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**Written submission from the
Canadian Environmental
Law Association**

**Mémoire de l'Association
canadienne du droit de
l'environnement**

**Regulatory Oversight Report on the
Use of Nuclear Substances in
Canada: 2018**

**Rapport de surveillance
réglementaire sur l'utilisation
des substances nucléaires au
Canada : 2018**

Commission Meeting

Réunion de la Commission

November 7, 2019

Le 7 novembre 2019

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**Canadian
Environmental Law
Association**
EQUITY. JUSTICE. HEALTH.

**SUBMISSION BY THE CANADIAN ENVIRONMENTAL LAW ASSOCIATION
TO THE CANADIAN NUCLEAR SAFETY COMMISSION REGARDING THE
REGULATORY OVERSIGHT REPORT ON THE USE OF NUCLEAR
SUBSTANCES IN CANADA: 2018**

October 14, 2019

**Prepared by
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Kerrie Blaise, Legal Counsel**

I. INTRODUCTION

These submissions are filed in response to the Canadian Nuclear Safety Commission's ("CNSC") notice of meeting dated April 10, 2019 concerning the presentation of the *Regulatory Oversight Report on the Use of Nuclear Substances in Canada: 2018* (herein "ROR").¹ A meeting in Ottawa with respect to this matter is scheduled for November 6-7, 2019. We note that while the notice was released on April 10, 2019, the ROR was not made publicly available until September 5, 2019. CELA appreciates the one-week extension provided by the CNSC for the filing of our comments.

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.

¹ CNSC, Notice of Participation in a Commission Meeting and Participant Funding, online: <http://www.nuclearsafety.gc.ca/eng/the-commission/pdf/NoticeMeetingPFP-ROR-NuclearSubstances-2018-e.pdf>; CNSC, "Regulatory Oversight Report on the Use of Nuclear Substances in Canada: 2018" (4 September 2019) [ROR].

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 submissions to the Commission to facilitate its meeting in regards to the regulatory oversight reports. All of CELA's materials and submissions filed with the Commission are publicly available on our website.²

II. FINDINGS

In response to the above referenced ROR, CELA raises a number of issues relating to the report's scope and content and provides the following comments relating to the use and oversight of nuclear substances in Canada. Our findings are set out below, accompanied by either requests or recommendations to the Commission and CNSC Staff. A summary of recommendations is included in **Appendix 1**.

i. Issues List and Scope

CELA has reviewed the ROR in detail and finds it is significantly more brief than prior ROR's on the same topic. Excluding appendices, the nuclear substance ROR in the past three years has had the following lengths:

- 2018-ROR (current): 48 pages
- 2017-ROR: 94 pages
- 2016-ROR: 84 pages

We note that the appendices accompanying each of these RORs also appear to have been reduced by a similar length. CELA finds this trend troubling and contrary to the purpose of the annual oversight reports, and **recommends** including information on the rationale behind this reduction in size/scope, including a summary of the information that will no longer be provided or will only appear in an even more abbreviated form.

As CELA has provided to the Commission in other instances, 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 practice in anticipation of tribunal proceedings.³ 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

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

³ Jerry DeMarco and Paul Muldoon, "Environmental Boards and Tribunals – A Practical Guide, 2nd Ed" (LexisNexis: 2016), p 78.

regulator, proponent, and intervenors, it would provide demonstrably clearer guidance to intervening parties regarding the acceptability of their submissions.

Issue identification is critically important, 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. While issue identification can require a significant amount of time, a clearer sense of the issues and providing the public an opportunity to comment advances procedural fairness.

Therefore, as there has not been a public scoping of issues, whereby the CNSC staff, licensees and intervenors can weigh in on the issues which should frame the report, we submit CELA's comments provided herein are not out of scope.

Recommendations

1. Given the reduced length of this year's ROR, information should be provided at the ROR meeting explaining the rationale for this reduction in size/scope, including a summary of the information that will no longer be provided or will only appear in an even more abbreviated form.
2. 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.

ii. Compliance and Rating Levels

First, CELA remains of the opinion that the CNSC's previous rating levels were easier to understand and more detailed than the current scale presented in the ROR.⁴ We reiterate our recommendation made in the past in relation to the 2016 edition of the ROR to reconsider the shift in terminology, or at least retain parts of the prior wording. This could be done, for example, by using the following names:

- Exceeds expectations.
- Meets expectations.
- Below expectations.
- Unacceptable.

⁴ ROR, p 103.

Unlike ‘meets expectations’ and ‘exceeds expectations,’ which are rather self-evident, the difference between ‘satisfactory’ and ‘fully satisfactory’ is unclear without further clarification.

Secondly, the ROR sets out a list of activities undertaken to encourage licensee compliance (ie. discussions with licensee, sanctions, monetary penalties etc.).⁵ However, what is not clear is the frequency with which each of these tools are used. This would be a helpful comparison to make in the report as it would illustrate whether the CNSC, in its licence verification activities, is using the gamut of powers available to it or prioritizing ‘softer’ mechanisms, for instance.

Thirdly, the ROR also includes information on the overall compliance rate of inspected licensees within the management SCA (94%), the operating performance SCA (84%), the radiation protection SCA (84%) and the security SCA (92%). While these SCA’s have been prioritized in the ROR, CELA **recommends** at least including the compliance percentages for the remaining SCA’s to allow the public to gain better insight into the overall performance of licensees. In this regard, CELA finds the following passage in the ROR of particular importance:

During licensing and compliance activities, CNSC staff review the licensee’s (or applicant’s) performance within each relevant SCA by reviewing licensee documents and conducting inspections. Owing to the broad nature of the different activities conducted by the licensees covered in this report, not all SCAs apply to all activities or all licensees. Although not incorporated into this report, all relevant SCAs are assessed during compliance inspections and reviews of licensees’ documents, and a compliance rating similar to those found in this report is assigned for each SCA. All required corrective actions arising from below-satisfactory performance are tracked and followed up by CNSC staff to ensure that all items of noncompliance are addressed to the satisfaction of the CNSC.⁶

From this passage, it is evident that the necessary performance data is already compiled and assessed by the CNSC. It is also clear that this data is considered important by the CNSC, since compliance ratings are assigned for each SCA. Yet apparently for reasons of simplicity, this data is excluded from the purview of the Commission and public.

CELA submits that given the reductions made to the length of this year’s ROR in comparison to previous years, there would have been ample space to include an appendix with a range of tables or charts containing key performance data covering the remaining SCA’s. CELA **recommends** this be remedied in next year’s ROR and an update provided at the ROR meeting in November, 2019.

⁵ ROR, p 8.

⁶ ROR, p 6-7.

Recommendations

3. Compliance percentages for all Safety and Control Areas should be included in the ROR to allow the public to gain better insight into the overall performance of licensees.

iii. Environmental Protection

The ROR makes the following general conclusion about the Environmental Protection Safety and Control Area (SCA):

[t]he evaluations of findings for the SCAs covered in this report show that, overall, licensees made acceptable provision to protect health, safety, security, and the environment from the use of nuclear substances and prescribed equipment[.]⁷

Unfortunately, the ROR contains little to no discussion of measures taken to protect the environment and omits any discussion or data related to the Environmental Protection SCA, which could have supported such a conclusion.

Lacking analysis and the supporting references, CELA submits the ROR does not contain sufficient information to allow the report to conclude that licensees made acceptable provision to protect the environment. While it is possible that licensees may have done so and are in compliance, the ROR contains insufficient information for the public to determine on what basis this is the case.

While CELA strongly urges incorporating reasonably detailed information regarding environmental protection, CELA **recommends** at least including information on whether or not any licensee was rated Below-expectation for any of the SCA's not explicitly covered in the ROR, including in particular the Environmental Protection SCA and the Waste Management SCA, and to provide references to other CNSC documents that may shed further light on any such below-expectation ratings.

Further, as the ROR notes “[e]ight licensees received an unacceptable rating in one or more SCAs.”⁸ Given the lack of information on other SCA’s, including in particular the environmental protection SCA, it can not be determined if any of these ‘unacceptable’ ratings have a bearing on the protection of the environment.

The ROR has excluded reporting on the Environmental Protection SCA on the basis that nuclear substance and radiation devices pose a low risk of impact. It also notes for waste nuclear

⁷ ROR, p 1.

⁸ ROR, p 17.

substances, Environmental Protection ratings are reported, in an appendix to the report. Specifically:

In addition, ratings for the environmental protection SCA are included for the waste nuclear substance subsector (appendix C.4). Environmental protection SCA ratings are not reported for the other sectors because the majority of nuclear substance and radiation device licensees are authorized to possess and use sealed sources and radiation devices, which have an extremely low risk of impact on the environment[.]⁹

However, contrary to this statement, no actual ratings are provided in Appendix C4 for waste nuclear substances. Instead, the Appendix C4 contains the following statement, which CELA submits, is wholly insufficient:

The waste nuclear substance licensees continue to manage and monitor environmental releases as a result of licensed activities. These releases are kept well below regulatory limits. There were no unplanned releases to the environment as a result of licensed activities in 2018.

Recommendations

4. Any licensee that receives a below expectation rating should be profiled in the ROR, even if its in regards to an SCA not described in the report.
5. Appendix C4 should be updated to include data which led to the positive performance rating for licensees in the Environmental Protection SCA.

iv. Compliance with REGDOC 2.9.1 Environmental Protection

Based on the ROR's reporting for the Environmental Protection SCA, CELA is concerned that the CNSC's scoping of environmental protection may have been too narrowly defined to capture potential harms and risks to the environment. The reasons given in the ROR for excluding the environmental protection SCA points to a potential gap in the CNSC's review of licensees. As such, the environment may be impacted by the activities of licensees covered by the ROR in ways not directly related to harm caused by nuclear substances, yet still within the scope of REGDOC-2.9.1.

According to section 2.2 of REGDOC-2.9.1, the scope of environmental protection oversight is broader than just nuclear substances:

⁹ ROR, p 7.

The CNSC's environmental protection safety and control area (SCA) covers measures that identify, control and monitor all releases of radioactive and hazardous substances and effects on the environment from facilities or as the result of licensed activities.

Yet, on p. 7 of the ROR, the following is said (and this is also mirrored on p. 60):

Environmental protection SCA ratings are not reported for the other sectors because the majority of nuclear substance and radiation device licensees are authorized to possess and use sealed sources and radiation devices, which have an extremely low risk of impact on the environment.

This clearly presents a narrower understanding of the Environmental Protection SCA, contrary to the CNSC's environmental protection framework set out in REGDOC-2.9.1, which in Section 2.2. requires consideration of not just radioactive substances, but rather of *all* hazardous substances and effects on the environment:

The CNSC's environmental protection safety and control area (SCA) covers measures that identify, control and monitor all releases of radioactive and hazardous substances and effects on the environment from facilities or as the result of licensed activities.

CELA is aware that REGDOC-2.9.1 sets out a presumption that most Class II facilities such as hospitals and universities, and the use and transport of nuclear substances and radiation devices, will have no interaction with the environment. However, in setting out this presumption, REGDOC-2.9.1 also makes it clear that the CNSC must review every licence application to verify that there are no significant interactions with the environment.

It is thus clear that this no more than a rebuttable presumption, which is expected to apply to a majority of Class II facilities, and that in its review of licensees, the CNSC is required to consider all hazardous substances and effects on the environment. The quoted statement on p. 7 of the ROR suggests that the CNSC has not done so to a sufficient degree.

In other words, absent data, findings and an intelligible rationale, which examine the overall environmental impact of licensees as required in REGDOC 2.9.1, a statement which concludes certain acts are *not* impactful is not sufficient. With this in mind, and given the purposes of the Commission's mandate per sections 3 and 9 of the *Nuclear Safety and Control Act*, CELA **recommends** this matter be discussed at the upcoming ROR meeting and the ROR updated by way of addendum, to set out how the environmental protection threshold per REGDOC 2.9.1 is fulfilled.

Recommendations

6. The upcoming ROR meeting and the ROR should be updated by way of addendum, to set out how the environmental protection threshold per REGDOC 2.9.1 is fulfilled.

v. Complexity among Licensees

The ROR notes that CNSC staff are reviewing the regulatory oversight strategies for larger or more complex licensees.¹⁰ CELA **recommends** providing more information in the ROR on the basis for this review, including any perceived/identified issues with the current approach or benefits to be gained from changing the current approach.

Further, the ROR notes that in 2019-2020, the CNSC intends to review the sufficiency of regulatory oversight strategies for larger or more complex nuclear substance and radiation device licensees. CELA queries what sectors or licensees may be the intended focus on this reform and **recommends** further information disclosing the reason for this change, be included at the ROR meeting in November.

Recommendations

7. Information should be provided in the ROR which describes the motivation to change oversight for larger and more complex licensees. This information should be presented at the upcoming ROR meeting.

vi. Performance Ratings, Compliance and Verification

The ROR notes an increase in decisions related to certification of Exposure Device Operators is mentioned, which did not lead to increased efforts due to optimization in CNSC staff processes.¹¹ CELA **recommends** describing what is meant by “CNSC staff optimized their process” and whether it will be applied to other areas beyond exposure device operators.

CELA also notes that 2018 witnessed a decrease in the time allotted for compliance verification (ie. an 18% decrease).¹² As other parts of the ROR allude to higher performance rates within the SCAs as a result of increased inspections, this begs the question whether this decrease in time spent on compliance verification may have led to fewer compliance issues being discovered. Therefore, CELA **requests** the Commission direct CNSC Staff to provide further information on whether this might be the case, and if not to provide an analysis of why this is not so.

¹⁰ ROR, p 10.

¹¹ ROR, p 11.

¹² *Ibid.*

CELA commends the change in inspection-approach, “from primarily verifying records and programs at head offices to conducting inspections in the field and observing workers operating portable gauges.”¹³ In addition to portable gauges, this approach has also been in the area of Nuclear Medicine and in industrial radiography.¹⁴ CELA notes that this new approach has apparently “led to improved detection of non-compliance in this subsector, shown by a decline in the performance in the radiation protection and operating performance SCAs”.¹⁵

To the extent that this has not already been done, CELA therefore **recommends** considering applying this approach to other (sub)sectors covered by the ROR, and in future RORs, include such considerations.

The ROR also notes that this change in inspection approach may account for the increase in findings of non-compliance both in operating performance and radiation protection.¹⁶ CELA finds it plausible that this may be part of the explanation, and suggests that the coming years may help show if the shift in inspection strategy is the main cause, and whether this approach will lead to a long-term positive effect on compliance. These results also support concerns expressed by CELA regarding the 2016-ROR, namely that a drop in the number of inspections would likely mean that more instances of non-compliance would go un-noticed.¹⁷

Within the industrial sector, a persistent problem with compliance can be observed in the fixed gauge subsector, with ratings dropping to rather disappointing levels:

- Radiation protection ratings dropped from 81 % in 2014 to 77 % in 2018.
- Operating performance ratings dropped from 90 % in 2015 to 68 % in 2018.

Therefore, CELA **requests** the Commission require CNSC Staff to provide information on the possible causes of these decreasing ratings and proposals for how it may be reversed.

Recommendations

8. A description of what is intended by the phrase “CNSC staff optimized their process” should be provided at the ROR meeting.

¹³ ROR, p 21.

¹⁴ ROR, p 24.

¹⁵ ROR, p 22.

¹⁶ ROR, p 31.

¹⁷ CELA’s 2016-Submission, p 2-3.

9. The Commission should require greater field-based rather than desk-top inspections of licensee compliance in the nuclear substance sectors beyond those noted in the ROR, of portable gauges, nuclear medicine and industrial radiography.

vii. Inspections

Inspections and other compliance verification activities are an important tool in ensuring protection of the environment and therefore CELA has looked at the number of inspections and time spent on compliance verification, as included in the ROR.

A number of changes have occurred over the past several years. In 2015 a total of 1,568 inspections were carried out. In 2016 the number of inspections decreased to 1,452. In 2017 this dropped further to 944 inspections, while 2018 saw a slight increase up to 949 inspections.¹⁸ Additionally, there has been an 18% drop the time allotted to compliance verification, compared to 2017.¹⁹

Given the shift from performance-based inspections to records-based inspections,²⁰ CELA **requests** information on how many of these inspections were performance-based and how many were records-based. CELA also **requests** information regarding the share of performance-based inspections vs. records-based inspections in past years, in order to gain a better understanding of how many performance-based inspections were carried out in past years compared to 2018.

Given a focus on high risk licensees, fixed gauge licences, which are labelled as medium risk, have apparently gone without inspection for several years, leading to increased findings of non-compliance.²¹

CELA finds it concerning that what appears to be a lack of sufficient resources to carry out the necessary number of inspections may have resulted in medium risk-licensees being left without proper oversight for a number of years. While it is positive that the CNSC plans to increase inspections of medium risk-licensees in 2019, the focus on resolving the inspection-backlog begs the question whether this will in turn lead to oversight issues in other areas.

Given that the ROR does not provide a clear answer regarding the allocation of inspection resources, CELA **requests** information as to what, if any, inspection areas or activities have been given lower priority to allow for the increased focus on medium risk-licensees in 2019. This should include a description of whether further resources have been allocated and/or whether a

¹⁸ ROR, p 17 and p 47.

¹⁹ ROR, p 11.

²⁰ *Ibid.*

²¹ ROR, page 31.

systematic approach is being taken to this problem. In particular, CELA is interested in whether the need for inspections going forward has been evaluated in order to avoid a back-log of inspections and deteriorating performance to occur within other subsectors, or to repeat in this subsector.

viii. International Obligations

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”.²² 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.

Recommendations

10. 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.

ix. Pre-licensing Application Reviews

Regarding pre-licensing reviews conducted by the CNSC, the ROR notes two instances in which a second pre-licensing visit was required before recommending that a licence be issued.²³ The first instance involved security concerns while the second instance involved an applicant’s failure to demonstrate a comprehensive knowledge of the radiation safety program and of the applicant’s responsibilities. For both of these instances, CELA **recommends** including more detailed information regarding the decision to carry out secondary pre-licensing visits. Doing so would help give the public a better understanding of the degree of rigor applied in the review of new applicants.

CELA also has concerns about the public accessibility of the pre-licensing application stage. CELA has previously sought licensee applications submitted to the CNSC during this stage, but has been denied access due to the “commercially sensitive and proprietary information” contained in the proponent’s reports. CELA remains of the view that this erodes the public’s right to know and sets a precedent for public disclosure at the earliest of review stages which permits the withholding of information by proponents, and prioritizes private interests over those of the public.

²² ROR, p 12.

²³ ROR, p 12.

As a solution, CELA proposes the CNSC consider a registry, much like the Environmental Registry of Ontario established under the *Environmental Bill of Rights*.²⁴ The Registry provides notice to the public regarding environmentally significant decisions, provides public opportunity to comment on these proposals before they are approved and requires that comments be considered by the decision maker before he or she makes their decision. Even though many of the postings to the Registry may not receive public comments, it provides an additional avenue to tracing the licence, permit or environmental compliance approval, or amendments to the instrument. As each proposal is subsequently updated with a decision, it provides a public snapshot of the proponent and intended activities, as well as the decision.

CELA **recommends** the CNSC consider adopting a similar approach to Ontario's Environmental Registry. We submit the CNSC's Licencee's Database is insufficient for the 2000+ nuclear substance licences as the licences are not searchable nor traceable as far as their conditions, expiry or amendments. Further, as nuclear substance licences do not undergo a licensing hearing, which in itself creates a public record, we recommend the adoption of a Registry system to fulfil public disclosure obligations required by the NSCA and CNSC REGODCs.

Recommendations

11. A public registry should be established for the 2000+ nuclear substance licences so that the licences are viewable and amendments or decisions from the Commission specific to the licence are traceable.

x. *Radiation Exposure to Workers*

CELA has reviewed the sector-by-sector comparison of annual effective doses to Nuclear Energy Workers (NEWs) and unfortunately, it appears that annual effective doses have increased in 2018.²⁵ CELA **recommends** including a detailed discussion of these results, including a review of potential causes and actions which will be taken to lessen exposures in subsequent years.

In regards to the two instances of INES level 2-exceedances in 2018 – one in the medical sector with an estimated dose of 3,650 mSv to the worker's wrist, and another in the commercial sector with an estimated dose of 1,681 mSv to the worker's thumb – the ROR notes that the workers have not reported any health effects as a result of these exposures.²⁶ However, given the short time frame within which health effects are being measured (as they occurred during the operational year of 2018), CELA **recommends** further information be provided about the

²⁴ See online: <https://ero.ontario.ca/page/welcome>

²⁵ ROR, p 28, Figure 11.

²⁶ ROR, p 28.

potential longer term health risks and ways in which ongoing medical review will be provided to these NEWs.

Lastly, the report makes frequent reference to the As Low As Reasonable Achievable (ALARA) principle in the context of workers' doses and radiation protection. However, as the ROR discusses, among the two thousand nuclear substance licences, there are varying degrees of complexity and risk. Thus, CELA **recommends** it would be helpful for the ROR to explain what ALARA constitutes in each of the nuclear substance sectors reviewed and how, in light of greater or lesser risk to the worker or the environment, licensing requirements and inspection are either more/less responsive.

Recommendations

12. Further information should be provided about the potential long-term health risks to exposed nuclear energy workers and how their long-term health will be monitored and evaluated.
13. The ROR should explain what ALARA constitutes in each of the nuclear substance sectors reviewed and how, in light of greater or lesser risk to the worker or the environment, licensing requirements and inspection are either more/less responsive.

xi. Trends in Nuclear Medicine Performance

Nuclear Medicine has witnessed a negative trend in compliance ratings for at least the past 5 years.²⁷ Therefore, CELA submits the ROR should have provided a more in-depth explanation and analysis of this trend, including possible causes and solutions. CELA **recommends** this information be provided to the Commission at the upcoming ROR meeting in November 2019.

CELA also notes that in comments previously submitted by St. Michael's Hospital to the Commission titled "Comments on Discussion Paper DIS1301, Proposals to Amend the Radiation Protection Regulations," St. Michael's Hospital critiques proposed further administrative burdens on hospital staff. It is suggested that part of the issue with the declining compliance ratings may be linked to the addition of administrative tasks to be handled by an already overburdened staff.

CELA **requests** the CNSC detail what steps have been taken to alleviate the administrative burden in this subsector, while still retaining a sufficient level of protection. We request the CNSC clearly set out how they intend to ensure hospital staff are not being tasked with burdensome requirements that, while of benefit to the CNSC, may fit poorly within the workflow at hospitals. In light of this potential burden, CELA **requests** the CNSC provide information on

²⁷ ROR, p 55.

how it aims to increase capacity. Ultimately, if unrealistic reporting expectations are placed on hospital staff, it will limit the value and potential of the CNSC's oversight.

Recommendations

14. In response to negative trend in Nuclear Medicine compliance ratings for at least the past 5 years, a more in-depth explanation and analysis of this trend, including possible causes and solutions should be provided to the Commission at the upcoming ROR meeting in November 2019.

xii. Other Matters of Clarification

CELA highlights a few remaining matters where greater clarification would assist in clarifying the content and reader accessibility of the ROR.

First, of the orders issued in 2018 noted in Appendix D of the report, order number 1206 remained open as of July 15, 2019. Secondly, an order issued on December 19 has not been provided an order number and is noted as "n/a". As no information is provided about the issues leading to these orders being issued,²⁸ CELA **recommends** including a brief description of the issues in question, in a manner similar to that provided for all of the closed orders.

Secondly, the ROR references the abbreviation DNSR.²⁹ The ROR does not explain what this stands for and thus CELA **recommends** a description be included.

Thirdly, pertaining to waste nuclear substances, the ROR states the following:

[T]he waste nuclear substance licensees, support other users of nuclear substances by handling low-level waste from research laboratories, as well as slightly contaminated metals, laundry and equipment from other types of nuclear facilities.³⁰

CELA **recommends** that information be included in the ROR, describing the amounts of contaminated materials received from such 'other types of nuclear facilities', the characterization of these materials' contamination, and a clearer identification of what constitutes 'other types of nuclear facilities.' This level of detail would assist in clarifying other standalone statements in the ROR, such as "for waste nuclear substance licensees that may have interactions with the environment," which on their face, are unclear.

²⁸ ROR, p 63-64.

²⁹ ROR, p 17.

³⁰ ROR, p 20.

Fourthly, regarding stakeholder engagement, the ROR notes that “reaching and engaging with licensee communities” is a particular focus.³¹ CELA queries to what extent the nuclear substances are used in areas which are not accessible by road, namely, in remote mining or exploratory sites. Therefore, CELA **requests** the Commission direct staff to provide further details about the locations of “licensee communities” and detail which communities have been visited in the year in focus.

Lastly, the ROR reviews a number of REGDOCs which either came into force during the year in review or will soon be available in draft form, and public comments solicited. In each instance, CELA **requests** the CNSC whether the coming into force of a REGDOC will be retroactive and made a licence compliance document for each licensee. Should this not occur, CELA **requests** an explanation as to why.

Recommendations

15. Discrepancies in order number 1206 and the order, not numbered, but dated December 19 should be remedied.
16. The acronym DNSR should be described and spelled out in full.
17. The amounts of contaminated materials received from ‘other types of nuclear facilities’, the characterization of these materials’ contamination, and a clearer identification of what constitutes ‘other types of nuclear facilities’ should be provided to the Commission and included in next year’s ROR.
18. In response to stakeholder engagement, CNSC Staff should provide information to the Commission regarding the location of “licensee communities” and detail which communities have been visited in the year in focus.

IV. CONCLUSION

We respectfully provide these comments to assist the Commission in its review of the Regulatory Oversight Report in the Use of Nuclear Substances in Canada: 2018.

Truly,

CANADIAN ENVIRONMENTAL LAW ASSOCIATION

³¹ ROR, p 40.



Morten Siersbaek, Legal Counsel



Kerrie Blaise, Counsel

**APPENDIX 1
SUMMARY OF RECOMMENDATIONS**

1. Given the reduced length of this year's ROR, information should be provided at the ROR meeting in November 2019 explaining the rationale for this reduction in size/scope, including a summary of the information that will no longer be provided or will only appear in an even more abbreviated form.
2. 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.
3. Compliance percentages for all Safety and Control Areas should be included in the ROR to allow the public to gain better insight into the overall performance of licensees.
4. Any licensee that receives a below expectation rating should be profiled in the ROR, even if its in regards to an SCA not described in the report.
5. Appendix C4 should be updated to include data which led to the positive performance rating for licensees under the Environmental Protection SCA.
6. The upcoming ROR meeting and the ROR should be updated by way of addendum, to set out how the environmental protection threshold per REGDOC 2.9.1 is fulfilled.
7. Information should be provided in the ROR which describes the motivation to change oversight for larger and more complex licensees. This information should be presented at the upcoming ROR meeting.
8. A description of what is intended by the phrase "CNSC staff optimized their process" should be provided at the ROR meeting.
9. The Commission should require greater field-based rather than desk-top inspections of licensee compliance in the nuclear substance sectors beyond those noted in the ROR, of portable gauges, nuclear medicine and industrial radiography.
10. 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.

11. A public registry should be established for the 2000+ nuclear substances so that the licences are viewable and amendments or decisions from the Commission specific to the licence are traceable.
12. Further information should be provided about the potential long-term health risks to exposed nuclear energy workers and how their long-term health will be monitored and evaluated.
13. The ROR should explain what ALARA constitutes in each of the nuclear substance sectors reviewed and how, in light of greater or lesser risk to the worker or the environment, licensing requirements and inspections are either more/less responsive.
14. In response to a negative trend in Nuclear Medicine compliance ratings for at least the past 5 years, a more in-depth explanation and analysis of this trend, including possible causes and solutions should be provided to the Commission at the upcoming ROR meeting in November 2019.
15. Discrepancies in order number 1206 and the order not numbered, but dated December 19, should be remedied.
16. The acronym DNSR should be described and spelled out in full.
17. The amounts of contaminated materials received from ‘other types of nuclear facilities’, the characterization of these materials’ contamination, and a clearer identification of what constitutes ‘other types of nuclear facilities’ should be provided to the Commission and included in next year’s ROR.
18. In response to stakeholder engagement, CNSC Staff should provide information to the Commission regarding the location of “licensee communities” and detail which communities have been visited in the year in focus.