



**Oral Presentation**

**Exposé oral**

**Written submission from  
Peterborough Public Health**

**Mémoire de  
Peterborough Public Health**

In the Matter of the

À l'égard de

**BWXT Nuclear Energy Canada Inc.,  
Toronto and Peterborough Facilities**

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**BWXT Nuclear Energy Canada Inc.,  
installations de Toronto et Peterborough**

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Application for the renewal of the licence for  
Toronto and Peterborough facilities

Demande de renouvellement du permis pour les  
installations de Toronto et Peterborough

**Commission Public Hearing**

**Audience publique de la Commission**

**March 2 to 6, 2020**

**Du 2 au 6 mars 2020**

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January 27, 2020

Canadian Nuclear Safety Commission  
280 Slater Street, P.O. Box 1046, Station B  
Ottawa, ON K1P 5S9

Dear Canadian Nuclear Safety Commission Members,

**RE: Application for Renewal of the BWXT Nuclear Energy Canada Inc. Class 1B Fuel Facility Operating Licence for the facilities in Toronto and Peterborough, Ontario**

Please accept this written submission with respect to the above-mentioned licence renewal for BWXT Nuclear Energy Canada Inc. (BWXT NEC). The comments made in this submission pertain to the Peterborough BWXT facility, which falls within the geographical jurisdiction served by the Board of Health for the Peterborough County-City Health Unit (operating name, Peterborough Public Health (PPH)).

According to Ontario's Health Protection and Promotion Act (HPPA), a medical officer of health shall investigate complaints regarding potential hazards related to occupational or environmental health in the health unit.<sup>1</sup> In addition, the HPPA requires medical officers of health to stay informed on matters related to occupational and public health.<sup>2</sup> As such, PPH has been engaged with community members, CNSC staff, the Ministry of Environment, Conservation and Parks, the City of Peterborough, and Public Health Ontario, as well as directly with BWXT in relation to the license renewal.

When considering whether or not the licence renewal should be approved, PPH urges commission members to consider the location of the BWXT NEC Peterborough facility. It is located within a residential neighbourhood and adjacent to an elementary school. The playground for the youngest children in the school is across the road from the facility. Should the licence be renewed to allow BWXT to continue operating, it would be essential to ensure that the surrounding community has the information it requires, in a timely and transparent manner, to reassure residents that environmental emissions are not posing a risk to health. In our opinion, strengthening the relationship with, and accountability to, the surrounding residential neighbourhood presents a challenging but worthwhile endeavour for any long term operation of BWXT in Peterborough.

PPH has reviewed the Commission Member Document (CMD) submitted by CNSC staff, dated December 20, 2019<sup>3</sup> regarding the *BWXT Nuclear Energy Canada Inc. Application to renew licence for the Toronto and Peterborough Facilities*. Upon review of this document, PPH believes that the recommendations proposed by CNSC staff in the CMD will help to ensure that if the uranium dioxide pelleting operations are relocated to Peterborough, emissions from the Peterborough BWXT facility can be controlled and maintained at levels that are protective for the community's health. However, we believe the implementation of recommendations and licence conditions proposed by CNSC staff, including those outlined in Licence Conditions 15.1: Environmental Monitoring and 15.2: Commissioning Report<sup>4</sup>, are critical prior, and not subsequent, to the approval of any changes in operations at the Peterborough BWXT facility, including the initiation of pelleting operations.

Current data for emissions of uranium in water and air at the Peterborough facility is published in the facility's annual compliance reports. Additionally, the Independent Environmental Monitoring Program (IEMP) provides additional sample results. Although reassuring, these snapshots do not provide PPH with enough data upon which to base, with confidence, a recommendation regarding the safety of the facility. It appears that the uranium emissions into air and water are far below the level that would impact human health, but we would appreciate a much more robust data set to support our assertions. It would be beneficial for this purpose for the IEMP to expand the number and location of samples collected and include additional air monitoring for uranium and beryllium.

In addition, we note what appears to be an upward trend of beryllium present in the results of the soil monitoring conducted as part of the IEMP.<sup>5</sup> The samples show an upward trend in the presence of beryllium in soil testing conducted in 2014, 2018 and 2019. The latest results did not become available until after the CMD had been posted. The upper limit has been steadily increasing: 1.1 mg/kg (2014) 1.34mg/kg (2018) and 2.34 mg/kg (2019). Although the results continue to be below the CCME Soil Quality Guidelines (4.0 mg/kg), the results are approaching the guideline and require further study to determine if there are fugitive beryllium emissions from the facility.

A comprehensive and robust monitoring program is quintessential to prevent exposure and protect public health. According to the current licence, monitoring for beryllium is not required at or outside of the fence line. The facility does conduct continuous in-stack monitoring. Given the trends in the soil samples collected as part of the IEMP, additional environmental monitoring outside of the fence of the facility should be considered, including air monitoring in areas where soil samples have been collected as part of the IEMP.

As the beryllium results have recently come to light, it would be most prudent to investigate with the establishment of a more comprehensive environmental monitoring program to be done first, prior to the decision regarding the renewal of the licence and/or the moving of the pelleting process to the Peterborough site. It would be our recommendation that this monitoring should be undertaken with the full participation of representatives of the local community.

Further to the licence conditions outlined by CNSC staff in the CMD, Peterborough Public Health encourages commission members to consider these additional recommendations:

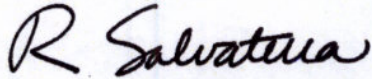
- 1. That BWXT implement a comprehensive environmental monitoring program to provide sufficient data to assess the full extent of uranium and beryllium emissions in the surrounding area prior to any decision regarding renewal of the licence and the addition of pelleting at the Peterborough site.**
- 2. That the BWXT Peterborough facility retain the services of an independent, neutral third party for soil, water, and air testing for Uranium and Beryllium, as appropriate, and publicly share all reports and test results in their entirety; and**
- 3. That the BWXT Peterborough facility establish a Community Liaison Committee (CLC) in Peterborough, similar to that which has been established in Toronto.**

We believe that these additional measures will help to increase the level of confidence that our community has in sampling results and will help to ensure that, moving forward, community concerns will be heard and addressed.

Peterborough Public Health plans to attend the public hearings in Peterborough on March 5 and 6, 2020 in order to address any public health-related questions from commission members.

Thank you in advance for considering this submission.

Sincerely,



Rosana Salvaterra, MD, CCFP, MSC, FRCPC  
Medical Officer of Health

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<sup>1</sup> Health Protection and Promotion Act, R.S.O. 1990, c. H.7, s. 11(1) <https://www.ontario.ca/laws/statute/90h07#BK12>  
(January 14, 2020)

<sup>2</sup> Ibid. s. 12(1)

<sup>3</sup> Canada. Canadian Nuclear Safety Commission. *BWXT Nuclear Energy Canada Inc. Application to renew licence for the Toronto and Peterborough Facilities*. CMD 20-H2. December 20, 2019.

<sup>4</sup> Ibid. pp. 223 – 226.

<sup>5</sup> Canada. Canadian Nuclear Safety Commission. *Environmental Protection Review Report: BWXT Nuclear Energy Canada Inc. Toronto and Peterborough Facilities – FFOL – 3620.01/2020 Licence Renewal*. e-Doc 6018621 (PDF). December 20, 2019.