



**Written submission from  
Miriam Davidson and  
Marlowe Bork**

**Mémoire de  
Miriam Davidson et  
Marlowe Bork**

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 20, 2020**

**ATTENTION:**

Senior Tribunal Officer, Secretariat  
Canadian Nuclear Safety Commission  
280 Slater Street, P.O. Box 1046, Station B  
Ottawa, Ontario K1P 5S9

**FROM:**

Dr. Miriam Davidson and Mr. Marlowe Bork,

**Intervention by written submission the CNSC**

To Whom It May Concern,

We are writing to express *our extreme concern* about the application by BWXT-Peterborough to the CNSC Commission to make uranium pellets at their facility at the old GE plant, in close proximity to Prince of Wales and Queen Mary schools and the surrounding community. The junior playground at Prince of Wales School is only 25 meters from the plant!

As residents of this thriving community, we have serious concerns about the impact of this new uranium production on our city. The GE facility is already contaminated and is located in the middle of hundreds of homes, close to many elementary schools and local businesses. We feel strongly that sort of production facility **should not be located near residential areas** as it poses a dramatic and highly dangerous set of health risks, particularly for our children. It is unconscionable that the CNSC commission is even considering the granting of this licence! Peterborough is a wonderful city, that is growing and thriving – and the supposed benefits of granting this license pale in comparison the devastating health and environmental risks.

We love our home on Dalhousie Street, our garden and our neighbours and we love the beauty of the land around us. This is a densely packed city, the location of GE is in the core of this community and beyond the day-to-day exposure that this pellet production would cause (see research/scientific data details below), even a small mistake or accident would cause be devastating for the city of Peterborough.

It seems crass to mention how this new license would negatively impact residents in terms of our finances, when the health and safety risk are so glaring. However, the reality is that this plant would significantly lower the value of all our homes and businesses! Who wants to move to a place that is contaminated with radiation? Who wants to raise children here? Who wants to retire in a place that has been poisoned!

BWXT wants to use the GE facility that is already here, as moving their production to our city would lower their costs and up their profits – at the expense of our children, at the expense of our community and most importantly, at the expense of the land that we live on, which will be contaminated forever!

So please read on as we have taken time to outline many of the details related to the research available to us that indicates how truly dangerous this would be. BWXT has all sorts of answers as to why this would be OK for us. Many of their claims are contradicted by the significant body of research available.

The company says that in terms of safety, we are exposed to radiation many times during our lives such as naturally occurring radon gas in the ground and routine x-rays with no bad health effects. But they are talking about spectral radiation, **not particulate radiation** and the BWXT proposal is to process large amounts of very fine uranium powder that are easily inhaled, ingested, or absorbed into the body through a cut or abrasion.

Uranium powder is classified as a **Type 1 carcinogen**. Uranium powder is much finer than flour. It is already emitted from the facility with the assembly of nuclear fuel rods and if pelleting begins, emissions of this highly carcinogenic dust through the air and in wastewater going to places like Little Lake and down the Trent Canal system will increase significantly. Another risk is the transport of uranium dust to the plant on trucks through city streets.

Using data from their Annual Compliance Monitoring Report, BWXT's actual uranium emissions from the Peterborough facility and their Toronto facility, the license proposal included major increases in annual emissions of uranium dioxide powder --airborne: 3,140 times, from .002 to 6.28 grams, and waterborne: 93,500 times, from 0.01 to 935 grams. A single gram of the very fine uranium oxide powder contains 7.8 trillion individual particles of 0.3 micron size, each a potential cancer cause if inhaled, ingested, or entering a body through a wound. The number of emitted particles would be astronomical - airborne: 134.2 billion new particles wafting through the neighbourhood per day, and waterborne: **20.2 trillion new particles heading through the sewer into the Otonabee River per day. HOW CAN WE ALLOW THIS?**

The danger of contacting a potent cancer-causing substance is very concerning especially for children who are particularly vulnerable to radiation and the other heavy metals that are needed for the pelleting process. **Uranium oxide can also adhere to DNA and cause birth abnormalities.** You only have to watch the documentary, "*Town of Widows*" to understand the dramatic risks that working with or near to uranium/radioactive materials causes.

The morality of proposing this process in such an old facility right next to Prince of Wales school and a high-density neighbourhood is in our opinion reprehensible. **Such a facility should be built well away from populated centers.** We understand that children at Prince of Wales School are warned not to play in the woods near the school for fear of contacting toxic residues already produced by the former GE plant. The possibility of more pollution of uranium dust adds to the risk.

It is our understanding too that hydrogen gas is needed to make the pellets and that hydrogen gas storage is in itself a huge risk to the local area as it is highly volatile and explosive. Just think hydrogen bomb. **The huge hydrogen gas tank at BWXT's present Toronto uranium pellet producing site poses a major risk to the local neighbourhood there and local resistance is mounting.**

A lawyer with the Canadian Environmental Law Association stated that the **CNSC has already stated that they support the license and they are highly unlikely to change their minds.** This is before the hearings have taken place, so what chance do we have to stop this!! We are also concerned about the potential for BWXT to shut down their Toronto pelleting operations and move it all to Peterborough.

We want to leave our beautiful home to our two sons, the home they grew up in and love. What sort of inheritance will it be if BWXT is granted their license to make uranium pellets here in Peterborough? Just down the street from us! As residents of this city we urge the CNSC to listen to us! To seriously consider what is best for the people of this community and this region. Anything short of your refusal to allow this license is a complete and utter dereliction of your duty to protect Canadian citizens from the dangers presented by this industry.

Respectfully submitted by,

***Dr. Miriam Davidson and Mr. Marlowe Bork***

Peterborough, ON

