



**Written submission from  
Ken Brown**

**Mémoire de  
Ken Brown**

In the Matter of the

À l'égard de

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

---

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

---

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**

*This page was intentionally  
left blank*

*Cette page a été intentionnellement  
laissée en blanc*

Senior Tribunal Officer, Secretariat  
Canadian Nuclear Safety Commission  
280 Slater Street, P.O. Box 1046, Station B  
Ottawa, Ontario K1P 5S9  
Sent by email [cncs.interventions.ccsn@canada.ca](mailto:cncs.interventions.ccsn@canada.ca)

RE: Written Intervention opposing requests from BWXT Nuclear Energy Canada Inc. (BWXT) to renew licence FFOL-3620.1/2020 for 10 years and to authorize pelleting operations at the Peterborough facility.

To whom it may concern,

I am requesting status to participate as an intervenor the hearing in the above referenced matter by way of this written communication only.

My submission to the Canadian Nuclear Safety Commission regarding the licence renewal of the BWXT facilities follows.

---

SUMMARY:

I live within 450 meters of the BWXT building and I am extremely concerned about the increased level of risk to people and the environment necessarily attached to the proposed pelleting operation. There are already well established environmental concerns regarding current BWXT operations and the burden of contamination inherited from legacy operations at the GE site.

- I am against granting pelleting operations in Peterborough.
- I am not in favour of granting any licence for a term exceeding three (3) years.
- I am against a single licence combining the operations of the Toronto and Peterborough facilities and believe a separate licence is required for each facility.
- I believe any licence must require significantly enhanced environmental monitoring both on and off-site.

DETAIL:

INCREASED RISKS:

The addition of pelleting operations necessarily increases risk of exposure to harmful radioactive materials in the air and soil.

I understand pelleting operations create uranium dioxide, which is flammable in powdered form and is not created by the currently licenced operations. I understand a 9,000<sup>1</sup> gallon tank will be required to be installed somewhere on the site to store liquid hydrogen necessitated by the pelleting operation. The presence of liquid hydrogen increases the level of risk compared to current licenced operations where no such liquid hydrogen tank is required nor exists.

The industrial zoning designation of the BWXT site (formerly GE site) would never be allowed to be created today in the midst of a residential area with a public school immediately across the road. I am not suggesting this "legacy" zoning be removed, but rather we must not allow such legacy zoning to be exploited to allow the expansion of industrial operations as is requested by BWXT.

It is my view that pelleting operations impose increased risks to the population and environment, adding to the already significant burden of risk already being borne due to current operations and inherited from legacy operations.

---

<sup>1</sup> as per the BWXT Toronto facility

Question:

- Why is it necessary for BWXT to expand to include “possible” pelleting operations in the midst of a densely populated residential area and increasing risks when such manufacturing can be done in areas where the population is minimal and thus risks concomitantly reduced?

Recommendation:

- Do not allow pelleting operations at the Peterborough site because pelleting operations impose increased risks to the population and environment, adding to the burden of risk already being borne due to current and legacy operations.

BERYLLIUM LEVELS SHOW STATISTICALLY SIGNIFIANT INCREASE.

I understand that it was only on Wednesday January 22, 2020 that the 2019 environmental monitoring data were released in full. Such unreasonable delays further, and significantly, hobble the public's ability to form a reasoned intervention with a deadline a mere five (5) days following such release.

I understand that the CNSC Independent Environmental Monitoring Program (IEMP) measures substances in the environment at 8 (2014 and 2018) or 9 (2019), locations external to the BWXT site<sup>2</sup>. I understand from speaking with others knowledgeable in such matters that the levels of beryllium in the soil were being measured and that levels of beryllium in the soil are an indicator of airborne levels. I understand in each of the measured years from 2014 onwards (2018 and 2019) a statistically significant increase in beryllium levels was evident. I further understand that the highest concentration of beryllium in soil was measured at the schoolyard of Prince of Wales Public School (which I think is Site Sample Code GP05-S05).

Questions:

- Does CNSC believe that the public can develop a fully informed intervention by January 27, 2020 when critical IEMP data was only made available five (5) days prior on Wednesday January 22, 2020?
- Has the IEMP noted a statistically significant increase in beryllium from 2014 to present?
- Of the 8 or 9 IEMP monitoring sites was the largest current measure of beryllium and measure of increase of beryllium at the schoolyard of Prince of Wales Public School and if not which was?
- When did CNSC become aware of the statistically significant increase in beryllium measured at IEMP sites?
- Was this increase in beryllium considered in CNSC's reports on the applications at hand?
- Why does CNSC's website fail to mention, or even draw attention to, IEMP data trend showing statistically significant increases in beryllium?
- In light of statistically significant increases in beryllium how can the public have any faith in CNSC conclusion “The IEMP 2014, 2018, and 2019 results indicate that the public and the environment in the vicinity of the BWXT Peterborough facility are protected and that there are no expected health impacts.” when the data shows increasing levels of this very hazardous substance?

Recommendations:

- Increase the number of monitoring sites; include air as well as soil measurements, increase the frequency and period of sampling.
- Require defined protocol for BWXT enhanced environmental monitoring regarding current operations to be in place.
- Require BWXT conduct off-site monitoring to defined protocols and increased frequency.

---

<sup>2</sup> <http://www.nuclearsafety.gc.ca/eng/resources/maps-of-nuclear-facilities/iemp/bwxt-peterborough.cfm>

- Require defined protocols for BWXT enhanced environmental monitoring specifically for proposed pelleting operations PRIOR to any licence approval allowing pelleting.
- Require consistent units of measure and show changes/trends, absolute measures, do not rely on diluting exposures over larger populations or time.

#### PETERBOROUGH AND TORONTO FACILITIES DIFFER

Each BWXT site has unique features and industrial history and should be licenced separately.

Recommendations:

- Do not combine the operations of the Peterborough and Toronto sites into one licence.
- Licence each facility separately.
- Do not approve pelleting operations at Peterborough facility.
- Peterborough licence should be limited to currently allowed operations and not allow any expansion of operations beyond currently allowed operations in Peterborough.

#### DECOMMISSIONING INSUFFICIENTLY DETAILED

In seeking Authorization for Pellet Production in Peterborough BWXT appears to rely upon Decommissioning Plans based on decommissioning current activities and operations, and does not include costs associated with decommissioning the expanded pelleting operation. BWXT appears to rely upon the absence of a business decision to actually conduct pelleting as justification for such underestimated decommission costs.

Questions:

- Does the updated financial guarantee of \$10,775,155 for Peterborough which BWXT is seeking approval for take into account decommissioning operations at Peterborough inclusive of a pelleting operation?
- Is the financial guarantee of \$10,775,155 for decommissioning plans in Peterborough sufficient?
- What happens to decommissioning plans and financial guarantees in the event BWXT were to declare bankruptcy?

#### LENGTH OF LICENCE EXCESSIVE

Ten years is too long a term for any licence. The BWXT request presents multi-faceted problems which have not been adequately addressed, including the need for significantly improved environmental monitoring on and off-site.

Recommendations:

- The term of any licence should be limited to three years and must not expand operations in Peterborough nor combine the operations of the Peterborough and Toronto sites into one licence during the term.
- Any licence must include significantly enhanced environmental monitoring, both on and off-site.

Sincerely,



Ken Brown

Contact information on the next page, as per guidelines. I do not want them published on the CNSC website.  
Thank you.