Safety Commission

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Written submission from Matthew and Karlie Holtby

Mémoire de Matthew et Karlie Holtby

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



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Intervention of Submission to the Canadian Nuclear Safety Commission regarding the license renewal of the BWXT facilities

January 27, 2020

Peterborough, ON

To Whom It May Concern:

### Overview

We are expressing our deep and real concerns about the health and safety for our family, future generations and the people I've come to know and love in Peterborough. The decision to grant a license to operate a potentially harmful pellet production operation within the city limits of a thriving community seems unconscionable in the year 2020. Just meters away from a Public School never mind being surrounded by a thriving residential area, is totally unacceptable. Uranium Pellet production should not be undertaken in any proximity to the backyards and playgrounds where families live and children play. Whether within the city limits of Peterborough or any other residential area! We implore you to reconsider this application and deny its implementation.

### **Risk Concerns**

The risks are far reaching regardless of any so-called safeguards. The use of beryllium in pellet production is especially toxic not only to humans but to any other biological life. Humans run the risk of a chronic life-threatening allergic disease called Berylliosis. (See reference below). Microscopic dust controls are especially difficult as one can imagine. While some experts claim there is an acceptable rate of exposure to this toxin, these numbers are currently in dispute and it would seem the logical acceptable level of exposure is "zero".

How is it feasibly possible to contain 100% of any microscopic dust with the production of pellets? In fact, I also fear for the lives of any workers who would be in contact with this element let alone any other not mentioned here. Apparently, disease caused by its toxicity may take five (5) years to show symptoms. Five years afterwards! These risks are totally unacceptable in an urban environment where children grow, learn and play!

We question any cleaning methods which may be in place using our municipal water. What happens to any runoff within the plant whether in the production of the pellets or cleaning any mechanical components from time to time? Does any of it find its way into our sewer systems which could ultimately find its way into the Trent system? Who would bear the costs of any accidents within or during any transport of these toxic materials? In the future, should any company decide to close the facility for any unforeseen reason, who would bear the enormous cost of removing toxic equipment and toxic soils as well? The dust itself from any future demolition could never be contained. Costs for future decontamination are probably incalculable.

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## **Property Value Concerns**

This license raises the potential for significant loss of property values in the vicinity. This too is extremely difficult to quantify. Nevertheless, many residents, especially new home owners are on the margins of making mortgage payments. Should their property values be negatively impacted by circumstances beyond their control as a consequence of this application the financial hardships could be financially catastrophic. The best risk management strategy therefore is elimination of the risk. Deny the application to produce uranium pellets in our community!

As deeply concerned citizens active in the community with a healthy, energetic family with hopes and dreams of success, this cloud of uncertainty casts a pall over our lives and the future of our children. We can live anywhere, however, we've chosen to live in Peterborough to nurture, love and watch our kids grow into healthy productive members of society. We must do everything we can to keep our families safe and the production of Uranium Pellets mere feet from our schools and homes is simply not acceptable.

We are proud to call this wonderful city our home. We have spent some of life's most precious moments here. They include the birth of our daughter, working for a great local radio station, 101.5 The Wolf, a lead role in a musical. Karlie is an award winning business leader in her field. We have purchased two homes in Peterborough within the past 5 years. In fact, we are so in love with Peterborough that after living outside of town for the better part of a year, we began actively searching for a home that would be more conducive to our growing family.

We wanted to become part of the community once again. Our real estate agent found the perfect home for us. A home where our 5 year old Son, and 3 year old Daughter can run on the sidewalk, or play in our yard, make new friends, go to school and love their community. We must be able to continue to walk around our neighborhood knowing we are safe and believe our community is clean and well maintained. We love it here. We implore you to keep us safe.

A deeply concerned family.

Matthew and Karlie Holtby

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## References:

# (1) Beryllium Fire Codes and Information

Hazards		
GHS pictograms		
GHS Signal word	Danger	
GHS hazard statements	H301, H315, H317, H319, H330,H335, H350i, H372	
GHS precautionary statements	P201, P260, P280, P284, P301,P310, P330, P304, P340,P310 <sup>[107]</sup>	
NFPA 704(fire diamond)		

- The fire rating for Health is (4). Very short exposure could cause death or major residual injury.
- The fire rating for Flamability is (3). Liquids and solids (including finely divided
- suspended solids) that can be ignited under almost all ambient temperature conditions.
- The fire rating for Instability is (3). Capable of detonation or explosive decomposition but requires a strong initiating source, must be heated under confinement before initiation, reacts explosively with water, or will detonate if severely shocked

# (2) Beryllium (Toxin)

Beryllium is chemically similar to magnesium and therefore can displace it from enzymes, which causes them to malfunction. Because Be²+ is a highly charged and small ion, it can easily get into many tissues and cells, where it specifically targets cell nuclei, inhibiting many enzymes, including those used for synthesizing DNA. Its toxicity is exacerbated by the fact that the body has no means to control beryllium levels, and once inside the body the beryllium cannot be removed. Chronic berylliosis is a pulmonary and systemic granulomatous disease caused by inhalation of dust or fumes contaminated with beryllium; either large amounts over a short time or small amounts over a long time can lead to this ailment. Symptoms of the disease can take up to five years to develop; about a third of patients with it die and the survivors are left disabled. The International Agency for Research on Cancer (IARC) lists beryllium and beryllium