Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire

CMD 23-M37.8

Date: 2023-11-13
File / dossier : 6.02.04
Edocs pdf : 7167222

Written submission from the Nuclear Transparency Project

Mémoire du Projet de transparence nucléaire

Regulatory Oversight Report for Uranium Mines and Mills in Canada: 2022

Rapport de surveillance réglementaire des mines et usines de concentration d'uranium au Canada : 2022

Commission Meeting

Réunion de la Commission

December 13-14, 2023

13-14 décembre 2023

Canada

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Submitted via email

November 13, 2023

To Members of the Canadian Nuclear Safety Commission,

Re: Canadian Nuclear Safety Commission Staff's Regulatory Oversight Report on Uranium Mines and Mills in Canada: 2022

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 and organizations for their informative publicly available materials and submissions on this matter.

NTP is also grateful for the comments in writing by CNSC staff in response to the information requests, submissions, and recommendations that constituted our ROR intervention last year. Further, we would like to thank the CNSC staff members and subject matter experts who met with us recently on October 18th to discuss our intervention from last year as well as this year's ROR – it was a productive meeting and their time and attention throughout was appreciated.

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 LLM in collaboration with biologist Dr. Tamara Fuciarelli 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 uranium mines and mills; and the third part which contains NTP's more general recommendations to improve the ROR intervention process for future ROR meeting proceedings. Our comments this year have been drafted to build on last year's recommendations, elaborating further on some of them and reporting on the progress of implementing others. As such, we hope this year's submission can be seen as a continuation of the conversations we began with the intervention we made last year.

PART ONE: NTP's review of the ROR

This is a unique category of licensee for a variety of reasons, including the particular way multiple jurisdictions regulate uranium mines and mills. The ROR provides helpful information about this unique governance landscape. The involvement of multiple agencies' in this sub-sector has also led to a rich source of contextual and specific information and data which is canvassed nicely in the ROR.

This year we are taking the opportunity to follow up on two issues we raised last year: public communications around compliance inspections and event reports. Each will be discussed below in turn.

Public communications concerning compliance inspections

In last year's intervention, we expressed some concern over the way annual inspections and notices of non-compliance were reported in the ROR. At that time, we noticed that there were fewer inspections and 50% fewer instances of non-compliance in 2020 coinciding with the most stringent lock-down measures during the Covid-19 pandemic and resulting move from on-site to virtual inspections. At that time, we noted that inspections and instances of non-compliance were lower in 2021 as well, compared with pre-pandemic years.[1] In those submissions, we were working from the following data in the 2021 ROR:

[1] Nuclear Transparency Project, Written submissions re: Regulatory Oversight Report for uranium mines and mills in Canada: 2021, at pp 2-3, online: https://nuclearsafety.gc.ca/eng/the-commission/meetings/cmd/pdf/CMD22/CMD22-M36-1.pdf.

Table 1.2: Inspections at uranium mines and mills

	2017	2018	2019	2020	2021
Number of inspections	30	26	20	17	18
Instances of non-compliance	23	31	23	11	19

Source: CMD 22-M36 at p 7

In our submissions last year, we were very careful in our analysis and interpretation of this data, not to come to any conclusions. We noted at that time that the data appeared to indicate some correlation between virtual inspections and lower instances of non-compliance, but emphasized that only CNSC staff were in the position to indicate whether there was any causation. CNSC staff at that time did not address this trend in the data, insisting instead that there was no change in inspections or their effectiveness over the pandemic.

In this year's ROR, we note a significant increase in both reported inspections and instances of non-compliance for 2022. The number of inspections was more consistent with 2017 – 2019 levels. Instances of non-compliance in 2022, however were 433% higher than the pandemic average, and up 212% from the 2017 – 2019 average:

Table 1.2: Inspections at uranium mines

	2018	2019	2020	2021	2022
Number of inspections	26	20	17	18	25
Instances of non-compliance	31	23	11	19	79 + 1 order

Source: CMD 23-M37 at p 7

Again, CNSC staff's discussion of inspections and non-compliances in this year's ROR does not address this trend in the data – either acknowledging it or explaining it. This year, however, NTP was able to meet with CNSC staff to discuss this and other issues in advance of our intervention submission date. At that meeting, we explained our analysis from last year and its relation to this year's data. At that meeting, we raised our concerns over the perceived disconnect between the data CNSC staff were disclosing in these RORs and their discussion of it. We asked whether the data was communicating something about the difficulty of keeping up with inspection schedules over the pandemic, and whether the data indicated anything about the effectiveness of virtual compared to in-person and on-site inspections. CNSC staff noted that while inspectors were still able to get a sense of facilities and their operations via virtual inspections, it was true that there was no replacement for in-person and on-site inspections. NTP believes this is an important finding and position that should have been more clearly and transparently communicated to the public in this year's ROR.

NTP understands that since pandemic restrictions were lifted, hybrid inspections have become more frequent. We have been assured by CNSC staff that inspections themselves are not continuing to be held virtually, but rather, the pre-inspection administrative meetings held with licensees are being conducted online. Subsequent inspections are then conducted in-person and on-site. We understand the virtual portions of the inspection process facilitate the conservation of CNSC resources, supporting the resumption of in-person and on-site inspections and more frequent communications between licensees and the regulator. In principle, this approach sounds reasonable and something NTP can understand. Again this is an important clarifying point that would have been welcome in this year's ROR.

Recommendation 1: that CNSC staff more clearly and comprehensively explain the data provided about inspections and instances of non-compliance in future RORs.

Public communications concerning event reports

Last year, we recommended that more information be included in RORs concerning reportable events. At that time we requested that volumes and concentrations for reportable environmental releases be provided in RORs. We also requested that environmental data from, and descriptions of, any post-event monitoring be provided to accompany CNSC staff assessments of the significance of reported events.

There does not seem to have been much progress on this issue since last year, and it remains difficult to get a sense of the events that are noted in this year's ROR. We have sent information requests to CNSC staff in relation to the following events:

- where "a third of a discharge pond" was released into the environment and concentrations of released substances were provided, but no volumes;[2]
- where 2,000 L of water was released at Key Lake from a pump test pit within the Mineshop Pump Bay to the exterior of the building: we have inquired whether any monitoring was undertaken to determine whether any contaminants were released or whether the liquids released caused contaminants elsewhere (e.g. soil) to become mobile;[3]
- where ammonia and sulphate were measured in new groundwater monitoring wells in the mill terrace of Key Lake but no concentrations were provided;[4]
- where 5m^3 of tailings were released from a hole in the exterior wall of the Tails Thickener Tank at McClean Lake but no concentrations of released substances were provided;[5] and
- where 120m^3 of partially treated Sue C pit water was released but no concentrations of released substances was provided.[6]

[2] Canadian Nuclear Safety Commission, Regulatory Oversight Report for Uranium Mines and Mills: 2022, CMD 23-M35, at p 99, online: https://www.nuclearsafety.gc.ca/eng/the-commission/meetings/cmd/pdf/CMD23/CMD23-M35.pdf.
[3] *Ibid* at p 104.
[4] *Ibid* at p 105.
[5] *Ibid* at p 156.
[6] *Ibid* at p 156.

While we appreciate CNSC staff assurances that all release events are considered to be of "low" significance, there is a compelling public interest in providing sufficient information for members of the public to understand and assess the significance on reportable events for themselves. The current gaps in public disclosure prevents this from being possible.

Recommendation 2: that CNSC staff provide volumes and concentrations for reported releases to the environment.

Recommendation 3: that CNSC staff provide more information (and data where available) to support conclusions about the significance of reportable events.

More generally, the communication issues around both reportable events and inspections and non-compliances seem to indicate a larger issue of regulator and licensee mistrust of intervenors. The CNSC regularly notes issues of public mistrust in the nuclear regulator and licensees often commit to trust-building with local communities. In the current ROR, public trust is discussed in the context of the IEMP, public information sharing, and Indigenous consultation and engagement.[7] However, working on behalf of NTP, we regularly encounter regulator and licensee mistrust in Indigenous Nations and communities and civil society organizations: a lack of trust in our ability to perform analysis as well as a lack of trust in our intentions to communicate with our respective memberships about nuclear issues.

As NTP's analysis of inspection and non-compliance data over the last two years illustrates, we hold ourselves to a high standard. We are careful not to make claims where we don't believe they can be substantiated, and our analysis of available data is always conducted with the intent of learning more about the facilities in question. NTP's approach to data analysis and interpretation is a careful one that follows four steps: 1) accessing, transcribing, or otherwise obtaining machine-readable data; 2) performing data analysis to identify possible trends in data values using open-source software such as Python; 3) presenting CNSC and individual licensees with our data analysis with accompanying questions and information requests relating to the data and our analysis. At this last step we also organize meetings with CNSC staff and licensees where we can discuss the data and what it is communicating about real-world realities; and 4) once we are confident in our analysis and interpretation of data, we share our findings with CNSC staff and licensees for comment to ensure against misinformation. When we ultimately prepare resources for the public based on our analysis, we are committed to clearly describing our internal process and would honestly and transparently communicate any differences in our opinions and interpretation of data compared with what is provided by the regulator or licensees.

Trust, like communication more generally, needs to be developed in both directions – though the nature of this work will look different depending on the different parties.

[7] *Ibid* at p at pp 10-11.

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

In last year's ROR intervention, we advocated for greater proactive disclosure of environmental data. In particular, we identified the following areas of data as a good starting point for wider disclosure: groundwater, stormwater, and ambient air quality data, as well as results from fish toxicity testing. At this time, we would also like to add disaggregated liquid effluent from tailings management facilities to this list.

At the recent CNL ROR Commission meeting on November 1st, we heard from CNSC staff that it may take a number of years before this kind of information is proactively uploaded to the Open Government portal. As such, we will continue to present this recommendation as a good starting point for future proactive disclosure.
In the interim, however, this year CNSC staff have undertaken to provide our organization with machine-readable versions of several of the tables included in this ROR. This is very appreciated as it will help NTP develop its own ROR-specific databank we can continue to update and analyze each year. Until more data becomes available on the Open Government portal, this step supports our capacity to still develop and deliver analysis.

Last year, we noted in our intervention that uranium mining and milling operations had not posted their Environmental Risk Assessments to their websites, as is required by REGDOC 3.2.1. To date, it appears as though Cameco operations have posted short summaries of their ERAs online.[8] Orano notes their ERA can be provided upon request. Neither meet the clear requirements of the REGDOC which states:

> "if a licensee is required to conduct an environmental risk assessment (ERA) and/or a probabilistic safety assessment (PSA), the ERA and a summary of the PSA must be posted on the licensee's website."[9]

The wording in this provision clearly indicates that a promise to disclose ERAs, or the disclosure of a summary of an ERA, are not sufficient or acceptable.

This provision of the REGDOC has an important history. It was included as an amendment to REGDOC 3.2.1 in response to considerable civil society advocacy over a number of years. Civil society organizations had also advocated at that time for the inclusion of a requirement for licensees to release machine-readable and disaggregated data but were not ultimately successful on that issue. As a result, inclusion of the requirement to disclose ERAs was seen as a compromise for not requiring broader data disclosure requirements. In light of this context, it is especially disheartening and concerning that despite the fact that ERA disclosure is required by the regulator, and despite the fact that we notified the Commission that this was not being implemented by licensees a year ago, ERAs have still not been posted online in full.

[8] Note: these summaries are very high level and contain no data and very little specific environmental information.
[9] REGDOC-3.2.1 Public Information and Disclosure, s 2.2.4, online: https://nuclearsafety.gc.ca/eng/acts-and-regulations/regulatory-documents/published/html/regdoc3-2-1/index.cfm.

The CNSC has held for many years that environmental release data is in the public interest to disclose. It is not subject to proprietary claims because it relates directly to how facilities engage with the ecologies and communities in which they are embedded.

Recommendation 4: that Commissioners use the upcoming meeting for this ROR to inquire about why neither licensee is posting their ERAs in full on their website.

Recommendation 5: that Commissioners use the upcoming meeting for this ROR to require that ERAs be posted for each facility covered by this ROR in advance of next year's ROR intervention period.

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

Last year, we requested the ability to present oral submissions at Commission meetings to consider RORs. This year, we'd like to continue to urge the Commission to reinstitute opportunities for intervenors to present oral submissions as well as ask and answer questions before the Commission on the record during meeting proceedings. With the disturbing issuances of 20-year licenses for several operations covered by this ROR,[10] 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 attend and present at future ROR meetings (virtually or in-person).

Relating to this point, we also strongly support the Ya'thi Néné Lands and Resources Office submissions requesting more time and better translation services for these ROR meetings. Our organization does not currently have any contributors from or living in Nuhenéné. As such, when engaging on issues relating to nuclear infrastructure there, we have to continue to learn about our responsibilities to Nuhenéné and Denesųłiné Nations. It is our privilege and duty to learn from Denesųłiné representatives who are deeply connected to, and have always governed, their homelands. Interventions are not only sources of information or perspectives for CNSC staff and Commissioners. They are also opportunities for the public and civil society organizations, such as our own, to learn and deepen our own understandings of nuclear infrastructures and their contexts.

Recommendation 7: for the Commission to ensure their procedures support Indigenous intervenors to engage as these intervenors choose and require.

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

[10] A regulatory development NTP has vehemently opposed. See: Nuclear Transparency Project, Written submissions re: application for the renewal of uranium mine/mill licenses for the McArthur River, Key Lake, and Rabbit Lake Operations, April 24, 2023, online: https://www.nuclearsafety.gc.ca/eng/the-commission/hearings/cmd/pdf/CMD23/CMD23-H6-24.pdf.

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 8: that the CNSC's PFP develop more specific and expansive intervenor funding criteria, in consultation with Indigenous Nations, communities, and organizations, members of the public, and civil society.