

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: 2018

November 12, 2019

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I. INTRODUCTION

These submissions are filed by the Canadian Environmental Law Association in response to the Canadian Nuclear Safety Commission's ("CNSC") notice of meeting dated May 27, 2019 concerning the presentation of the *Regulatory Oversight Report for Uranium Mines and Mills in Canada:* 2018 (herein "ROR"). A meeting in Ottawa with respect to this matter is scheduled for December 11-12, 2019.

Expertise of the Intervenor

CELA is a non-profit, public interest law organization. For nearly 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 previously appeared before the Commission for the relicensing hearings of Canada's nuclear power plants and decommissioned reactors and has consistently provided written

¹ CNSC, Notice of Participation in a Commission Meeting and Participant Funding, online: http://nuclearsafety.gc.ca/eng/the-commission/pdf/NoticeMeetingPFP-ROR-UMM-2018-e.pdf; CNSC, "Regulatory Oversight Report for Uranium Mines and Mills in Canada: 2018" (11 October 2019) [ROR]

submissions to the Commission regarding their regulatory oversight reports. All of CELA's materials and submissions filed with the Commission are publicly available on our website.²

This submission is co-authored with Luc Lance, Radon Measurement and Analytical Provider certified by the Canadian National Radon Proficiency Program. Mr. Lance is also a member of the Canadian Association of Radon Scientists and Technologists.

II. FINDINGS

In the ROR, CNSC Staff conclude that in 2018 "there were no releases that could have harmed human health or the environment" and that all licensee activities were sufficient in this regard to merit a rating of "satisfactory" (SA). CELA's assessment of the ROR, however, reveals a number of shortcomings, specifically related to the report's scope, the public availability of documents and CNSC Staff's conclusions regarding environmental protection.

Accordingly, for the reasons outlined below, CELA recommends that the Commission require significant portions of the ROR to be withdrawn or substantially re-written, and proponents required to disclose critical licensing documents prior to all regulatory oversight report processes. A summary of CELA's recommendations are set out in **Appendix 1**.

i. Issues List and Scope

As CELA has previously provided to the Commission, we **recommend** the CNSC conduct a premeeting conference or discussion, which seeks input on issues to be discussed. Preliminary meetings are a widely used practice in anticipation of tribunal proceedings.⁴ 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.

² Canadian Environmental Law Association, online: https://www.cela.ca/test-emergency-planning-around-canadian-nuclear-plants

³ ROR, p ix

⁴ Jerry DeMarco and Paul Muldoon, "Environmental Boards and Tribunals – A Practical Guide, 2nd Ed" (LexisNexis: 2016), p 78

In this instance, licensees chose not to disclose documents requested by CELA on the basis that they were not within the ROR's scope. CELA reiterated with licensees that regardless of the ROR, licensing documents should be publicly available. Further, should licensees wish to weigh in on the scope of RORs, we request this be an open and inclusive process, conducted by the CNSC and a decision made prior to the release of the ROR. Thus, we **recommend** the CNSC adopt procedures allowing for issue identification so that there is clearer sense of the issues and heightened procedural fairness.

Furthermore, had an opportunity to provide comments been provided, many of the requests made by CELA in this written submission pertaining to the inclusion of climate effects and sustainable development goals could have been included within the purview of the ROR. In our experience, there is not an opportunity to amend the ROR text and thus, these issues for review will remain omissions within the report.

Lastly, 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, CELA **recommends** that a call-for-comments on a draft of the ROR be sought prior to the final text being provided to the Commission and furthermore, if requested, public intervenors be provided an opportunity to orally intervene.

Recommendations

- 1. The CNSC should adopt rules of procedure allowing for issue identification prior to the release of the ROR to provide clarity regarding scope and heighten procedural fairness.
- 2. A call-for-comments on a draft of the ROR should be sought prior to the text being finalized for review by the Commission.
- 3. Public intervenors should be provided an opportunity to intervene orally at ROR meetings.

ii. Unsatisfactory Public Availability of Documents

CELA received participant funding from the CNSC to (1) comment on the sufficiency of the information made available to the public and (2) summarize our findings and recommendations in a written report to be submitted to the Commission. While the scope of this report extends beyond the scope and amount of funding awarded, we reiterate that a required objective of our participation was to review the sufficiency of publicly available information.

However, having reviewed the ROR and accompanying documents, CELA concludes that the public availability of documents necessary to review the ROR's findings in full is severely limited and critically deficient. This is in part because of an unwillingness, on part of the licensees to share information, but also the Commission, who despite statements in support of public disclosure, have not adequately followed through on its stated objectives.

CELA's finding that public information and disclosure is insufficient is particularly unfortunately given a stated purpose of the ROR was to review the availability of licensees' public information and outreach efforts,⁵ and the ROR explicitly recognizes that public information is "essential to establishing an atmosphere of openness, transparency and trust between the licensee and the public." Based on our findings, our **recommendations** to the Commission are as follows.

First, CELA **recommends** that the Commission ensure that plans and compliance verification criteria which form the licence be matters of public record. For instance, CELA requested the Preliminary Decommission Plans (PDPs) from both Cameco and Orano Canada Inc. but was denied in both instances. CELA was first denied disclosure of the PDPs by CNSC Staff, who recommended we contact licensees directly. CELA received no response from Orano Canada Inc. and Cameco advised that the PDPs would not be disclosed because they were not relevant to our review of the ROR and contained proprietary information. While it appears Cameco has since published summaries of its PDPs to its website⁷ in response to our requests, we reiterate that all primary licensing documents should be disclosed in full and only private information redacted.

Secondly, CELA submits that any document either referenced in the ROR or relied upon in coming to a conclusion should be made publicly available. On this basis, the PDPs are within the scope of our review as, as the ROR notes, "licensees are required to develop preliminary decommissioning plans and associated financial guarantees to ensure that work activities are covered financially, and work is guaranteed to completion with no liability to the government." The ROR also states in discussing the Rabbit Lake site, "no changes to the existing preliminary decommissioning plan and cost estimates have occurred."

Without the provision of the PDPs, there is no way for CELA or any member of the public to review the validity of these statements. Further, as a quasi-judicial tribunal, the Commission should abide by the open court principle and ensure its proceedings are open to the public.⁹

⁵ ROR, Executive Summary

⁶ ROR, p 7

⁷ See online: https://www.cameco.com/media/media-library

⁸ ROR, p 68

⁹ A. Wallace, "The Impact of the Charter in Administrative Law: Reflections of a Practitioner" (2002), p 262

Fulfilling this role requires that the record before the Commission be publicly available. Absent an express explanation determining why this should not be the case, any document referenced or relied in the ROR should be publicly available.

Thirdly, 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. Inadequate decommissioning planning can cause water resources to be contaminated by acid mine drainage and the disposal of mine tailings can lead to further land and water degradation as residues leach into groundwater from wind and soil erosion. ¹⁰

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. Disclosure in the public interest should serve as an override to protecting confidential business information, when there is the potential for serious harm to the environment or human health.

Planning for decommissioning occurs years in advance and so to, should the ability of the public to access and review information about plans and proposals. For these reasons, CELA **recommends** the Commission recognize the importance of the public in environmental decision-making and require the disclosure of PDPs.

Further, the Commission, as a public interest body, should also ensure the public is *as* represented as the proponent in decision-making processes. CELA **recommends** that PDPs, and other licensing documents, be public documents by default. Without adequate disclosure of information, the public cannot participate in decision-making. The Commission, by allowing proponents to withhold documents of critical public importance, is not furthering access to environmental justice nor upholding fair, and equitable decision-making procedures.

Recommendations

4. 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. Therefore, disclosure in the public interest should serve as an override to the protection of confidential business information when there is the potential for serious harm to the environment or human health.

¹⁰ See CELA Newsletter, April 1983, p 5

5. To advance environmental justice and uphold fair and equitable decision-making procedures, the Commission should recognize the importance of the public in environmental decision-making and immediately require all PDPs and other licensing documents to be made publicly available.

iii. Environmental Protection

The ROR concludes that in 2018, "there were no releases that could have harmed human health or the environment." However, since there is insufficient licensee compliance with a diverse range of CNSC Regulatory Documents (RegDocs) and a lack of publicly available environmental emissions data, CELA is unable to corroborate this finding by CNSC Staff and ask that it be withdrawn from the ROR.

First, the ROR lists the regulatory documents applicable to uranium mine and mill facilities. In only 7 of 55 instances have the RegDocs been implemented by licensees. No explanation is provided in the ROR for this lack of compliance and accordingly, CELA concludes that allowing proponents to operate *despite* non-conformance with a number of CNSC policies is a flawed method of oversight and licensing.

According to the ROR, the RegDocs which remain outstanding - and in most instances will not be implemented by licensees until a future licence renewal - include:

- REGDOC-2.10.1, Nuclear Emergency Preparedness and Response, Version 2
- REGDOC-2.9.1, Environmental Protection: Environmental Principles, Assessments and Protection Measures, Version 1.1
- REGDOC-3.1.2, Reporting Requirements, Volume I: Non-Power Reactor Class I Nuclear Facilities and Uranium Mines and Mills
- REGDOC-2.11.1, Waste Management, Volume III: Assessing the Long-Term Safety of Radioactive Waste Management
- REGDOC-2.11.1, Waste Management, Volume II: Management of Uranium Mine Waste Rock and Mill Tailings

While it may be that licensees are compliant with prior versions of these RegDoc's (which in many instances would predate 2017), we **recommend** the Commission at its meeting clearly define why licensees are able to operate absent compliance with regulatory documents and secondly, confirm the basis upon which it is satisfied that in all Safety and Control Areas, licensee activities is sufficient to protect human health and the environment.

¹¹ ROR, p ix

CELA is alarmed that such broad non-compliance with CNSC RegDocs is permitted, as it undermines the efficacy of the Commission's oversight and the carrying out of their mandate, per section 9 of the *Nuclear Safety and Control Act*. Further, without an adequate licensing basis and prescribed limits and standards to which licensee activity can be compared, the Commission lacks the baseline to fulfill its purpose, in the oversight of the nuclear sector and protection of human health, safety and the environment.

Second, CELA submits Appendix L, which reports the annual release of radionuclides from uranium mine and mills, is an insufficient stand-in for more detailed and publicly accessible available on the National Pollution Release Inventory (NPRI). We reiterate our **recommendation** that radionuclides be reportable to the NPRI. Unlike Appendix L, which is a 2-page text insert, the NPRI construes data in a number of forms, 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.

The data presented in Appendix L lacks all of these features and cannot be considered analogous. Appendix L should list each of the categories, as included in the NPRI, documenting releases from offsite transfers for disposal and recycling, on-site releases, and on-site disposal. Each of these categories would be further defined by releases to air, land and water. Currently, Appendix L only reports liquid effluent to surface waters.

Third, CNSC Staff's conclusion that "there were no releases that could have harmed human health or the environment" misconstrues the risk that accompanies uranium mining and mill operations. As the ROR recognizes, there are releases of "molybdenum, selenium and uranium with the potential for adverse environmental effects." The ROR continues, stating "as a result, improved engineering controls and treatment technologies to reduce effluent releases of these contaminants were implemented" [emphasis added]. ROR also notes in the context of Cigar Lake mining operations that "arsenic loading to the environment has been reduced steadily since 2016."

CELA submits reducing effluent releases does not eliminate the risk posed by the toxics and thus, the potential for adverse environmental affects referenced in the ROR remains. In this regard, the ROR also notes that there are no federal or provincial effluent discharge limits for molybdenum and thus, the CNSC requires licensees to develop facility-specific discharge limits.

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

¹³ ROR, p 25

¹⁴ Ibid

¹⁵ ROR, p 51

CELA submits the lack of a federal or provincial limit does not exempt the CNSC from using its regulation making authority to set a limit. For a chemical which is a suspected reproductive and neurotoxicant, ¹⁶ the CNCS should ensure effluent releases are prescribed in regulation not industry-developed codes of practice.

In light of these findings, CELA submits the Commission direct CNSC Staff to revise the entirety of the ROR's discussion of the Environmental Protection SCA and rather than awarding "Satisfactory" ratings to all uranium mine and mill sites, revise the rates to be "Below Expectations" for all licensees.

Recommendations

- 6. The Commission should not permit widespread non-compliance with CNSC RegDocs and at its ROR meeting, clearly set out why this occurs and confirm the basis upon which it fulfills its authority under the *Nuclear Safety and Control Act* in overseeing nuclear licensees.
- 7. The rating for all sites for Environmental Protection should be changed form "satisfactory' to "below expectations" as Regulatory Documents specific to environment, human and health, waste management and emergency planning standards have not yet been adopted and implemented by licensees.
- 8. 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.

iv. Inspections

In reference to the CNSC's inspections of uranium mines and mills, the ROR outlines:

CNSC inspectors conduct inspections of uranium mines and mills. The number of inspections and the focus of the inspections depend on performance and operating status of the mine or mill. The CNSC uses a risk-informed approach when planning inspections. In 2018, CNSC staff performed a total of 26 inspections across the five mines and mills.

¹⁶ M. Winfield et al, "Nuclear power in Canada: an examination of risks, impacts, and sustainability," (Pembina - December 2006), p 18

As a result of these inspections, 31 non-compliances or action notices were issued. All concerns raised during the inspections have been addressed by the operators.¹⁷

Not considered, however, in the ROR's chapter on inspections is the Spring Report of the Federal Commissioner of the Environment and Sustainable Development ("Environment Commissioner")¹⁸ which reported on Canada's mining industry and effluent releases. Among the findings of the Report was mine sites' widespread incomplete information for compliance reporting. As the Report noted, "[compliance] reports did not include data on unauthorized effluent discharge from other than the final discharge point, and many mines were excluded because of lack of data."¹⁹ The Environment Commissioner underscored the importance of the matter as "enforcement activities help to ensure that the metal mining industry complies with requirements designed to protect fish and their habitat. Tracking information by mine site is important because compliance rates can vary by site, even for the same company."²⁰

In light of these findings by the Environment Commissioner, we **recommend** the Commission provide an overview of actions the CNSC has taken at the upcoming ROR meeting. We also **request** an addendum to the ROR be drafted and posted which specifically responds to the Environment Commissioner's findings and expressly reviews the sufficiency of compliance reporting among uranium mine licensees.

Recommendations

9. The Commission should provide an update at is ROR meeting responding to the findings of the federal Environment Commission which found widespread, incomplete compliance reporting among Canada's mining industry, specifically pertaining to effluent releases. This update should be included as an addendum to the ROR.

v. Climate Change

As part of CELA's sufficiency review of the ROR for environmental protection and oversight, we reviewed the ROR's consideration of climate change and climate effects on uranium mill and mine sites. Unfortunately, the ROR fails to consider climate effects. CELA has previously raised this issue before the Commission, and we again urge the Commission to direct Staff to expressly consider climate impacts and variability within the scope of the ROR.

¹⁷ ROR, p ix

¹⁸ Office of the Auditor General of Canada, "2019 Spring Reports of the Commissioner of the Environment and Sustainable Development," online: http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201904_e_43295.html

¹⁹ *Ibid*, p 18

²⁰ Ibid

First, 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.

Second, mining infrastructure – including tailings ponds and waste management areas – have been designed on the assumption that the climate is *stable*.²¹ Therefore, the risk of structural failure due to the forces of climatic changes, post-closure, is of great concern.²² 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.²³ 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.

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.²⁴ 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.²⁵

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, 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.

Third, 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.²⁶ We **recommend** this information be sought from licensees at the ROR meeting and an

²¹ T. Pearce et al. "Climate change and mining in Canada" (Mitigation and Adaptation Strategies for Global Change, 2011), p 12

²² *Ibid*, p 13

²³ *Ibid*, p 15

²⁴ *Ibid*, p 16

²⁵ ROR, p 68

²⁶ T. Pearce et al, p 17

update publicly shared by way of addendum to the ROR report. Furthermore, as scholars have recognized, there are "no widespread legal obligations to consider climate change in mine planning or in mine closure plans."²⁷ Thus, it is crucial the Commission, as a public interest body and regulator, actively respond to this legislative gap.

Recommendations

- 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. At the upcoming ROR meeting, the Commission should consider legal obligations it will develop to ensure climate change is considered in mine closure planning.

vii. Consideration of Sustainable Development Goals

As of 2016, there was 218 million tonnes of uranium mill tailings and 169 million tonnes of uranium waste rock.²⁸ These tailings and waste rock contain radionuclides, heavy metals, and release nitrous oxides, sulphur dioxide and particulate matter to the atmosphere.

Accompanying the operations of uranium mines, is a commitment by Canada to reduce all wastes through their cycle in an effort to minimize adverse impacts to human health and the environment. As a signatory to the United Nations' 2030 Agenda for Sustainable Development, Canada has committed to achieving 17 goals and 169 targets. Accordingly, Goal 12 sets out that Canada will:

By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.

²⁷ Ibid

²⁸ Natural Resources Canada, "Inventory of Radioactive Waste in Canada – 2016," p 1

In light of the Sustainable Development Goals, CELA **requests** an update be provided to the Commission at the ROR meeting clarifying how it seeks to meet this Goal. We also **recommend** the Commission publicly release its strategic plan for doing so, and require licensees publicly release plans aimed at waste reduction.

Recommendations

13. At the ROR meeting, the Commission should state how it seeks to meet the UN's Sustainable Development Goals, release its strategic plan for doing so, and require licensees to publicly release plans aimed at waste reduction.

vii. Radon Monitoring

CELA's review of the ROR also included consideration of radon monitoring and testing. Accordingly, we have reviewed the IEMP data for the McClean Lake, Key Lake, McArthur River and Cluff Lake Project sites.

For the Key Lake and McArthur River, no radon testing data or monitoring information was provided. We **request** that this discrepancy be explained at the upcoming ROR meeting. We further note that the neither the ROR nor IEMP data considered the potential of radon dissipation in the air, should it be released from the tailings management areas. Wind direction and velocity are also factors which have a role in the release of radon. Thus, as a means of contingency and climate planning, we **recommend** the ROR and IEMP data consider the impact of radioactive dust being transported away from tailings areas and, the resulting radon monitoring which would be required to protect nearby communities and the environment.

Recommendations

14. Contingency and climate planning should assess radon monitoring needs in order to safeguard public health and the environment.

viii. Other Items

CELA also raises the following other matters for the Commission's attention:

First, as described in the ROR, the CNSC only issues licences when applicants fulfill prescribed requirements, including that they confirm that they will adhere to the international obligations to which Canada has agreed. Thus, CELA **requests** information as to whether each licensee is provided information on what particular international obligations apply to their licenced activities. CELA **recommends** the ROR reference the key international standards as well as

obligations guiding licensing requirements and discuss how this is communicated to licensees.

Second, in a number of instances throughout the report, its noted that "In 2019, as a result of recommendations from the Commission, CNSC Staff took an initiative to.." however, the report does not clarify in what context these recommendations were made (ie. meeting or hearing) and where they could be located (ie. transcript, record of decision). Therefore, we **recommend** that for all of these follow-up items, a reference to the originating direction be provided.

Recommendations

- 15. The ROR should list and reference key international standards as well as obligations guiding licensing requirements and discuss how international obligations are communicated to licensees.
- 16. For all follow-up actions referenced in the ROR, the originating direction should be cited for ease of reference.

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: 2018.

Truly,

CANADIAN ENVIRONMENTAL LAW ASSOCIATION

Kerrie Blaise, Counsel

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APPENDIX 1 SUMMARY OF RECOMMENDATIONS

- 1. The CNSC should adopt rules of procedure allowing for issue identification prior to the release of the ROR to provide clarity regarding scope and heighten procedural fairness.
- 2. A call-for-comments on a draft of the ROR should be sought prior to the text being finalized for review by the Commission.
- 3. Public intervenors should be provided an opportunity to intervene orally at ROR meetings.
- 4. 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. Therefore, disclosure in the public interest should serve as an override to the protection of confidential business information when there is the potential for harm to the environment or human health.
- 5. To advance environmental justice and uphold fair and equitable decision-making procedures, the Commission should recognize the importance of the public in environmental decision-making and immediately require all PDPs and other licensing documents to be made publicly available.
- 6. The Commission should not permit widespread non-compliance with CNSC RegDocs and at its ROR meeting, clearly set out why this occurs and confirm the basis upon which it fulfills its authority under the *Nuclear Safety and Control Act* in overseeing nuclear licensees.
- 7. The rating for all sites for Environmental Protection should be changed form "satisfactory' to "below expectations" as Regulatory Documents specific to environment, human and health, waste management and emergency planning standards have not yet been adopted and implemented by licensees.
- 8. 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.
- 9. The Commission should provide an update at is ROR meeting responding to the findings of the federal Environment Commission which found widespread, incomplete compliance reporting among Canada's mining industry, specifically pertaining to effluent releases. This update should be included as an addendum to the ROR.
- 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. At the upcoming ROR meeting, the Commission should consider legal obligations it will develop to ensure climate change is considered in mine closure planning.
- 13. At the ROR meeting, the Commission should state how it seeks to meet the UN's Sustainable Development Goals, release its strategic plan for doing so, and require licensees to publicly release plans aimed at waste reduction.
- 14. Contingency and climate planning should assess radon monitoring needs in order to safeguard public health and the environment.
- 15. The ROR should list and reference key international standards as well as obligations guiding licensing requirements and discuss how international obligations are communicated to licensees.
- 16. For all follow-up actions referenced in the ROR, the originating direction should be cited for ease of reference.