



**Written submission from
Bruce Harris**

**Mémoire de
Bruce Harris**

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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SUBMISSION OF Dr. BRUCE HARRIS, Bsc. MD

I am a recently retired physician who worked as an Emergency Room Physician, Hospitalist and Family Physician for over 37 years in Renfrew County . I also held the position of Chief of Staff at St Francis Memorial Hospital for 2 terms.

In the last 2 years I have had the opportunity to review the work history of 2 former employees of General Electric Production Facility . In direct communication to me, both former employees described their jobs in loading uranium pellets into metal rods to make nuclear fuel bundles. They describe a work place where issue of safety regarding the handling of the uranium pellets was very casual or non-existent. They both described the pellets as frequently falling to the floor to the point where significant time had to be dedicated at the end of every shift to clean them up. They both described many of the pellets as being damaged and breaking into pieces including dust sized particles. These fragments were gathered at the end of the day to be recycled. Both workers describe a work place where horse play in handling the uranium pellets was tolerated. Both witnessed a coworker placing uranium pellets in his mouth during the clean up period at the end of the shift.

I have reviewed 'THE REPORT OF THE ADVISORY COMMITTEE ON RETROSPECTIVE EXPOSURE PROFILING OF THE PRODUCTION PROCESSES AT THE GENERAL ELECTRIC PRODUCTION FACILITY'

It is disconcerting to see that employees at the GE faculty [building 21] were found to have uranium in their urine that far exceeded the allowable concentrations. It is also noted that 44% of workers in the GE nuclear department were found to have reduced white blood cell (WBC) counts [monocytes]. Their WBC counts were 15-20 times lower than normal. This has been proposed to be a result of uranium accumulating in the bones of the workers. Monocytes originate in the hematopoietic tissue of the bone marrow and their production is known to be diminished from alpha radiation injury. Children are especially sensitive to radiation because their cell division rates are much higher than adults particularly in their hematopoietic tissue

There appears to be an absence of any data about the long term effects of radiation on employees or the degree of contamination of the BWXT nuclear facility in Peterborough on the BWXT website or anywhere else.

Given the following facts ;

- 1.the known radioactive contamination of employees at the BWXT plant as well as the history of poor safety enforcement at the plant.
- 2.the lack of data accessing the degree of contamination in or around the BWXT plant
3. The proximity of the BWXT plant to the Prince of Wales Public School and nearby family homes.

4. The increased vulnerability of children to the effects of radiation.

The following recommendation is made;

A complete Environmental Assessment be done on the BMXT plant and its environs which would also seek to establish a baseline for radiation safety before any licence is approved.

As a former resident of Renfrew County, I am painfully aware of the concerns that CNSC is not an objective science based organization. The firing of Linda Keen over safety concerns in Chalk River has not been reassuring. As well many people in Peterborough express concerns that CNSC is a 'rubber stamp' organization. There is a history that CNSC never has refused a licence. I prefer to avoid a cynical view and request that the CNSC support the above recommendation out of human concern for the safety of the children who live in Peterborough.

It is difficult to not comment on the safety record of BWXT. BWXT has only a 3 year history in Canada. However BWXT has a history of over 70 years in the USA. This history is blighted with regulatory and safety issues. A simple Google search reveals that one of the companies BWXT owns has been found to have covered up a plutonium accident in Idaho Falls on November 8 2011,3.

BWXT is also reported to produce nuclear materials for production of nuclear armaments ,4. How much more unsafe could anything be than the detonation of a nuclear device?

1.https://www.unifor.org/sites/default/files/documents/document/ge_advisory_cmtt_report_may_15_final_for_web.pdf

2.<https://www.ncbi.nlm.nih.gov/books/NBK158798/?report=printable>

3.<https://apps.publicintegrity.org/nuclear-negligence/repeated-warnings/>

4.<https://www.dontbankonthebomb.com/bwxt/>