



**Written submission from
Katherine Orgill and
Bruce Scott**

**Mémoire de
Katherine Orgill et
Bruce Scott**

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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January 18, 2020

Katherine Orgill and Bruce Scott

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Peterborough ON ██████████

Ms. Velshi:

We wish to submit an intervention to the CNSC for the BWXT application for licence renewal and licence expansion in Peterborough Ontario.

We have lived in the vicinity for over 25 years and our children both attended Prince of Wales School. Through the work of local people we have become aware of the licence renewal and we appreciate this opportunity to present our concerns and questions to the CNSC.

It is only within the past year that we have become aware of some aspects of the work carried on at the BWXT site, previously GE-Hitachi. There are 3 areas which we would like to address:

- 1) Health ramifications
- 2) Site location and history
- 3) Length of licence

Health ramifications:

This site is within metres of an elementary school and surrounded by residential areas. BWXT and CNSC staff acknowledge that there is, and will continue to be, discharge of uranium particles into the surrounding environment. While the current levels in Peterborough are lower than Toronto, they are assumed to rise to the Toronto level if/when pelleting were to begin here.

The licence renewal application states that:

- “...human health effects due to releases of Contaminants of Potential Concern (COPC) to the air and water from the BWXT facilities were found to be unlikely.” (Appendix D / page 13)

Additionally:

- “CNSC staff concluded that the risks attributable to the radiological and non-radiological releases from the Peterborough facility are very low and no adverse effects to human health and non-human biota are expected.” (Pg. 7)

The conclusions are based on adult males. The importance of studying women’s health separately from men is becoming increasingly known. The outcomes and data are not directly relatable to adult women.

More importantly, that it is even more fundamental to study the impact on the developing bodies of young children and pregnant women. They are of particular concern when it comes to radiation exposure. They have billions of cells that are actively dividing - and each division cycle is vulnerable to damage by radiation.

Also, since one inhaled micron can bind to DNA and cause mutations, how can it be stated that there are no concerns for human health? We know that the time between exposure (inhalation/ingestion) and disease may be many years, it is imperative that **long term** health outcomes be a key focus.

Uranium dust that is inhaled or ingested can release massive amounts of radiation. It has been calculated by the Uranium Medical Research Centre that a single 2.5 micron (2.5 millionths of a metre) dust grain releases a radiation dose 200 times the legal dose limit for a Canadian citizen.

“The route of entry of UO₂ into the body which is potentially most serious, and is also most likely if exposure is accidental, is through inhalation.” (IBILABS.com /International Bio-Analytical Industries, Inc.)

- How do you know ‘no adverse effects’ are expected? What tracking of health of workers and neighbourhoods currently exists? If not, how do you propose to track?
- What long term tracking of **employees**, both permanent and temporary, has taken place in Toronto?
- What long term tracking of **citizens**, particularly children and pregnant women, has taken place in Toronto?
- How do you know that there are no health impacts on the young students of Prince of Wales School, particularly those that live close by the BWXT site? (The Beryllium stack is within 30m of the lower playground area at Prince of Wales. This is the playground for the youngest, and therefore most vulnerable, of the students.)

Site location and history:

You will be aware that there are increasing questions regarding contamination of the site. When we first heard GE was closing operations, we were distressed for those losing employment. However, we were also interested in the opportunity for redevelopment of this large space in a central urban area of our city. We now know that there is extensive contamination which would need to be remediated first.

We were dismayed to learn about the new request to allow processing in Peterborough. This would continue and add to the contamination. As we are sure you know, the legacy of this site has been very much in the news over the past couple of years due to the number of past employees and their struggle with WSIB for their health issues from working in the plant. The documentary ‘Town of Widows’ addresses this particular piece of the history of this site which continues to impact the community.

- “Preliminary Decommissioning Plans: Updated Preliminary Decommissioning Plans (PDPs) were submitted for both facilities on March 27, 2019. The PDPs were accepted by CNSC Staff on July 30, 2019. Subsequently, a minor revision of the Toronto PDP was submitted on October 16, 2019. BWXT NEC is seeking approval of the updated financial guarantee amounts as follows; (pg.9/Written submission from BWXT Nuclear Energy Canada Inc.)
 - Peterborough: \$10,775,122
 - Toronto: \$37,362,745

These numbers are confusing. The Peterborough site is much larger than the Toronto site and has been operating for over 100 years. It is surprising that the decommissioning amount in Peterborough would

be 25% of the site in Toronto. Does this suggest that the possibility of closing the Toronto site and moving all operations to Peterborough?

- 1) What are the current plans and costs to rehabilitate the Peterborough site? What is the timeline for this? How is this information shared with the community?
- 2) If expansion occurs, what impact will it have on the rehabilitation of this central urban site? Will it impede/delay rehabilitation?
- 3) How can putting a new source of radiation next to an elementary school align with the principle of ALARA?

Length of licence:

BWXT has requested a 10 year licence renewal. Although they maintain that they currently have no plans to move pelleting to Peterborough, we find this very difficult to believe. We would argue that it is not in the public interest to grant licences for 10 year periods, especially if the content of the licence changes. This removes, for a considerable time, the opportunity for meaningful input from the surrounding community. It sends a message that the public good is not a priority.

Additionally, a citizen liaison committee would seem to be a basic component of good corporate citizenship.

- How would granting a 10 year licence, with new allowances, be in the public interest?

In summary:

- we request that the CNSC deny a widening of the activities at the Peterborough location
- we request that the CNSC deny a 10 year renewal of the licence

Respectfully,

Katherine Orgill and Bruce Scott