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**Written submission from the
Nuclear Transparency Project**

**Mémoire du Projet de
transparence nucléaire**

**Regulatory Oversight Report on the
Use of Nuclear Substances in
Canada: 2023**

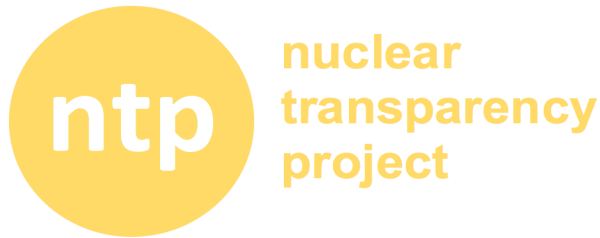
**Rapport de surveillance réglementaire
sur l'utilisation des substances
nucléaires au Canada : 2023**

Commission Meeting

Réunion de la Commission

November 7, 2024

7 novembre 2024



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Submitted via email

September 30, 2024

To President Tremblay 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: 2023

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, Canadian civil society organizations, and Indigenous Nations for their informative publicly available materials and submissions on this matter.

NTP is also grateful for the comments in writing we have received from CNSC staff in response to our ROR intervention last year. We have noticed that some of our past recommendations were incorporated into this year's ROR. We look forward to continuing our dialogue with CNSC staff as our understanding of the licensees covered by this ROR deepens.

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 who work to examine the economic, ecological, and social facets and impacts of Canadian nuclear energy production. We are committed to interdisciplinary, cross-sectoral, and equitable collaborations and dialogue between regulators, industry, Indigenous nations and communities, civil society,

members of host and potential host communities, and academics from a variety of disciplines.

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 LL.M. in collaboration with biologist Dr. Tamara Fuciarelli, data analyst and engineer Alan Rial, M. Eng., and student researcher Alexandra Chernoff.

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 the third part contains recommendations relating to procedural or administrative aspects of these ROR proceedings. This is NTP's third year intervening on the ROR for facilities that use nuclear substances. As such, our comments this year have been drafted to build on the previous two years' recommendations, elaborating further on some of them and reporting on the progress of implementing others.

PART ONE: NTP's review of the ROR

Firstly, NTP appreciates the new standardized format of this ROR. While this new format is easier to navigate than previous RORs, we can also see how this change will facilitate easier comparison between this year's ROR and future RORs for facilities that use nuclear substances. The new format will also assist with future comparisons between RORs for different licensee categories each year. As such, the new format is a positive development that improves both the accessibility and public utility of CNSC RORs.

Secondly, CNSC staff clearly note on page 4 of this year's ROR that there were several ways in which they amended this year's ROR to take into account certain recommendations made by last year's intervenors. NTP agrees these changes have resulted in a more comprehensive and responsive ROR this year. For example, last year NTP had recommended that more detailed descriptions for each sub-category of licensee covered by this ROR be added as a regular report feature. We noted that ideally this would include lists of substances used or produced by each type of licensee alongside descriptions of the processes that use or produce them. This had been done in the past for medical and industrial licensees, and we explained how the same for all other licensee types would be similarly useful. We were pleased to see these descriptions in Appendix A of this year's ROR.

The only further recommendation we would make relating to these licensee descriptions concerns waste nuclear substance licence holders. We have come to understand that these facilities are the only sub-type of licensee covered by this ROR that is required to conduct Environmental Risk Assessments and routinely monitor releases to the

environment. As such, we recommend that they be described as a specific sub-type of commercial licensee responsible for conducting environmental monitoring in future RORs. We will return to this issue in part two of our submissions below.

Recommendation 1: that CNSC staff include a brief description of waste nuclear substance licensees and their monitoring requirements in future ROR descriptions of commercial licensees.

Thirdly, NTP noted last year that certain licensee activities, such as reportable events, were described as ‘insignificant’ or ‘minor’, without data being provided to support and contextualize these characterizations. Our organization recommended that wherever assessments of significance are provided, CNSC staff should endeavour to provide the data in the main text of the ROR, or else hyperlink to publicly available data sources, that can speak to how CNSC staff assessments were reached. We explained that members of the public and civil society organizations vary in their science and data literacy. While some prefer to defer to the CNSC for assessments of safety, wellbeing, and regulatory compliance, others have an interest in seeing and understanding how the CNSC comes to such determinations. A robust ROR would ideally cater to these differing needs, interests, and capacities. NTP noted that infrastructure for wider data disclosure could be created fairly simply and contribute to greater public access to information and data in ways that should not be too taxing for licensees or CNSC staff. This recommendation does not seem to have been implemented in this year’s ROR, and as such we resubmit it for CNSC staff and Commissioners’ consideration.

Recommendation 2: that CNSC staff provide data to accompany any descriptive language for, or assessments of the significance of, environmental releases or doses to workers and the public.

NTP understands that the CNSC is in the process of developing the requisite regulatory and technical infrastructure for wider data disclosure and that this will take time. Our organization will continue to support this work through recommendations in our interventions as we learn more, and through our involvement in working groups and other fora elsewhere relating to government open access data. Some initial steps to support further development in this area that are specific to this ROR are listed in the second part of these submissions below.

Fourth, NTP’s interventions last year and the year before noted that while risk-informed and “graded approaches” to oversight and public communications remain a central guiding principle in Canadian nuclear regulation, the CNSC should also recognize other complimentary approaches. Where planned and unplanned releases to the environment are known – for example, where sampling results from existing monitoring programs or mitigation efforts are available – this available information and data should be publicly released regardless of predicted risks to environmental or public and worker health.

In last year’s ROR, a release event from a waste nuclear substance licensee was noted with only CNSC staff assurances that there were no resulting likely adverse effects on the

environment. We asked CNSC staff whether any measurements were taken of the release and whether any event reports were provided by the licensee to CNSC staff describing the incident in more detail. CNSC staff responded with some additional information including the estimated volume of the release alongside a more detailed description of the release event. CNSC staff also provided the relevant Action Levels for released substances, noting that actual releases during the event were below these thresholds. Even though CNSC staff still refused to disclose what the actual measured releases were, their response still illustrated that more information was readily available on file than that which was included in the ROR itself.

NTP also asked CNSC staff for access to the event report from the licensee for the abovementioned event, noting other RORs (such as last year's ROR for nuclear generating facilities) have introduced a practice of hyper-linking to event reports. CNSC staff in this case have instead directed us to file formal access to information requests for event reports. NTP notes that the federal legislated access to information processes are often time and resource extensive: sometimes taking years, and requiring payment for access to requested records. For small organizations such as ours, this process is not often feasible.

This year, we were left with similar questions relating to a waste nuclear substance facility release event whereby an unplanned release of multiple substances was made to the municipal sewer system: event #WNSL-5 mentioned on page 128 of this year's ROR. CNSC staff noted that no discharge limits were exceeded for radiological contaminants, and noted one non-radiological substance exceeded applicable discharge limits (providing measured release concentrations for that substance). However, disclosure of all released substances and their respective Action Levels and discharge limits would be helpful for understanding the nature and extent of the reported event.

When releases are made to the environment, there is an immediate public interest in knowing the quantity and concentration of all released substances. If this information is already on file for nuclear regulators, NTP submits it would be in the public interest to proactively disclose. For this reason, we resubmit our recommendation from last year that CNSC institute proactive disclosures of more detailed release event information to the public.

Recommendation 3: that environmental and dose-related data (whenever known) be released for reported release events regardless of determinations of the risks they pose to environmental or public and worker health.

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

We had recommended last year that environmental data from all unsealed sources be routinely disclosed to the public. The most recent communications from CNSC staff have indicated there may only be nine waste nuclear substance facilities required to monitor

environmental releases. Given this limited number, a pilot project may be feasible whereby these facilities could begin to publicly share their monitoring data.

NTP contributors have begun a sector-wide public information audit, to gauge relative public disclosures between different types of Canadian-regulated nuclear facility. Requiring more public disclosure from the nine abovementioned waste nuclear substance facilities would appear to be consistent with reporting requirements for smaller nuclear substance facilities. NTP submits it would be in the public interest for the CNSC to adopt a more consistent approach whereby all facilities that perform environmental monitoring should also share the results of their monitoring programs proactively with the public.

Recommendation 4: that CNSC staff consider a pilot project whereby all waste nuclear substance facilities begin to proactively publicly report the results of their environmental monitoring programs.

Further, as part of our audit we had requested that more facilities covered by this ROR be included in the interactive map of nuclear facilities posted to the CNSC website (<https://www.cnsccsn.gc.ca/eng/resources/maps-of-nuclear-facilities/>). Last year, we were more specific in our recommendations, asking for at least all the waste nuclear substance facilities to be included on the CNSC's interactive map. CNSC staff have since indicated that they will consider this. Given that these facilities are the only ones falling under this ROR that routinely emit radionuclides into the surrounding environment, we believe that their inclusion along with all other Canadian-regulated nuclear emitting facilities would be in the public interest.

Recommendation 5: that waste nuclear substance facilities be included on the CNSC's interactive public map of Canadian-regulated nuclear facilities.

Finally, NTP resubmits its requests from last year that certain practices be instituted to facilitate NTP analysis of data already contained in CNSC staff's ROR. First, the graphs and tables used to visualize data throughout the ROR and appendices could be embedded in the PDF text rather than included as images. This would make the data they contain more machine-readable and thus potentially exportable to other machine-readable formats for further analysis. Further, the tables provided throughout the ROR could also be provided separately in CSV formats, either via a link or as a separate document that accompanies the ROR. Most of the tables and graphics included in the ROR are likely assembled in a version or format that is already machine readable before being converted into the PDF ROR document. As such, making that original format available to the public would hopefully not require too much staff time.

While we were able to extract some data manually from this year's ROR to begin our own trend analyses, the process was time consuming and the manual input of data always increases the chance of human error (requiring more time to internally audit our work by multiple NTP contributors).

NTP has a particular interest in machine-readable formats of tables recording inspection frequencies and reportable events. As such, this would mark an especially helpful starting point for CNSC staff to share machine-readable versions of its tables. Notably, CNSC staff who prepare the RORs for uranium and nuclear substance processing facilities, as well as uranium mines and mills, have begun to provide machine-readable formats of their graphs to us which has been incredibly useful and deeply appreciated.

Recommendation 6: that CNSC staff ensure graphs and tables included in future RORs are machine-readable either by including data values in ROR text or else by disclosing these tables in separate CSV formats.

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

Two years ago, NTP had requested more time to prepare our ROR interventions. Last year and this year, the CNSC responded by increasing the amount of time between funding decisions, ROR publication, and the final due dates for intervenors' written submissions. This year, like last, we received a participant funding decision in mid-July, we received the ROR draft in mid-August, and our comment deadline was again in early October. The consistency between these new timelines from year to year is also helpful as it allows our organization to effectively plan how it will undertake its funded work and coordinate tasks between its different contributors.

Recommendation 7: that timeframes for ROR interventions continue to provide at least 10 weeks between funding decisions and final submission due dates; at least 6 weeks between the publication of RORs and final submission due dates; and that these dates for each step of the ROR process remain consistent from year to year.

In previous years, NTP has also requested the ability to present oral submissions at Commission meetings to consider RORs. This used to be an automatic aspect of ROR interventions, but in recent years has only been extended to intervenors when RORs coincide with mid-term licensing updates from specific facilities. With longer licence terms being approved for nuclear facilities over the last few years, and smaller panels of CNSC Commissioners being convened for licensing hearings, opportunities for civil society organizations to engage with Commissioners has become increasingly limited. This is despite the fact that interacting with Commissioners during meeting and hearing proceedings has the potential to significantly improve the quality of engagement with intervenors' submissions, offering more opportunity for mutual learning and increased familiarity with organizations' advocacy priorities and the CNSC's mandate and approach to related issues. As such, NTP recommends a return to the practice of permitting intervenors to present oral submissions before Commissioners during ROR proceedings.

Recommendation 8: that opportunities to make oral submissions be extended to all intervenors, ensuring more meaningful opportunities to contribute to the public record for these ROR proceedings.

NTP would also recommend that CNSC staff institute a more detailed method to track funded intervenors' concerns from year to year. Currently, appendix L of this year's ROR outlines general areas of concern for all intervenors according to CNSC-identified themes. As CNSC staff have already undertaken the practice of responding to intervenor information requests and recommendations in writing between ROR meetings, including these interactions or summaries of them on the public record would help Commissioners to understand how CNSC staff address intervenors concerns more specifically. It would also more transparently convey whether any progress is made on individual issues raised by intervenors from year to year.

Recommendation 9: that CNSC staff institute a more detailed method to track intervenors' ROR concerns from year to year.

Finally, the review of the PFP funding criteria is an outstanding item that NTP would again like to propose for the CNSC's consideration. The scoping of ROR interventions by the funding grants and conditions intervenors receive can effectively shape the substantive content of ROR proceedings and impact the public record and any outcomes from Commission meetings. Developing a broader definition of the types of analysis and experts eligible for funding could expand the scope of funded interventions while still remaining consistent with the Commission's mandate.

Recommendation 10: that the CNSC's PFP develop more specific and expansive intervenor funding criteria, in consultation with members of the public and public interest organizations.