

**SUBMISSION BY THE CANADIAN ENVIRONMENTAL LAW ASSOCIATION  
TO THE CANADIAN NUCLEAR SAFETY COMMISSION REGARDING THE  
REGULATORY OVERSIGHT REPORT FOR URANIUM MINES AND MILLS  
IN CANADA: 2019**

**November 16, 2020**

**Prepared by  
Kerrie Blaise, Legal Counsel  
Morten Siersbaek, Legal Counsel**

**I. INTRODUCTION**

These submissions are filed in response to the Canadian Nuclear Safety Commission's ("CNSC") notice of Participation at a Commission Meeting and Participant Funding dated July 8, 2020 concerning the presentation of the *Regulatory Oversight Report for Operating Uranium Mines and Mills in Canada: 2019* (herein "2019 ROR") released on October 5, 2020.<sup>1</sup> A virtual meeting with respect to this and other matters is scheduled for December 8-10, 2020. Our recommendations to the Commission to assist in their review are summarized in **Appendix A**

CELA is a non-profit, public interest law organization. For 50 years, CELA has used legal tools to advance the public interest, through advocacy and law reform, in order to increase environmental protection and safeguard communities across Canada. CELA is funded by Legal Aid Ontario as a specialty legal clinic, to provide equitable access to justice to those otherwise unable to afford representation. CELA has an extensive library of materials related to Canada's nuclear sector which is publicly available on our website.<sup>2</sup>

**II. FINDINGS**

In response to the 2019 ROR, CELA raises a number of issues relating to the ROR's scope and content and provides the following comments relating to CNSC's oversight of uranium mine

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<sup>1</sup> Canadian Nuclear Safety Commission, "Regulatory Oversight Report for Operating Uranium Mines and Mills in Canada: 2019" (5 October 2020) [2019 ROR]; Notice <https://www.nuclearsafety.gc.ca/eng/the-commission/pdf/NoticeMeetingPFP-ROR-UMM-2019-e.pdf>

<sup>2</sup> Canadian Environmental Law Association, online: [www.cela.ca](http://www.cela.ca).

sites and activities. Our findings are set out below, accompanied by either requests or recommendations to the Commission and CNSC Staff.

The overarching goal of the comments submitted by CELA is to recommend improvements in the 2019 ROR and make requests to ensure that CNSC Staff provide relevant, additional information when the ROR is before the Commission. CELA furthermore intends these comments to be considered when drafting the upcoming ROR for 2020 and during the drafting and review of the upcoming ROR Discussion Paper which according to the CNSC Staff's presentation for a prior ROR this Fall, is anticipated by end of year 2020.<sup>3</sup> CELA additionally submits that the upcoming Discussion Paper consultation is not a stand in for a response on the matters discussed below, specific to this ROR.

CELA would also like to note that, while COVID is not strictly speaking a 2019-related issue, CELA finds that the ROR meeting presents an important opportunity to discuss the impact of COVID on the activities covered by this ROR – especially given the significant closures which occurred at multiple Cameco sites as a result of the pandemic. As such, CELA believes the Commission should use the upcoming ROR meeting to discuss the impact of temporary closures and layoffs on the efficacy of health safety measures and oversight for environmental monitoring.

#### **A. Scope and Process for Regulatory Oversight Reports**

Many of CELA's recommendations are aimed at making the ROR more accessible and informative, and enhancing the data and analysis in support of the CNSC Staff's conclusions. As enumerated below, there are numerous deficiencies in this year's ROR which detract from its potential information sharing and oversight value. These recommendations are based on the ROR's recognition that:

The [Nuclear Safety and Control Act] mandates the CNSC to disseminate objective scientific, technical and regulatory information to the public concerning its activities and the activities it regulates. CNSC staff fulfill this mandate in a variety of ways, including hosting in-person and virtual information sessions and through annual regulatory reports.<sup>4</sup>

We also make the following general comments about the efficacy of the CNSC's regulatory oversight review process. *First*, we **recommend** the CNSC conduct a pre-meeting conference or discussion, which seeks input on issues to be discussed. Preliminary meetings are a widely used

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<sup>3</sup> Online: <https://www.nuclearsafety.gc.ca/eng/the-commission/meetings/cmd/pdf/CMD20/CMD20-M23-A.pdf>

<sup>4</sup> 2019 ROR, p. 18.

practice in anticipation of tribunal proceedings.<sup>5</sup> Not only would the CNSC, as a quasi-judicial tribunal, benefit from a pre-meeting conference, whereby the scope of the proceeding could be narrowed or expanded, upon input from the regulator, proponents, and intervenors, it would provide demonstrably clearer guidance to intervening parties regarding the acceptability and relevancy of their disclosure requests and resulting submissions.

The lack of issue identification in the context of the CNSC's hearing and meeting processes again impeded our review of this ROR and its findings. It is critically important that the scope of the ROR be expressly provided not only to ensure the efficient and best use of intervening parties' time, but to ensure matters of critical importance are not deemed out of scope and thus dismissed.

*Second*, while we appreciate having the opportunity to comment on the ROR, we lack the opportunity for reply and ability to discuss our findings with the Commission. Thus as the Commission will note throughout this submission, we are replying to matters raised at last year's ROR and raising issues which, as articulated last year, would be reviewed this year (but in many instances, have not been reviewed in the ROR). Having to wait a full year to reply to timely matters is not an efficient process and given this delay, detracts from the value of interventions. Relatedly, CELA submits that intervenors who provide comments on an ROR should have an opportunity to present orally before the Commission. Currently, intervenors are precluded from presenting and thus the opportunity to engage in dialogue with Commissioners and CNSC Staff does not exist. This maintains the high-level nature of RORs and does not facilitate critical review.

*Third*, we submit 30 days remains an insufficient amount of time for members of the public and civil society to review the material of the ROR and provide value-added comments to the Commission. The public's ability to weigh-in during the ROR process can be further constrained due to the time lag in requesting and receiving references or supporting material, or, as in this case, other competing CNSC review deadlines. While CELA is not opposed to this ROR being reviewed by the Commission in tandem with other RORs (as will occur during the scheduled December 2020 meeting), the length of time granted for review should be extended in light of the other matters also open for public comment. Should the Commission choose to have multiple comment opportunities with the same closing date, at least 60 days should be provided as recognition of the importance and value of public comments, and to further fairness and respect for adequate procedural rights.

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<sup>5</sup> Jerry DeMarco and Paul Muldoon, "Environmental Boards and Tribunals – A Practical Guide, 2<sup>nd</sup> Ed" (LexisNexis: 2016), p 78

*Fourth*, as stated in the introduction of the ROR, “there are no actions requested of the Commission. This CMD [ROR] is for information only.”<sup>6</sup> CELA objects to this framing and requests that rather than serving an informational purpose, the aim of the ROR should be to identify gaps and propose action items (even if voluntary or for guidance) which improve licensee compliance within all Safety and Control Areas (SCAs).

## **Recommendations**

1. Oral submission opportunities and rights of reply should be included within the scope of ROR interventions.
2. The CNSC should extend the amount of time provided to the public for the review of RORs and ensure a minimum 60-day timeframe.
3. The ROR would be more effective if the CNSC canvassed a list of issues and topics to inform the scope of the ROR. Given the trend to longer, ten-year licences, soliciting public comment on the scope of issues addressed in ROR would provide a starting point for public engagement.

## **B. Depth of ROR Review**

CELA has reviewed the ROR in detail and finds it is significantly more brief than prior ROR’s on the same topic. For instance, this year’s ROR totals 37 pages while last year’s ROR was 159 pages. Further, based on our submissions below, we submit there were several areas that merit review or follow-up from last year. In furtherance of the CNSC’s mandate to disseminate objective scientific, technical and regulatory information to the public, CELA **recommends** greater detail be provided within the ROR and all conclusions in the text supported by references to accompanying documents or studies.

## **Recommendation**

4. Greater detail should be provided within the ROR and conclusions in the text supported by references to accompanying documents or studies.

## **C. Public Availability of Documents**

Last year, CELA informed the Commission that the Preliminary Decommission Plans (PDPs) were requested from both Cameco and Orano Canada Inc but denied in both instances. We noted that the public availability of documents was necessary to corroborate the ROR’s findings, and

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<sup>6</sup> ROR, p ii

the denial of these critical documents was also contrary to the Commission's frequent and repeated support for the public dissemination of information.

As a follow up, we **request** the Commission directly ask Cameco and Orano Canada Inc. at the upcoming ROR hearing if these documents have been made publicly available since last year's ROR meeting. If not, we further **recommend** the Commission set the precedent that these core licensing documents be made public, as a matter of practice.

As a quasi-judicial tribunal, the Commission should abide by the open court principle and ensure its proceedings are open to the public.<sup>7</sup> Fulfilling this role requires that all relevant materials before the Commission be publicly available. Absent an express explanation determining why this should not be the case, the subject areas canvassed in the ROR including the individual licenses and their verification and licensing basis should be publicly available.

### **Recommendation**

5. The Commission should require Cameco and Orano to release their preliminary decommissioning plans for public review. Summaries of PDPs should not be an accepted alternative when this information is available and before the Commission.

### **D. Decommissioning Planning**

This year's ROR does not contain any discussion of decommissioning of uranium mine sites. For the following reasons, CELA submits this is a critical deficiency and **recommends** it be remedied by way of an addendum to this year's report.

*First*, to ensure the environmental and health burden which has historically accompanied Canada's mining sector does not continue with the uranium mines reviewed in this ROR, it is crucial there be adequate planning which prevents, minimizes and mitigates adverse environmental effects.

*Second*, the impact of mining activities on local ecosystems - and the byproducts which are often introduced as a result of industrial activity and also have lasting impacts – are only amplified should financial guarantees in closure plans be insufficient and oversight lacking.

*Third*, planning for decommissioning occurs years in advance and so to, should public discussions about decommissioning plans and proposals. Including decommissioning planning in these annual meetings and RORs would also further the Commission's role as a lifecycle

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<sup>7</sup> A. Wallace, "The Impact of the Charter in Administrative Law: Reflections of a Practitioner" (2002), p 262

regulator, as it is vested with the oversight of all components throughout the lifetime of each type of licensed activity.

## **Recommendations**

6. As part of the Commission's role as a lifecycle regulator, decommissioning plans should be a required component of RORs so that the range of technically complex and challenging decommissioning actions which are specific to uranium mines and mills can be publicly reviewed and discussed.

### **E. Radionuclides and the National Pollutant Release Inventory (NPRI)**

In previous ROR submissions,<sup>8</sup> CELA has discussed the need for consistent, comprehensive data on the releases of radionuclides from CNSC regulated facilities. In addition to our participation in this ROR, CELA has been active in advocating for radionuclide data to be accessible on the NPRI<sup>9</sup> and continues to closely monitor how this data is released. Unfortunately, despite our prior recommendations on this topic, the need for accessible radionuclide emission data has gone unheeded again in this year's ROR.

By way of background, radionuclides are not reported to Canada's National Pollutant Release Inventory (NPRI), an online data portal and a key resource for identifying pollution prevention priorities, supporting the assessment and risk management of chemicals, and encouraging actions aimed at reducing pollutant releases. The NPRI is covered under sections 46 – 53 of the *Canadian Environmental Protection Act, 1999*. The legislation enables the NPRI to track pollution using a listing approach and categorize substances by threshold. As radioactive substances are not part of the substance list, CELA has continued to advocate for the inclusion of radionuclides on the NPRI substance list.

This year's ROR states that "CNSC staff have commenced publishing annual releases of radionuclides to the environment from nuclear facilities on the CNSC Open Government Portal."<sup>10</sup> The ROR also provides a few charts<sup>11</sup> noting radionuclide releases to air.

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<sup>8</sup> See for instance, CELA, "CELA's Comments on the CNSC's Regulatory Oversight Report for Uranium and Nuclear Substance Processing Facilities in Canada: 2017 - Recommendations to Improve the Oversight of Environmental Protection and Waste Management" (19 Nov 2018); Northwatch and Canadian Environmental Law Association, "Review of the CNSC's Regulatory Oversight Report for Uranium and Nuclear Substance Processing Facilities in Canada: 2016" (20 Nov 2017); and our 2019 comments on the 2018 ROR for CNL.

<sup>9</sup> See for instance, "Proposal to add radionuclides to the National Pollutant Release Inventory: Notification of decision," online: <https://www.canada.ca/en/environment-climate-change/services/national-pollutant-release-inventory/public-consultations/proposal-radionuclides-national-pollutant-release-inventory.html>

<sup>10</sup> ROR, p 26

<sup>11</sup> ROR, p 27

However, CELA remains of the view that these attempts (both in the ROR and Open Government Portal) setting out releases of radionuclides from uranium mine and mills is an insufficient stand in for more detailed and publicly accessible data that would be provided on the NPRI.<sup>12</sup> For greater clarity, a comparison of the NPRI, Open Government Portal and ROR display of data is provide below in **Images 1 – 3**.

**Image 1.** NPRI Display of Cameco’s Key Lake Operation (Non-radionuclide release)

List of Substances (excluding <u>CAC</u> )										
Substance	CAS Number	On-Site Releases				Disposal <sup>(1)</sup>		Off-Site Recycling	Units	Substance Information
		Air	Water	Land	Total	On-Site	Off-Site <sup>(2)</sup>			
<u>Ammonia (total)</u>	<u>NA - 16</u>	14	17	-	30	-	-	-	tonnes	
<u>Arsenic (and its compounds)</u>	<u>NA - 02</u>	0.887	6.7	-	7.6	110,574	-	-	kg	
<u>Lead (and its compounds)</u>	<u>NA - 08</u>	1.2	8.3	-	9.5	705,416	-	-	kg	
<u>Manganese (and its compounds)</u>	<u>NA - 09</u>	0.002	0.023	-	0.025	25	-	-	tonnes	
<u>Nickel (and its compounds)</u>	<u>NA - 11</u>	0.001	0.175	-	0.176	112	-	-	tonnes	
<u>Nitrate ion</u>	<u>NA - 17</u>	-	29	-	29	-	-	-	tonnes	
<u>Selenium (and its compounds)</u>	<u>NA - 12</u>	8.5	12	-	21	1,201	-	-	kg	
<u>Sulphuric acid</u>	<u>7664-93-9</u>	-	-	-	-	-	-	-	tonnes	
<u>Vanadium (and its compounds)</u>	<u>7440-62-2</u>	-	0.004	-	0.004	49	-	-	tonnes	
<u>Zinc (and its compounds)</u>	<u>NA - 14</u>	0.039	0.009	-	0.048	14	-	-	tonnes	

**Image 2.** CNSC Open Government Portal Display of Cameco’s Key Lake Operation

Year	Année	NPRI ID	Company	Facility Na	City	Ville CSD	SDR C/Province	Latitude	Longitude	Substance	Substance	Units	Un Stack	Emis Direct	Disc
2019	2019	1148	Cameco	Key Lake	Saskatoon	Saskatoon	SK	57.2067	-105.6592	Uranium	Uranium	kg	NRM	NR	43.8
2019	2019	1148	Cameco	Key Lake	Saskatoon	Saskatoon	SK	57.2067	-105.6592	Thorium-230	Thorium-230	MBq	NRM	NR	24.5
2019	2019	1148	Cameco	Key Lake	Saskatoon	Saskatoon	SK	57.2067	-105.6592	Radium-226	Radium-226	MBq	NRM	NR	134.2
2019	2019	1148	Cameco	Key Lake	Saskatoon	Saskatoon	SK	57.2067	-105.6592	Lead-210	Plomb-210	MBq	NRM	NR	24.5
2019	2019	1148	Cameco	Key Lake	Saskatoon	Saskatoon	SK	57.2067	-105.6592	Polonium-210	Polonium-210	MBq	NRM	NR	7.3

**Image 3.** ROR Display of Radionuclide Emissions

**Radionuclides in ambient air, 2019**

2019	Reference annual air quality levels	Cigar Lake	McArthur River	Rabbit Lake	Key Lake	McClellan Lake
Pb <sup>210</sup> (Bq/m <sup>3</sup> )	0.021 <sup>1</sup>	0.0003	0.0003	0.0002	0.0003	0.0003
Ra <sup>226</sup> (Bq/m <sup>3</sup> )	0.013 <sup>1</sup>	0.0000	0.0000	0.0000	0.0001	0.0000
Th <sup>230</sup> (Bq/m <sup>3</sup> )	0.0085 <sup>1</sup>	0.0000	0.0000	0.0000	0.0001	0.0000
U (µg/m <sup>3</sup> )	0.06 <sup>2</sup>	0.0010	0.0001	0.0001	0.0008	0.0025

<sup>12</sup> Similar conclusions were made by CELA in its review of the ROR in 2018, see; <https://www.cela.ca/Inclusion-of-NPRI-Data>

As shown in **Image 1**, the NPRI display of emissions contains multiple hyperlinked columns so that readers can easily click to learn more about the substance, its make-up and type of release (ie. onsite, offsite etc.). The NPRI also construes data in a number of formats, thus allowing the data to be presented according to the user's preference. For instance, members of the public can search the NPRI by postal code, facility name or substance. The data can be viewed by year or, as a five-year aggregate, providing the user with the ability to choose their preferred level of detail. In comparison to the NPRI data, the Open Government Portal in **Image 2** and ROR in **Image 3** only report effluent to air, is specific to one year, does not illustrate the other emissions from the site, nor include hyperlinks should readers seek further information and explanation.

Further, without radionuclide data being contained on the NPRI– nor a direct link to the CNSC on the NPRI's site-specific pages – it is very possible members of the public using the NPRI tool will presume there are *not* radionuclide emissions. This is information which ought to be readily available and not housed on CNSC-specific channels.

### **Recommendation**

7. The radionuclide emission data provided in the Open Government Portal and ROR are not equivalent alternatives nor substitutes for the NPRI. Given the threat radionuclides pose to human health and the environment, we encourage the Commission to again, rethink its decision to *not* support the inclusion of radionuclides on the NPRI's substance list. The lack of comprehensive, accessible publicly-available data minimizes the ability of the public and independent scientific experts to provide valuable insight on relevant considerations to support the decision-making process and impedes the public's right to know.

### **F. Environmental Inspections and Enforcement**

CELA **requests** the Commission seek the following clarification from CNSC Staff at the upcoming ROR meeting and include it by way of addendum to the report.

*First*, the ROR states that “all treated effluent (which must meet federal and provincial discharge limits) is continuously discharged and eventually reaches Hidden Bay of Wollaston Lake” (emphasis added).<sup>13</sup> In response, we note that the existence of a law setting out allowable discharge levels does not automatically guarantee said levels are complied with. Thus, we **request** the Commission inquire as to the specific inspections and study undertaken by CNSC Staff or the proponent demonstrating effluent releases were indeed within allowable limits.

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<sup>13</sup> ROR, p 3

At the provincial and federal and even global level, there is a dearth of environmental enforcement action and a worrying trend that despite the growing *number* of environmental laws enacted in the last three decades, there is not an accompanying implementation of enforcement measures.<sup>14</sup> For this reasons, we **recommend** the ROR reference the study, data or inspection which verifies the ROR's conclusion that discharge limits are indeed being met.

*Second*, the ROR references that the "IAEA carried out activities at the Key Lake, McArthur River, and McClean Lake Operations to verify nuclear material inventories and assure the absence of undeclared nuclear material and activities."<sup>15</sup> The ROR then states that "no issues were identified."<sup>16</sup> CELA **recommends** that the ROR clearly reference how members of the public could access and learn more about the IAEA's onsite activities, findings and conclusions. Having conducted an online search for this matter, CELA can confirm that if there is publicly available information, it is not accessible or not easily searchable. We again ask that the CNSC to include footnotes referencing supporting documentation for items which either (1) conclusions or (2) references to inspections and oversight activities.

## **Recommendations**

8. CNSC should include footnotes referencing the documentation in support of its ROR conclusions and provide references when incorporating findings from external reports, inspections and reviews.

## **G. Climate Change and Resiliency**

Last year, CELA recommended that the Commission seek information from licensees at the ROR meeting regarding the climate risks faced by the mines and tailings management areas and review what techniques are necessary and being employed to manage and adapt to climate change. We also recommended that the Commission to direct Staff to expressly consider climate impacts and variability within the scope of RORs.

Unfortunately, this year's ROR does not contain a single reference to 'climate' nor 'greenhouse gas emissions' despite it being a topic of much discussion by Indigenous intervenors at last year's ROR meeting<sup>17</sup> and by written submission, including those submitted by CELA.

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<sup>14</sup> See United Nations Environment, "Environmental Rule of Law – First Global Report" (2019) online: [https://wedocs.unep.org/bitstream/handle/20.500.11822/27279/Environmental\\_rule\\_of\\_law.pdf?sequence=1&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/27279/Environmental_rule_of_law.pdf?sequence=1&isAllowed=y)

<sup>15</sup> ROR, p 5

<sup>16</sup> *Ibid*

<sup>17</sup> <http://nuclearsafety.gc.ca/eng/the-commission/pdf/TranscriptMeeting-2019-12-12-e.pdf>

At last year's ROR meeting, proponents submitted that the environmental risk assessment includes a range of factors and inputs, like precipitation, temperature, etc. and by extension, does consider climate change.<sup>18</sup> CNSC Staff echoed that climate change is “sort of” within a regulatory framework, that is “multifaceted” and there is some “overarching higher-level work that is happening.”<sup>19</sup> Unfortunately, none of these responses confirm to CELA that climate variability across time is being tracked so that trends can be identified, impacts predicted and precautionary action taken.

*First*, there is no indication that the environmental risk assessment, which is based on present activities is the appropriate tool for predicting climate response and requisite adaptive and mitigation efforts. Further, to substantiate ever-more frequent messaging from the CNSC that nuclear is “clean energy,”<sup>20</sup> CELA **recommends** a climate affects analysis of all licensees be undertaken to substantiate these claims.

*Second*, CELA submits oversight of potential climate impacts is within the purview of the CNSC's review because of its responsibility to protect the environment from unintended radioactive releases. Catastrophic weather events are becoming more frequent and CELA recommends the CNSC review the climate resiliency of licensees as part of their regulatory oversight reporting. More specifically, we again **recommend** that a review of licenced activities' climate resiliency be included in the regulatory oversight reporting,<sup>21</sup> and ask that the Commission direct CNSC Staff to include this in future RORs.

*Third*, mining infrastructure – including tailings ponds and waste management areas – have been designed on the assumption that the climate is *stable*.<sup>22</sup> Therefore, the risk of structural failure due to the forces of climatic changes, post-closure, is of great concern.<sup>23</sup> Extreme rainfall, rain, snow and rapid melting events pose specific risks to mine sites because they can overwhelm site drainage and diversion structures, thereby causing excess runoff to tailings impoundment areas.<sup>24</sup> This in turn can lead to erosion, slope instability and the rapid increase of water levels and threaten releases of acid rock draining and other contaminants into the environment.

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<sup>18</sup> Transcript, p 154 <http://nuclearsafety.gc.ca/eng/the-commission/pdf/TranscriptMeeting-2019-12-12-e.pdf>

<sup>19</sup> *Ibid*, p 155

<sup>20</sup> See for instance remarks from CNSC President Velshi, online:

<https://nuclearsafety.gc.ca/eng/resources/presentations/president-velshi-remarks-office-nuclear-regulation-annual-industry-conference.cfm>; <http://nuclearsafety.gc.ca/eng/resources/presentations/keynote-remarks-rumina-velshi-july-18-2018-ottawa.cfm>

<sup>21</sup> CELA has previously made this submission to the Commission, including in our 2017 comments on the ROR for Nuclear Substances: 2017.

<sup>22</sup> T. Pearce et al. “Climate change and mining in Canada” (Mitigation and Adaptation Strategies for Global Change, 2011), p 12

<sup>23</sup> *Ibid*, p 13

<sup>24</sup> *Ibid*, p 15

Changes in temperatures can also affect mine sites, by altering the availability of water (ie. due to prolonged droughts) and triggering increased evaporation from tailings ponds and potentially exposing or re-exposing metals and contaminants below.<sup>25</sup> This is particularly relevant in the context of this ROR's reviews, as it includes mine sites whose tailings management functions involve storing solids produced by mills, providing ongoing dewatering of tailings solids and hydraulic containment of surface, runoff and groundwater from the catchment area.<sup>26</sup>

For instance, in Elliot Lake, most of the waste management area was decommissioned by water cover. Should the water bodies which feed the tailings area be depleted, the resulting radioactive dust would pose a threat to the surrounding environment and community. While CELA does not support the CNSC's decision to exclude historic mine sites from its annual ROR review, we do **request** that lessons learned from already decommissioned sites be considered when reviewing the operational uranium mine and mill facilities in Canada. CELA submits that as climate change was not a consideration that factored into decommissioning for Canada's historical uranium mine sites, we **recommend** it is pressing that these sites be brought into the scope of the ROR on an annual basis and, that decommissioning plans for currently operating sites be required to consider climate effects.

*Fourth*, it is crucial that the Commission, as the federal authority vested with the oversight of these sites, specifically understand the climate conditions of the mines and their tailings management areas and know what techniques are necessary to manage and adapt to climate change.<sup>27</sup> We **recommend** this information be sought from licensees at the ROR meeting and an update publicly shared by way of addendum to the ROR report.

As climate impacts become more frequent and pronounced, CELA again strongly **recommends** the CNSC discuss climate change in the context of licensee oversight because of the major safety and environmental risk they pose.

## **Recommendations**

9. The CNSC should commission an independent climate effects analysis of all licenses in order to provide the expert-based justification needed to substantiate the Commission's promotion of nuclear as a "clean" form of energy, capable of combatting climate change.
10. The Commission should seek information from licensees at the upcoming ROR meeting setting out the climate risks faced by the mines and tailings management areas and review what techniques are necessary and being employed to manage and adapt to climate

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<sup>25</sup> *Ibid*, p 16

<sup>26</sup> ROR, p 68

<sup>27</sup> T. Pearce et al, p 17

change.

11. As climate change was not a consideration that factored into decommissioning for Canada's historical uranium mine sites, there is a pressing need to bring these sites into the scope of the ROR on an annual basis. Relatedly, decommissioning plans for currently operating sites should be required to consider climate effects.

## **H. Regulatory Document Implementation**

Appendix C of the ROR sets out the status of RegDoc implementation for the Cameco and Orano sites. However, there are significant changes between the table presented in Appendix C and its equivalent in last year's ROR. For instance, we note the following unexplained changes:

- **Cigar Lake:** RegDoc 2.9.1 implementation changed from 2021 in last year's report to 2020 in this year's report; RegDoc 3.2.1 changed from 2021 to 2020
- **McArthur River:** RegDoc 2.2.2 implementation changed from 2019 in last year's report to 2022 in this year's report; RegDoc 2.10.1 changed from 2020 to the non-specified 'next LCH update'; RegDoc 2.13.1 changed from 2020 to the non-specified 'next LCH update'
- **Rabbit Lake:** RegDoc 2.10.1 implementation changed from 2022 in last year's report to 2020 in this year's report; RegDoc 2.11.1 change from 2020 to non-specified
- **Key Lake:** RegDoc 2.9.1 implementation changed from 2022 in last year's report to 2020 in this year's report; RegDoc 3.1.2 changed from 2022 to 2020
- **McClellan Lake:** RegDoc 2.13.1 changed from 2022 to 'implemented'

We **request** the CNSC clarify why in some instances implementation dates have been removed and replaced with 'next LCH change' and for others, a date not specified, when last year it was; more still have been altered by a two year time span. CELA submits this is a significant human safety and environmental protection issue as RegDocs form the licensing basis for allowable activities, and from which the CNSC verifies compliance. Without these standards being in place and in force, no oversight and necessary enforcement can occur. Therefore, we **recommend** at the upcoming ROR meeting that CNSC Staff explain why these changes to implementation dates have been made since last year's ROR, and addendum to this report be provided.

**Recommendation**

12. Changes, omissions and discrepancies in the status of RegDoc implementation in this year's ROR in comparison to last year should be set out at the upcoming ROR meeting. For items which are deferred or no longer required, there is an even greater need for explanation.

**III. CONCLUSION**

We respectfully provide these comments to assist the Commission in its review of the Regulatory Oversight Report for Uranium Mines and Mills in Canada: 2019.

Regards,

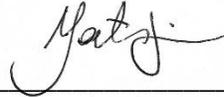
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CANADIAN ENVIRONMENTAL LAW ASSOCIATION



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Kerrie Blaise, Legal Counsel



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Morten Siersbaek, Legal Counsel

**APPENDIX 1**  
**Summary of Recommendations**

1. Oral submission opportunities and rights of reply should be included within the scope of ROR interventions.
2. The CNSC should extend the amount of time provided to the public for the review of RORs and ensure a minimum 60-day timeframe.
3. The ROR would be more effective if the CNSC canvassed a list of issues and topics to inform the scope of the ROR. Given the trend to longer, ten-year licences, soliciting public comment on the scope of issues addressed in ROR would provide a starting point for public engagement.
4. Greater detail should be provided within the ROR and conclusions in the text supported by references to accompanying documents or studies.
5. The Commission should require Cameco and Orano to release their preliminary decommissioning plans for public review. Summaries of PDPs should not be an accepted alternative when this information is available and before the Commission.
6. As part of the Commission's role as a lifecycle regulator, decommissioning plans should be a required component of RORs so that the range of technically complex and challenging decommissioning actions which are specific to uranium mines and mills can be publicly reviewed and discussed.
7. The radionuclide emission data provided in the Open Government Portal and ROR are not equivalent alternatives nor substitutes for the NPRI. Given the threat radionuclides pose to human health and the environment, we encourage the Commission to again, rethink its decision to *not* support the inclusion of radionuclides on the NPRI's substance list. The lack of comprehensive, accessible publicly-available data minimizes the ability of the public and independent scientific experts to provide valuable insight on relevant considerations to support the decision-making process and impedes the public's right to know.
8. CNSC should include footnotes referencing the documentation in support of its ROR conclusions and provide references when incorporating findings from external reports, inspections and reviews.

9. The CNSC should commission an independent climate effects analysis of all licenses in order to provide the expert-based justification needed to substantiate the Commission's promotion of nuclear as a "clean" form of energy, capable of combatting climate change.
10. The Commission should seek information from licensees at the upcoming ROR meeting setting out the climate risks faced by the mines and tailings management areas and review what techniques are necessary and being employed to manage and adapt to climate change.
11. As climate change was not a consideration that factored into decommissioning for Canada's historical uranium mine sites, there is a pressing need to bring these sites into the scope of the ROR on an annual basis. Relatedly, decommissioning plans for currently operating sites should be required to consider climate effects.
12. Changes, omissions and discrepancies in the status of RegDoc implementation in this year's ROR in comparison to last year should be set out at the upcoming ROR meeting. For items which are deferred or no longer required, there is an even greater need for explanation.