Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire

CMD 26-M13.16

Date: 2026-04-12

Written Submission from William G. Templeman

Mémoire de William G. Templeman

In the matter of the

À l'égard de la

Mid-term update from BWXT Nuclear Energy Canada Inc. on licensed activities at its Toronto and Peterborough facilities

Mise à jour de mi-parcours sur les activités autorisées de BWXT Nuclear Energy Canada Inc. à ses installations de Toronto et de Peterborough

Commission Meeting

Réunion de la Commission

May 2026

Mai 2026

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Canada

INTERVENTION TO THE CANADIAN NUCLEAR SAFETY COMMISSION

Subject: BWXT's mid-term licence review for Peterborough, Ontario Hearing

From: Bill Templeman of 301 Boswell Avenue, K9J 5G2 in Peterborough, Ontario

Submission: 13 pages

Date of Submission: April 14, 2026

Submitted via email to cnsc.interventions.ccsn@canada.ca

As an intervenor regarding BWXT's licence back in March of 2020 – See **Supporting Document A** appended to this submission —I fear that new research information has come to light that heightens the urgency I feel in resisting this licence renewal. Not only have my initial concerns not been adequately addressed, but there are new concerns that I need to make the CNSC aware of.

Since the hearings, the CNSC has been censured by the International Atomic Energy Agency for not living up to international standards in relation to things like public doses, siting and justification. See **Supporting Document B** appended to this submission.

Just a reminder that the only Commissioner with biological expertise, a medical doctor, radiologist and professor of public health, (in a panel of engineers, and industry insiders) said: ***"Moving the pelleting operations, adding radiation doses and UO2 air and effluent emissions in a site which has an adjacent vulnerable population, is not acting in an abundance of precaution." Sandor Demeter – former CNSC commissioner.***

There would be a substantial increase in emissions of insoluble, ceramicized uranium dioxide into the air and sewage system in Peterborough if BWXT incorporated pelleting operations. Uranium is particularly dangerous when inhaled as an internal emitter because it emits alpha particles, which are especially damaging once inside the body. .. It also emits gamma rays and beta particles as it decomposes. Because the grains of toxic dust coming from the factory are so small they can be breathed deeply into the lung where radiation and heavy metal chemical toxicity can harm DNA, cells and sensitive tissues. The grains of uranium pollution making it through the filters into the stacks are also so small they can even go up through the olfactory passages and into the brain causing neurotoxicity.

Uranium causes more damage to cells and tissue once inside the body than previously thought because of the bystander effect, the untargeted effects, genomic instability and because there are synergies between its radiotoxicity and its chemotoxicity as a heavy metal.

The science around uranium's effects on cells and tissue has accumulated since the last hearing. For stochastic events like cancer and genetic mutations, there is no threshold. It can be caused by a single alpha particle passing through a cell. (WHO)

BWXT and the CNSC have made it more difficult to compare the air and sewer emissions at the Toronto and Peterborough facilities in recent years, despite my directly questioning them, so I'll use the last 4 years I could find in the 2023 ERAs.

If the pellet manufacturing based at BWXT's Toronto plant were to be moved to Peterborough, based on Toronto's emissions, much more uranium would go into the sewers with these consolidated operations than go into the sewers in Peterborough now.

Based on Toronto's air emissions, thousands of times more uranium would go into the air than happens now in Peterborough.

BWXT in Peterborough has one uranium stack. Toronto has 6. It's a whole different level of uranium pollution.

Furthermore, why has the CNSC allowed BWXT to substantially decrease the funds set aside for decommissioning during the first half of this license? Are the citizens of Peterborough expected to cover the remaining costs of decommissioning?

How about the value of my house (.6 km from the BWXT building)?

Why has CNSC still not done any independent monitoring closer than 450 meters to the factory in Toronto, when BWXT's nuclear fuel processing building is only 25 meters from Prince of Wales school? Why does the CNSC do so little independent monitoring?

If pellet manufacturing comes to Peterborough, all the uranium normally stored and processed there would be stored in Peterborough. Up to 1500 tons of uranium could be moving through our streets, next to our waterways and stored onsite in our downtown core.

Unfortunately, accidents happen. During the first half of this license period, pipes cracked, allowing water contaminated with beryllium (and once with uranium that was meant for the sewer) to seep through the concrete into the ground. Neither the big ice storm last year nor the derecho was mentioned in BWXT's midterm intervention. What was the impact of these extreme weather events on BWXT's operations?

Canada is blessed with an abundance of wilderness. Why must BWXT select a residential neighbourhood in Peterborough as a site for its nuclear operations? Are there not other options available that would be safer for citizens? I would appreciate an answer to these questions.

Yours truly,

William G. Templeman
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Supporting Documents appear on the next page below.

Supporting Document A:

INTERVENTION TO THE CANADIAN NUCLEAR SAFETY COMMISSION 1

Subject: BWXT's licence application for Peterborough, Ontario Hearing Ref. 2020 - H - 01)

From: Bill Templeman, 301 Boswell Avenue, Peterborough, Ontario K9J5G2

Submission: 6 pages excluding cover letter

Submitted via email to cnsc.interventions.ccsn@canada.ca on January 25, 2020

To Whom It May Concern,

I am concerned about the possibility of BWXT Nuclear Energy Canada being granted a licence to produce nuclear fuel pellets 0.6 km from my home. I am not a nuclear engineer, a physicist or a radiation biologist. So, I am totally dependent on experts.

When I get onto a passenger jet, I have to depend on the expertise of the pilots, the flight crew, the air-traffic controller and the ground crew who serviced the aircraft. I have to trust that all these people have managed the risks involved. I am not a pilot.

When I am wheeled into an operating room at the hospital for a procedure or emergency surgery, I have to trust that my surgeon, my anesthetist, the nurses and technicians on duty have managed all the risks involved. I'm not a doctor either.

So, when a nuclear manufacturer near my house says they want to build reactor components using radioactive materials, I have to trust that they too, like the pilots and doctors, have managed all the risks involved. But have they? I don't know. I am a volunteer program host on a local community radio station (Trent Radio, 92.7 FM) in Peterborough. I post my program as podcasts after each show. I have interviewed 3 executives at BWXT. I have included links to my podcasts on this issue in an appendix at the end of this document. The BWXT 2 executives I met were bright, decent people; the sort of people with whom I would leave my house keys in order to feed the cat and water the plants when I go away on vacation. Very trustworthy. But nuclear energy is a hideously complex topic and I do not have the technical background to judge if I am being told the truth or not. BWXT is asking the neighbourhoods adjacent to the plant to have faith in the company's expertise and safety record. "Trust us", they say. Why? Why should these neighbours trust BWXT?

Will there be a huge nuclear explosion at the plant? Probably not. They don't work with enriched uranium and there are no reactors involved. However, BWXT plans to store up to 9,000 gallons of liquid hydrogen on their site to be used in the production of the pellets. When I brought this matter up at BWXT, I was assured that the storage tank will be managed by their hydrogen supplier and that storing hydrogen in liquid form is better from a safety standpoint that storing gaseous hydrogen. But is storing such a large quantity of liquid hydrogen in the middle of a residential neighbourhood (and across the street from an elementary school) a good idea?

Will there be any seepage of radioactivity into our local environment? I don't know. The former occupants of that plant (GE Hitachi) said there would be no safety concerns, yet there is a shockingly

high incidence of cancer among former employees and in the neighbourhoods close to the plant. I am told the same is true in Port Hope for the neighbourhood closest to the Cameco plant there. Will BWXT be any different? I don't know. The BWXT executives said they would test the air and soil around the plant on a regular basis. I am concerned about the plant being located 25 meters from a large elementary school. Is this a safe idea? In Ontario we have lots of undeveloped land. Why not set up this operation far from schools and residential neighbourhoods?

But what about property values? Nothing untoward may ever happen at BWXT's plant. There may no radioactive contamination of the surrounding neighbourhood. Yet in ten years if the market perception is that this neighbourhood is contaminated or unsafe, our properties will be worth much less than they are today. Manufacturing processes and environmental contamination are both physical processes and subject to the laws of science. Property values, particularly property values in neighbourhoods deemed to be of questionable 3 safety, are subject to market forces and the laws of perception, not the laws of science. Apart from selling now and moving, what can homeowners in the neighbourhood of this plant do to mitigate this financial risk? BWXT or the Canadian Nuclear Safety Commission (CNSC) are not in the real estate business. Neither organization will be compensating me for any loss in property value I may sustain.

Much of my retirement savings are tied up in this house. My house is fully paid for and is the foundation of my security for old age. If either my wife or myself ever need intensive care in our final years, the money for this care will come from the sale of this house. Now I have to admit that this is hardly a desperate situation. There are many, many people in Peterborough who will never own a house like mine. So, this is very much "a middle-class" problem. But it is my middle-class problem. The mere existence of this nuclear manufacturing plant close to my house could seriously erode my property value. Once BWXT gets its licence renewal from the CNSC, we will have no voice whatsoever.

I have been told that this decrease in property values is an issue in Port Hope. Faye More, head of the Port Hope Community Health Concerns Committee has not been mollified by assurances of government compensation for lost equity on homes resulting from AECL activities, and she points to new hot spots being discovered when buildings are demolished or new holes dug as evidence that concerns about property values and privacy rights ought to be reconsidered in the face of broader public health issues (Harries, 2017). Will the government compensate Peterborough property owners for lost equity on homes resulting from BWXT's activities? I acknowledge that the Port Hope situation is quite different from what we are facing in Peterborough. Or is it?

For one of my podcasts, I interviewed Jim Dufresne, a retired GE plant worker with over 20 years of experience on the nuclear side of the business. Concerned about a high rejection rate by the WSIB of claims by ex-GE workers and their families for compensation for suffering caused by illnesses and deaths, Dufresne compiled a list of 175 former GE Nuclear/GE Hitachi workers. 64 of them had died from cancer. More than 1 in 3. I am not an epidemiologist, but such numbers cry out for a comprehensive environmental assessment and 4 epidemiological survey prior to inviting more nuclear manufacturing into a residential neighbourhood.

Health Canada dismissed similar doubts raised by concerned citizens in Port Hope. Eric Mintz, an epidemiologist retained by the Port Hope Community Health Concerns Committee to review such studies, drew very different conclusions from the data collected by Health Canada, arguing that it actually shows higher than normal rates of leukemia and childhood cancer deaths, as well as significantly

elevated incidences of brain, lung, and colon cancer for certain time periods and demographic groups (Harries, 2017).

A problem in Peterborough is that right now there are no baseline measurements of radiation or cancer levels around the GE neighbourhoods. But will the production of these pellets cause property values in the neighbourhood to fall? Perhaps. The property values around BWXT's plant in the Lansdowne Dupont neighbourhood of Toronto are among the lowest in the GTA.

So, to conclude: I respectfully request that the CNSC not grant BWXT Nuclear Energy Canada Inc. a licence to produce nuclear fuel pellets at their Peterborough facility. If, in its final analysis, the CNSC decides to grant such a licence, I request that this licence be limited to 2 years, not 10 years as requested by the company.

My rationale for this request is two-fold: (1) A 2-year licence would give the company time to pilot their pelleting process then do a complete environmental assessment of the air, soil and water in the surrounding neighbourhood and (2) if radioactive contamination is detected in the neighbourhood, an exposure of 2 years would be significantly less damaging than an exposure period of 10 years.

Finally, I wish to offer the Commission a few words of feedback on this intervenor process. Preparing a document and delivering an oral presentation are not daunting challenges for me. Public speaking and writing are daily activities for me. However, there are many citizens for whom these tasks form an insurmountable barrier. I should point out that the neighbourhoods directly adjacent to the former GE plant are among the most economically depressed areas in Peterborough. Some of the neighbours closest to the BWXT building on Monaghan Road do not have access to this intervenor process for educational and cultural reasons. Social class exclusion makes BWXT’s licence application an inaccessible process for them. Upscale wealthy neighbourhoods to do not get 5 nuclear manufacturing. There are no nuclear factories in Rosedale, Forest Hill or along the Bridal Path in Toronto. The BWXT plant in Toronto is in a former industrial area, near the infamous Junction neighbourhood. Is the same dynamic at play in Peterborough?

This intervenor process is, in effect, exclusionary in that those without the vocational background or cultural capital to write and speak in public are, ipso facto, excluded from this process. I would be glad to offer alternatives to the current intervenor processes should the Commission wish to explore this matter further.

Respectfully yours,

Bill Templeman, Peterborough, Ontario

References: Harries, K. (2008, March; updated 2017, June), Nuclear Reaction, The Walrus, Retrieved from https://thewalrus.ca/nuclear-reaction/

APPENDIX

I have interviewed 3 members of CARN (Citizens Against Radioactive Neighbourhoods) and created a 3-episode podcast for my Trent Radio program and podcast. See the links below to listen to these episodes if you want more details.

You can also visit the CARN website at https://www.nopellets.ca/.

Part 1: https://pintsandpolitics.ptbopodcasters.ca/podcast/edition-76-part-1 why-is-there-community-resistance-to-nuclear-fuel-manufacture-in peterborough/

Part 2: https://pintsandpolitics.ptbopodcasters.ca/podcast/edition-76-part-2 why-is-there-community-resistance-to-nuclear-fuel-manufacture-in peterborough/

Part 3: https://pintsandpolitics.ptbopodcasters.ca/podcast/edition-77-part-3 why-is-there-community-resistance-to-nuclear-fuel-manufacturing-in peterborough/

I have also interviewed a former plant worker from GE Nuclear/GE Hitachi and 3 executives from BWXT.

Ex-GE worker: https://pintsandpolitics.ptbopodcasters.ca/podcast/edition-78-part-2-is-nuclear fuel-manufacturing-safe-in-peterborough-a-ex-ge-nuclear-worker-says-no/

BWXT executives: https://pintsandpolitics.ptbopodcasters.ca/podcast/edition-78-part-1-is-nuclear manufacturing-safe-in-peterborough-bwxt-says-yes/

Supporting Document B:

https://concernedcitizens.net/2020/03/07/international-peer-review-finds-deficiencies-in-canadas-nuclear-safety-framework/

International peer review finds deficiencies in Canada's nuclear safety framework

7 Comments

UPDATE July 2024

A June 2024 follow-up to an initial 2019 IAEA mission highlighted several problem areas:

- Explicit justification of facilities and activities whereby radiation risks must be considered in terms of the overall benefit, in line with IAEA safety standards;
- Full alignment of Radiation Protection Regulations with IAEA safety standards;
- implementation of constraints on dose or on risk, to be used in the optimization of protection for members of the public for nuclear facilities.

Despite the CNSC's positive spin on the IAEA missions, their findings are a cause of deep concern for independent observers and experts.

February 2020

The International Atomic Energy Agency (IAEA) has released the final report of its review of Canada's framework for nuclear safety. The review was conducted in September 2019 by a 24-member team including 20 senior regulatory experts from 17 countries, under the aegis of the IAEA's "Integrated Regulatory Review Service" (IRRS).

The final report was produced by peer reviewers and hosts together. This report took five months, after completion of the mission to be finalized.

The IRRS team conducting the review provided numerous observations, suggestions and recommendations that require action by the Government of Canada and the Canadian Nuclear Safety Commission (CNSC).

These include the following: (all text is excerpted from the IAEA report and IAEA safety guides except "Comments" which highlight concerns of civil society groups). Red text highlights some key quotes from the IRRS team's report.

1. The Government of Canada should enhance the existing policy and establish the associated strategy to give effect to the principles stated in its *Radioactive Waste Policy Framework*.

The IAEA requires "To ensure the effective management and control of radioactive waste, the government shall ensure that a national policy and a strategy for radioactive waste management are established." Further, it requires that "The national strategy for radioactive waste management has to outline arrangements for ensuring the implementation of the national policy." The IRRS team found "no evidence", beyond the principles contained in the *Policy Framework*, of a "governmental policy or strategy related to radioactive waste management." It found that the *Policy Framework* "does not encompass all the needed policy elements nor a detailed strategy or corresponding arrangements… for radioactive waste management in Canada."

Comment: "The IRRS mission found no evidence… of a government policy or strategy related to radioactive waste management." *This policy and strategy vacuum highlighted by the IAEA has allowed the promotion of substandard radioactive waste facilities that would not isolate radioactive wastes from the biosphere as required by IAEA.This puts Canadians at risk of adverse effects on their drinking water, their health and their property values. If this policy vacuum persists, current and future Canadians will pay for this deficiency with adverse health outcomes and increasing demands on the public purse to remediate poorly designed radioactive waste facilities in the future.*

2. The Government of Canada's decommissioning requirements should align with IAEA guidance that entombment, in which all or part of the facility is encased in a structurally long-lived material, is not an acceptable strategy for planned decommissioning of existing nuclear power plants and future nuclear facilities.

The IRRS team included the following observation in its report: "The CNSC is currently considering two licence applications related to in situ confinement of legacy reactor facilities. This strategy of in-situ confinement is **not consistent with SSG-47**" (emphasis added)

SSG-47 is the 2018 IAEA Specific Safety Guide, *Decommissioning of Nuclear Power Plants, Research Reactors and Other Nuclear Fuel Cycle Facilities*. The report suggests that Canada "revise its current and planned requirements in the area of decommissioning to align with the IAEA guidance".

The IAEA review states that "The national policy on management of radioactive waste should include decommissioning aspects, including the choice of possible decommissioning strategies" and it "encourages Canada to request an international peer review of the proposed strategy related to in situ confinement [entombment] of legacy reactors."

Comment: *Two proposals for entombment of shut-down reactors are currently undergoing environmental assessment in Canada. IAEA guidance explicitly prohibits this approach, which essentially consists of dumping concrete on top of the highly radioactive remains of defunct reactors and leaving them in place. Such an approach would allow radioactive contaminants to leak into groundwater and drinking water sources for millennia.*

3. The Government of Canada's legal framework for nuclear safety should "expressly assign the prime responsibility for safety to the person or organization responsible for a facility or an activity," and should "explicitly stipulate that compliance with regulations and requirements established or adopted by the regulatory body does not relieve the person or organization responsible for a facility or an activity of its prime responsibility for safety."

The IRRS team found that "The legal framework does not expressly assign the prime responsibility for safety to the person or organization responsible for a facility or an activity."

The IAEA requires that "The government shall expressly assign the prime responsibility for safety to the person or organization responsible for a facility or an activity."

Comment: *Lack of clarity on who is primarily responsible for safety can lead to lax safety practices as occurred in Ontario in 1997, when seven Ontario Power Generation reactors had to be shut down and U.S. experts called in to review the situation. (See "Canada pays price for taking nuclear safety for granted").*

4. The Government of Canada's legal framework for nuclear safety should explicitly address the principle of "Justification of facilities and activities", namely that "Facilities and activities that give rise to radiation risks must yield an overall benefit."

The IAEA requires that "For facilities and activities to be considered justified, the benefits that they yield must outweigh the radiation risks to which they give rise." The IRRS review states that "The*re is* ***no systematic evaluation of justification*** *for the various practices involving radiation sources in the licensing process*." (emphasis added)

The review suggests that the CNSC should "establish a procedure to ensure the systematic implementation of justification in the authorization of all practices involving radiation sources."

Comment: *Real situations arise where there is a trade-off between the nuclear industry's desire to expand and the public's right to be protected from radioactive pollutants, which are routinely released from nuclear facilities. By not explicitly addressing "justification", Canada's nuclear safety framework allows industry needs to prevail and man-made radiation exposures to increase without any assessment of whether or not there are benefits to society at large that justify the increased exposures. This deficiency is a problem given the recent exemption from impact assessment of small nuclear reactors and Canada's intention to invest heavily in this new technology.*

5. The CNSC should implement a systematic gap analysis between IAEA requirements and its regulatory framework, and update the regulatory framework as necessary.

The IAEA requires that "regulations and guides shall be reviewed and revised as necessary to keep them up to date, with due consideration of relevant international safety standards" The IRRS team found that CNSC regulations "do not comprehensively cover all IAEA Fundamental Safety Requirements." The CNSC

"has no systematic approach to conduct a gap analysis between the new IAEA requirements and its regulatory framework." The IRRS team observed that Canada's style of legislative practice "may create difficulties to find exact wording when searching where and by what provision individual requirements of the IAEA Safety Standards are addressed." It observed that the CNSC "uses a predominantly non-prescriptive approach in the application of its regulatory framework."

The IRRS team stated "*CNSC has **not developed** a single document where all elements of safety policy are gathered and approved by the senior management*." (emphasis added)

Comment: *Many fundamental IAEA safety standards are not addressed by regulations in Canada and there is no system in place to identify the gaps. IAEA standards that are addressed tend to be addressed in a "non-prescriptive" way. For example, there is no mention of the standards and regulations in actual nuclear facility licenses so essentially there is no legal force behind them. In practical terms, Canada's regulator relies on its licensees to "self-regulate"; this can lead to problems.*

6. The CNSC should establish or approve dose constraints for all Class I type facilities, should consistently implement the concept of dose constraints for all facilities, and should standardise regulatory practice for derived release limits.

The IRRS team found that "dose constraints are not explicitly established for all Class I facilities," that "there are different approaches used to the regulation of the control and authorization of releases for different types of facilities," and that "inconsistencies are evident" in the derivation of derived released limits.

Comment: *According to the review team there is much inconsistency in Canada's approach to establishing limits for radioactive pollutants from individual facilities. This puts Canadians at risk. In our experience, CNSC allows licensees to create a separate release limit for each and **every one of hundreds of radionuclides** it releases, each one based on releasing up to the public dose limit for that radionuclide. This problem is compounded by the fact that members of the public can be exposed to releases from more than one facility. For example, people in the Ottawa Valley are subject to radioactive releases from the defunct NPD reactor at Rolphton, from the Chalk River Laboratories, and from SRB Technologies in Pembroke which releases tritium to the air, groundwater, and the sewer system. Each one of these facilities sets its own release limits that allow it to release up to the public dose limit for each and every radionuclide it releases.*

7. The CNSC should ensure that radiation protection requirements are consistent with the IAEA *General Safety Requirements*, Part 3; specifically, with respect to optimization of radiation protection through dose constraints, dose limits and retention of dose records by licensees.

The IRRS review states that "*The current radiation protection regulations and requirements are **not in accordance** with GSR Part 3 with respect to optimization of radiation protection current radiation protection regulations and requirements are **not in accordance** with GSR Part 3 with respect to optimization of radiation protection.*" (emphasis added)

The IRRS team noted that the CNSC is updating its *Radiation Protection Regulations*. However, it found that this update "does not foresee a reduction in the dose limit to the pregnant nuclear energy worker from 4 mSv to 1 mSv… nor the establishment of dose limits for apprentices or students of 16 to 18 years of age." Further, it found that CNSC regulations do not meet the IAEA requirement that "Records of

occupational exposure for each worker shall be maintained during and after the worker's working life, at least until the former worker attains or would have attained the age of 75 years, and for not less than 30 years after cessation of the work."

Comment: *Canada does not adequately protect pregnant nuclear energy workers, allowing a four times higher dose to pregnant nuclear energy workers than IAEA recommends. Canada does not adequately protect student workers from 16 – 18 years of age. Inadequate record retention makes health studies difficult and could interfere with compensation claims in the event of adverse health outcomes potentially caused by radiation exposures.*

8. The CNSC should align its transportation regulatory documents with IAEA requirements, including its guidance for package design certification, and guidance regarding management system for transport.

The IAEA Regulations SSR-6 (*Regulations for the Safe Transport of Radioactive Materials, 2018 Edition*)require that "a management system based on international, national or other standards acceptable to the competent authority shall be established and implemented for all the activities associated to the transport of radioactive material." The IRRS report states "*The CNSC has* ***not explicitly established or adopted guidance*** *regarding management system for transport*." (emphasis added)

Comment: *Canada's inadequate management system for transport of radioactive materials puts Canadians at risk. We have no guarantees that packaging is adequate, and no notification to municipalities and emergency personnel when shipments are passing through their area. Three fiery crashes on Canadian highways in recent years amplify our concerns about potential catastrophic consequences of inadequately regulated transport of radioactive materials.*

Here are screenshots of Appendix IV from the final report. The IRRS team had suggestions or recommendations in 20 out of the 26 areas they looked at during the review.

APPENDIX IV - RECOMMENDATIONS (R), SUGGESTIONS (S) AND GOOD PRACTICES (GP)

AREA	R: Recommendation S: Suggestion GP: Good Practice	Recommendations, Suggestions or Good Practices
1. RESPONSIBILITIES AND FUNCTIONS OF THE GOVERNMENT	S1	Suggestion: The Government should consider explicitly addressing SF-1, Principle 4 (Justification) in its legal framework.
	S2	Suggestion: The Government should consider expressly assigning, in its legal framework, the prime responsibility for safety to the person or organization responsible for a facility or an activity.
	S3	Suggestion: The Government should consider enhancing the legal framework to explicitly stipulate that compliance with regulations and requirements established or adopted by the regulatory body does not relieve the person or organization responsible for a facility or an activity of its prime responsibility for safety.
	GP1	Good Practice: The CNSC has developed a targeted, multi-faceted programme for dealing with historic radium luminous devices in the public domain.
	R1	Recommendation: The Government should enhance the existing policy and establish the associated strategy to give effect to the principles stated in the Canadian Radioactive Waste Management Policy Framework.
2. THE GLOBAL SAFETY REGIME	GP2	Good Practice: The CNSC has a comprehensive system for collecting, analysing and sharing regulatory experience feedback.
3. RESPONSIBILITIES AND FUNCTIONS OF THE REGULATORY BODY	S4	Suggestion: The CNSC should consider continuing to focus on its human resource management plan to ensure that CNSC continues to have access to a sufficient number of qualified and competent staff to regulate existing facilities and activities as well as new and emerging technologies in accordance with the nature of facilities.
	GP3	Good Practice: The CNSC is very committed to ensuring a high level of transparency and openness, through an established, systematic, accountable and comprehensive set of activities that ensure transparency, openness, involvement, dialogue and accountability with the public, stakeholders and interested parties about its regulatory activities and decisions.

4. MANAGEMENT SYSTEM OF THE REGULATORY BODY	**S5**	**Suggestion: CNSC should consider consolidating all elements of its safety policy into a single document.**
5. AUTHORIZATION	**GP4**	**Good Practice: CNSC proactively developed extensive guidance and processes to assist potential applicants determine the content of the SMR application.**
	S6	**Suggestion: CNSC should consider revising its current and planned requirements in the area of decommissioning to align with the IAEA guidance that entombment is not considered an acceptable strategy for planned decommissioning of existing NPPs and future nuclear facilities.**
	S7	**Suggestion: CNSC should consider establishing a procedure to ensure the systematic implementation of justification in the authorisation of all practices involving radiation sources.**
	S8	**Suggestion: The CNSC should consider including notification alone as an option for the regulatory control of nuclear substances and radiation devices in accordance with a graded approach.**
	R2	**Recommendation: The CNSC should establish or approve dose constraints for all Class I type facilities.**
	S9	**Suggestion: The CNSC should consider consistently implementing the concept of dose constraints for all facilities and standardising regulatory practice for derived release limits (DRLs).**
6. REVIEW AND ASSESSMENT	**GP5**	**Good Practice: The peer reviews adopted for certification of packages minimize the risk associated with the certification of higher risk designs and increases reliability and consistency of certificates issued by CNSC. They also improve communication and knowledge sharing among Certification Engineers.**
	GP6	**Good Practice: HC has undertaken a strategic differentiation of messages on radon in order to effectively target sub-groups of the public. This represents an innovative and effective programme for raising awareness of radon and the necessary actions to mitigate it, targeting a point of time when people are more likely to be receptive to the message.**
	S10	**Suggestion: HC should consider undertaking a survey of radionuclide levels in building materials or indoor gamma dose rates arising from building materials to determine if**

		they make a significant contribution to public exposure.
7. INSPECTION	**S11**	**Suggestion: CNSC should consider formalizing the practice of inspector exchanges between licensee locations for inspection assistance to ensure the operating experience and lessons learned from assisting other CNSC staff perform inspections at different licensee locations are maximized.**
	S12	**Suggestion: CNSC should consider its process to formalise all elements used to ensure a comprehensive, regular review of the objectivity and independence of the on site inspectors.**
	S13	**Suggestion: The CNSC should consider performing unannounced inspections for uranium fuel fabrication, refining and conversion facilities.**
8. ENFORCEMENT	**N/A**	
9. REGULATIONS AND GUIDES	**R3**	**Recommendation: CNSC should ensure that the radiation protection requirements are consistent with the requirements of GSR Part 3.**
	S14	**Suggestion: CNSC should consider implementing a systematic gap analysis between the IAEA requirements and the regulatory framework and updating the regulatory framework as necessary.**
	S15	**Suggestion: CNSC should consider the requirements of SSR-4 and relevant IAEA guidance when specifying safety requirements and criteria for fuel cycle facilities.**
	R4	**Recommendation: The CNSC should revise its guidance for package design certification applications to align it with IAEA SSR-6.**
	S16	**Suggestion: The CNSC should consider establishing or adopting guidance aligned with IAEA TS-G-1.4.**

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fact sheetCNSC, IAEA peer review of Canada's nuclear safety framework, Nuclear safety problems in Canada

Post navigation

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