



**Written submission from
Karen Hjort-Jensen**

**Mémoire de
Karen Hjort-Jensen**

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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From: Karen hjort-jensen
Sent: January-26-20 1:23 PM
To: Interventions (CNSC/CCSN); Karen hjort-jensen
Subject: BWXT application to manufacture uranium pellets in Peterborough

TO WHOM IT MAY CONCERN:

I wish to make a written submission only to express my serious concerns with regard to the application by BWXT-Peterborough to manufacture uranium dioxide pellets at the GE facility in Peterborough. This facility is in a residential neighbourhood and in close proximity to two elementary schools. In fact the junior playground of Prince of Wales School is a mere 25 metres from the plant itself..

BWXT will argue we are exposed to radiation in our daily lives through naturally occurring radon gas and x-rays, However, that is not the same as being exposed to particulate radiation. Uranium powder, which is finer than flour, is classified as a Type 1 carcinogen. The BWXT proposal to manufacture these pellets will result in the processing of large amounts of very fine uranium powder which can be easily inhaled, ingested or absorbed into the body through cuts and abrasions.

And we know that children are especially vulnerable to radiation and other heavy metals needed in the process. It is morally reprehensible that a company would consider manufacturing a product of this nature within 25 metres of a public school. If indeed a licence is to be given to BWXT-Peterborough for the production of uranium pellets, the facility should be located in an industrial area and not in a residential area in close proximity to two elementary schools. Neither should a storage facility for nitrogen be anywhere near a residential neighbourhood.

It will be argued by BWXT-Peterborough that there are stringent safety and emergency practices in place to ensure that the neighbourhood is not exposed to carcinogens as a result of the manufacture of these pellets.

But, to conclude on a personal note, I have very little faith in industry practices or regulatory bodies to protect us from carcinogens with regard to uranium mining, radon gas, or the manufacture of uranium dioxide pellets. I lived for 10 years (1976-1986) in the Bancroft area where initially there were three uranium mines (Faraday, Bicroft, and Dyno) which closed down and a number of years later the Madawaska Mine re-opened in the Faraday Mine location. When those three mines closed down the tailing ponds were no longer adequately monitored and that radioactive material found its way into the construction and road building industries. Subsequently the Atomic Energy Board of Canada spent a number of years in the Bancroft area cleaning up the problem and retrofitting basements (at no cost to the residents) with pipes and exhaust fans which diverted the radon gas up through the roof. All the houses in Cardiff were inspected and the house that we were living in at the time was clear of radon gas. But when we moved to a house north of Bancroft we immediately requested an inspection from the Atomic Energy Board. It was identified that, as a result of naturally occurring uranium, the house had 100 times the acceptable level of radon gas in the basement. After extensive retrofitting of the basement (removing the concrete floor and then installing pipes with holes in them in the floor and a fan in the connected pipe that went up through the roof) the radon gas was able to be reduced to twice the acceptable levels. However, I should point out that within a few years my husband at the time developed throat cancer. Did this have to do with his chronic exposure to radon gas at twice the acceptable levels? I guess we will never know - he had also been a pipe smoker. But that leads me directly to discussing the staggering number of deaths from cancer among the workers who worked in those Bancroft uranium mines. Frequently, when speaking to someone who had a relative or knew of someone who worked in the mine you would be told

that they had died of cancer. Company literature at the time apparently assured workers that working in the uranium mines was completely safe as long as they didn't smoke. However, anecdotally it appeared that the only difference between developing cancer if you were a smoker and worked in the mine was that you developed cancer sooner than if you didn't smoke and worked in the mine! And, finally, in a recent conversation with a contractor who purchased an extractor fan from me to install in the house he was building to minimize possible exposure to radon gas, he told me that the acceptable levels of radon gas exposure in Canada is twice the acceptable levels in the U.S. and four times the acceptable levels of the W.H.O. So assurances from the Canadian regulatory bodies or the industry itself do not reassure me.

Please listen to our community on this and DO NOT approve the application of BWXT-Peterborough to assemble uranium pellets in the GE location.

Karen Hjort-Jensen

Peterborough, ON