



**Supplementary Information
Oral Presentation**

**Renseignements supplémentaires
Exposé oral**

**Revised written submission from
Ruth Bishop**

**Mémoire révisé de
Ruth Bishop**

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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February 18, 2020 - Revised submission

Dear Sir, Madam

I want to present this intervention as a *written submission* and also wish to present it *orally* at the Peterborough Hearings in early March.

Position: *I am opposed* to the granting of a ten-year license to BWXT Peterborough that would include permission to produce uranium pellets at their plant on Monaghan Street in the heart of downtown Peterborough. *I am also opposed to* renewing their current license for the next ten years given community concerns about rising Beryllium levels. If a license is granted it should be for no more than three years with the agreement that a thorough environmental assessment and risk management study be carried out by a reputable, independent evaluator chosen by Peterborough's City Council. Uranium dioxide pelleting should not be allowed at BWXT's Peterborough site. Results of such an evaluation should be made available to the public and all stakeholders before any further action is taken regarding the granting of another license. The BWXT Peterborough site license should be separated from the Toronto license so that local regulations and concerns can be addressed and applied. The BWXT license conditions should be subject to Ontario Ministry of Environment Regulations.

Question 1

Spearheaded by their provincial and territorial medical associations, British Columbia, Nova Scotia, and Labrador have banned uranium mining because it is too toxic to human health, this despite the fact that all regions have considerable uranium ore deposits. Quebec is under a Uranium Mining Moratorium and will soon vote on a permanent ban. The driving idea behind these bans is that uranium belongs under the ground-like asbestos. The current moratorium in Quebec states that even if exploration for other minerals uncovers uranium, all work must be discontinued. The state of Virginia has also banned uranium mining and other states are considering this.

In light of widespread national and international concerns about the dangers of uranium extraction and processing, why are we considering letting milled, concentrated, finely pulverized uranium into the city of Peterborough- into our very city core in a residential neighbourhood approximately 36 meters from a junior playground? - when the company admits there will be significant increased emissions of such a dangerous substance- a class A carcinogen

Question 2

The current operations at BWXT emit some levels of uranium but the pelleting process would greatly increase these emissions. Using data compiled from BWXT's Annual Compliance Monitoring Report for BWXT's actual uranium emissions, the license proposal includes major increases in annual emissions of uranium dioxide powder- airborne 3,140 times more, from .002 to 6.28 grams, and waterborne: 93,500 times more, from 0.01 grams 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 cause of cancer if inhaled, ingested, or entering a body through a wound. Waterborne that translates to 20.2 trillion new particles heading through the Peterborough sewers into the filtration plant and into the Otonabee River per day. That could amount to 9000 kg of Uranium in Little Lake each year. And Little Lake is truly a small lake located in downtown Peterborough.

Peterborough operates the tallest water jet in Canada named the Centennial Fountain that operates continuously from May until October with the water shooting up 250 feet and creating a wide circumference of spray. It's considered to be one of Peterborough's biggest tourist attractions. **Does that mean that these tiny uranium particles, will be released by the fountain into the air?** -in close proximity to the nearby homes, Little Lake Beach, Beavermead Park and Campsite, the Marina, Liftlock Boat Tours, and the Music Fest events where thousands of people attend each summer? (Surina Ryder alone attracted 17,000 people to her concert recently)

Why is an independent, thorough and independent environmental /risk assessment study that studies local site-specific issues such as water borne uranium powder and The Centennial Fountain, or the long term effects of uranium and beryllium powder exposure in children not required as part of the licensing process?

Question3

Pelleting for nuclear fuel rods is part of the supply chain for production of nuclear fuel rods for the CANDU Nuclear Reactor. This extends from the mining of uranium, the refining process, pelleting, and assembly of the rods as well as all transportation. Nuclear plants like Pickering are class A sites and have the safety features of isolation from the public and thick concrete containment to protect the public.

The current BWXT pelleting facility at the BWXT Landsdown Toronto site does the following to produce the pellets.

- It bakes 150 Tonnes of Uranium Dioxide every month into pellets to be used in Nuclear Reactors across Canada.
- There are 700 Tonnes of Powdered Uranium Dioxide sitting onsite at any given point.
- The facility also houses an above-ground 9000 gallon tank of highly flammable liquid hydrogen.
- Uranium Dioxide is also highly-flammable, even Pyrophoric— meaning it can ignite upon coming into contact with air.

Why are the same protections required of Nuclear Power Plants not required for a facility that has applied for permission to do uranium dioxide pelleting and admits to allowing a percentage of uncontrolled emissions into the area? With these risks, why is a pelleting facility not upgraded to a Class One Nuclear facility?

Why is BWXT allowed to apply to make pellets in an industrial building that was built in 1892 and has a history of industrial accidents and contaminations?

Why is BWXT not required to build a newer facility in a more isolated area away from a major watercourse like the Otonabee River?

Why is this license to produce pellets even considered in such a built-up urban area with an elementary school serving 500 students practically across the road and 36 meters from their junior play ground?

Why is Beryllium even now allowed to be vented through a chimney that is right next to the Monaghan sidewalk and metres from the school?

Although I have many more concerns and questions, I will leave it at this. Thank you for reviewing these concerns and I would appreciate a chance to meet you and present them at the Peterborough hearings in March.

Sincerely,
Ms. Ruth Bishop