty to oversee these long-term risks and defend the public interest.

Ginette Charbonneau, physicist

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Spokespersons for the Ralliement contre la pollution radioactive



Our mission is to act voluntarily and collectively to promote responsible solutions for radioactive waste management that are safe for the environment and the health of the population in Canada.