

Canadian Impact Assessment Registry reference number 88774

Canada's Used Nuclear Fuel Project - Comments for the preparation of a potential assessment - Juan P. Unger, Ottawa, 4 February 2026

Dear Madams, Sirs,

I present the following comments in the hopes they be incorporated in the preparation of an assessment for a possible Deep Geological Repository (DGR) for Canada's Used Nuclear Fuel.

1. - **The Deep Geological Repository (DGR) project** is of such a large, costly, dangerous and long-lasting scope that it **warrants a full Impact Assessment** before any particular designs are prepared, let alone decided on.

The descriptions, analyses, projections, and assessments of all aspects of the project, including those mentioned in these comments, must take into account potential increased strength and incidence of extreme weather events and natural disasters.

Such approach must cover the entire expected period of operation of the DGR and after its expected closure, particularly for matters related to continuous monitoring, management, alert and incident or emergency response measures and resources.

2.- **The transportation of radioactive waste to or from the DGR must be included in an Impact Assessment**, with a thorough and detailed description and analysis of the potential conditions, hazards, incidents and impacts that the route(s) and modes of transportation could entail.

The DGR's very reason for being and its operation are about receiving radioactive waste, and there is no actual operative DGR without the radioactive waste being transported to it, so it would render an Assessment woefully incomplete and outright dishonest to not include the transport of radioactive waste in the DGR's Impact Assessment.

3. **A proper Impact Assessment must include the potential status, scenarios and impacts several centuries into the future**, not just the span of time the active reception and placement of waste will take place, given that many impacts and hazards associated with the project will continue to impact or present significant hazards for centuries, if not millennia, and will be imposed on future generations. Such hazards would include the external venting and/or other potential forms of release, environmental dispersal and accumulation of radioactive particles, as well as other hazards intrinsic to the project such as possible corrosion of caskets, cavern flooding or collapse, to name some.

The long-term risk and impact assessment must include potentially required maintenance, mitigation and remedial actions associated with such hazards, with the potential cost and realistic expected effectiveness of such actions. All of these must be

expressed in current dollar value estimates and **based on today's existing and available resources and technologies, not speculative or aspirational resources and technologies that are not available or do not currently exist.**

4. An Impact Assessment must include a thorough description and analysis of expected and also less likely but **possible amounts, spread, bioaccumulation, environmental and human health risks of short, medium, long and very long term radioactive emissions, leaks and releases must be included.**

These must include expected and potential amounts, their potential dispersal routes and patterns, accumulation and resulting accumulated radioactivity levels. All must be **expressed in amounts or possible ranges of amounts, and not in vague or general adjectives or other terms** (i.e., significant/not significant, high/low, etc.), and also not in terms such as Canada's current regulatory allowable release limits (i.e., above/below allowable limits, etc.). **Terms such as "allowable limits" do not actually reflect "safe limits" and do not allow any meaningful calculation of risk** (in addition to being arguably obsolete and meaningless in terms of actual human health impact and environmental safety risks).

5. **An Impact Assessment must include a thorough description and analysis of the monitoring and response measures and resources that would be required for real-time and continuous reporting, public accountability, alerts and remedial responses** through at least several centuries past the current one. This, given that the hazards and lethality of the waste contained and its expected or potential radioactive internal and external releases will not disappear and will continue to be present for centuries after the DGR is formally closed or otherwise ceases to receive waste.

This must also **include the requirements and risks** for mechanisms and resources that will be required **for ensuring an effective continuity of monitoring, maintenance, public accountability and response capabilities** for the DGR and any potentially impacted areas across centuries, including potential physical, economic, political and social disruptions, resulting from extreme weather, war or political upheaval, and/or breakdown of national governance structures which are currently expected to support the DGR project in the near future.

Sincerely,

Juan P. Unger
Ottawa

====END OF COMMENTS====