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**Written submission from the
Nuclear Transparency Project**

**Mémoire du
Nuclear Transparency Project**

**Regulatory Oversight Report on the
Use of Nuclear Substances in
Canada: 2021**

**Rapport de surveillance
réglementaire sur l'utilisation
des substances nucléaires au
Canada : 2021**

Commission Meeting

Réunion de la Commission

November 1st, 2022

Le 1^{er} novembre 2022



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transparency
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Submitted via email

October 3, 2022

To President Velshi and Members of the Canadian Nuclear Safety Commission,

Re: Canadian Nuclear Safety Commission Staff's Regulatory Oversight Report
on the Use of Nuclear Substances in Canada: 2021

We would like to begin by thanking the Commission for this opportunity to provide comments on this Regulatory Oversight Report (ROR). We would also like to recognize the efforts of Canadian Nuclear Safety Commission (CNSC) staff, multiple Canadian civil society organizations, and Indigenous Nations for their informative publicly available materials and submissions on this matter.

About NTP

The Nuclear Transparency Project (NTP) is a Canadian-registered not-for-profit organization dedicated to supporting open, informed, and equitable public discourse on nuclear technologies. NTP advocates for robust public access to data and other types of information and helps to produce accessible analysis of publicly available information, all with a view to supporting greater transparency in the Canadian nuclear sector.

NTP is comprised of a multi-disciplinary group of experts working to examine the economic, ecological, and social facets and impacts of the Canadian nuclear sector. The organization produces public reports, academic articles, and other publicly accessible resources. It also regularly intervenes in nuclear regulatory decision-making processes. The organization seeks to support youth and early career scholars, especially those from underrepresented communities in their respective disciplines. NTP also recognizes a responsibility to model the transparency and accountability practices for which it advocates. We are committed to interdisciplinary, cross-sectoral, and equitable collaborations and dialogue between regulators, industry, civil society, members of host and potential host communities, as well as academics and professionals from science, technology, engineering and math (STEM) fields, the social sciences, and humanities.

About this intervention

NTP's intervention was made possible by CNSC funding through its Participant Funding Program (PFP). These submissions were drafted by NTP founder and coordinator Pippa Feinstein, JD LLM in collaboration with biologist and PhD candidate Tamara Fuciarelli MSc and Alan Rial, M. Eng. who performed NTP's data analysis.

Our submissions have been divided into three parts: the first part contains a review of the current ROR; the second part contains recommendations to increase the amount of publicly accessible data collected by facilities that use nuclear substances; and a third part which contains NTP's more general recommendations to improve the ROR intervention process for future ROR meeting proceedings.

PART ONE: NTP's review of the ROR

There are several areas in which it appears CNSC staff have taken past intervenor feedback into account and prepared a more responsive ROR. More information relating to the risk-informed planning process and CNSC staff's approach to assessing environmental impacts are both greatly appreciated. More general, the report was clearly and accessibly written with some helpful use of graphics (especially the diagram showing the geographic distribution of facilities covered by this ROR).¹

That being said, NTP recommends additional caution around the use of minimizing language to describe facilities' environmental impacts and doses to workers and the public. Future RORs should include more environmental and other data (or references via hyperlink to online sources of relevant data). This data in turn should speak for itself and be presented in such a way that it supports a robust public understanding of facilities' operations and impacts. Such an approach would facilitate the ability of members of the public to gauge the relative performance and oversight of facilities.

Recommendation 1: that minimizing descriptive language relating to facility operations and environmental impacts only be used (if at all) where actual data and relevant regulatory limits and guidelines have also been provided.

NTP has registered general concerns with "graded" and "risk-informed" approaches to regulatory oversight in the past. The organization is similarly concerned about CNSC staff's graded approach to applying REGDOC 2.9.2 to facilities.² All facilities interact with the ecosystems in which they are situated. Where contaminant pathways exist, they should be comprehensively managed, and this should be regularly communicated to the public (especially via the proactive release of environmental data). Risk, by contrast is

¹ Regulatory Oversight Report on the Use of Nuclear Substances in Canada: 2021, CMD 22-M32, 16 August 2022, at p 20.

² *Ibid* at pp 7, 12-13. Note: REGDOC 2.9.2 relates to the management of environmental releases from nuclear facilities.

much harder to quantify and subject to more complex, contentious, subjective, and potentially opaque considerations.

NTP submits that all facilities be required to meet all relevant regulatory requirements and that these requirements be equally enforced by the regulator. In their ROR, CNSC staff noted budgetary concerns and short staffing in the past, but that additional staff will be hired to conduct further inspections of licensees in this ROR category. NTP hopes the additional regulatory staff will help ensure more comprehensive inspections and oversight, and thus less discretion in the use of CNSC staff's graded approach.

Recommendation 2: that CNSC staff move beyond a purely graded or risk-informed approach to the regulatory oversight of nuclear facilities.

PART TWO: NTP's review of publicly accessible data for facilities covered by the ROR

This category of licensee is difficult to assess on a facility-to-facility basis like other ROR categories, due to the sheer number of facilities and licenses: 1,500 licensees with 2, 097 licences divided between them. However, the majority of these facilities only hold sealed sources of radionuclides (most often types of industrial gauges). These sealed sources do not routinely emit contaminants. A smaller subset of licenses govern facilities with unsealed sources of radionuclides. These facilities routinely release contaminants into the environment via monitored pathways. For example, the ROR notes that isotope production facilities release contaminants into the environment via stacks to the air as well as liquid effluent releases to municipal sewer systems.³ In these cases both pathways are monitored and subject to release limits.

To date, NTP's experts have not found much data relating to environmental releases from unsealed sources at facilities covered by this ROR. These facilities appear to constitute the only ROR category that does not report annual contaminant loadings via the federal Open Government Data Portal. Data is not available via the CNSC website either. As such, NTP recommends more transparency via proactive environmental data disclosure for facilities with unsealed sources of radionuclides.

Recommendation 3: that environmental data be publicly disclosed from facilities with unsealed sources of radionuclides.

Finally, the CNSC has a map of regulated facilities on its website. Some facilities that fall under this ROR category can be found on the map, but others appear to have been left off. From the webpage alone, it is impossible to know that the list of facilities is not a complete one. Further, there is no discussion of the criteria used to determine which facilities are listed and included on this map.⁴ The full number of medical, research, commercial and industrial facilities covered by this ROR and their geographical

³ *Ibid* at 12-13.

⁴ See: Canadian Nuclear Safety Commission, Maps of Nuclear Facilities: <https://nuclearsafety.gc.ca/eng/resources/maps-of-nuclear-facilities/results.cfm?category=cns-c-offices>.

distribution should be better reflected on this CNSC webpage (either in the map itself, or an alternative graphic on the same webpage as the map feature).

Recommendation 4: that the CNSC website include a more comprehensive description of facilities that use nuclear substances on its webpage with its map of CNSC-regulated facilities.

PART THREE: NTP's recommendations for future ROR intervention processes

Intervention timelines are very short and do not allow sufficient time for intervenors to request and obtain information from CNSC staff and licensees. Currently, PFP applications are due in the Spring, decisions are made late summer, and interventions are due in early Autumn. This effectively means members of the public and public interest organizations must undertake their work with little notice over the summer holidays and busy back-to-school season. This can pose a barrier for intervenors with family care responsibilities, those who work in schools and universities, and others. Funding decisions are usually determined before RORs are publicly released. As such, they are not dependent on ROR publication timelines and should be scheduled earlier in the year (with little inconvenience to the Commission) in order to allow organizations to better plan for their work and ensure CNSC staff and licensees have more time to respond to intervenors' information requests.

Recommendation 5: that the CNSC increase the amount of time intervenors have to prepare their written submissions.

The Commission should reinstitute opportunities for intervenors to present their interventions, ask and answer questions before the Commission on the record during meeting proceedings. This opportunity can be extended for virtual attendance only and thus not require the CNSC to cover any travel costs associated with in-person attendance. With relicensing hearings on a 10-year basis for most facilities, Commission meetings are a particularly important avenue for the public to engage with Commissioners.

Recommendation 6: that the CNSC Registry and Commissioners allow intervenors to virtually attend and present at future ROR meetings.

More transparency is required around the criteria being used to determine who receives funding, how much each intervenor receives, and what kinds of analysis are ultimately funded over others. Funding is a key factor that determines who can intervene, and by extension, which questions and issues are ultimately brought to the Commission. The way "value added" contributions and "expertise" are defined effectively works to scope (in part) the content that can be addressed during Commission meetings. While general guidance is provided to interested members of the public and public interest organizations

in the CNSC's Participant Funding Program Guide⁵ and eligibility criteria⁶, both these materials are silent on the intersection between funding and the substantive scope of Commission proceedings. NTP encourages the development of more specific funding criteria, in consultation with members of the public and public interest organizations.

Recommendation 7: that the CNSC's PFP develop more specific intervenor funding criteria, in consultation with members of the public and public interest organizations.

⁵ CNSC, "Participant Funding Guide", online: <http://www.nuclearsafety.gc.ca/eng/pdfs/participant-funding-program/CNSC-Participant-Funding-Guide-eng.pdf>.

⁶ CNSC, "Eligibility Criteria", online: <http://www.nuclearsafety.gc.ca/eng/the-commission/participant-funding-program/eligibility-criteria.cfm>.