

August 16, 2017

From: Michael Dworkind

To: Nicole Frigault, Environmental Assessment Specialist
Canadian Nuclear Safety Commission

By email: cnscc.ea-ee.ccsn@canada.ca

Fwd: Chalk River nuclear waste dump

CEAA Reference number: 80122

CNSC near surface waste disposal Project
a modest proposal:

I am sending this short personal statement of scientific concerns related to the environmental public health hazards of the planned nuclear waste dump at Chalk River. Apparently it will be within a mile of the Ottawa river that feeds into the St Lawrence river that supplies drinking water for millions of people including myself and my family.

My interest in ionizing radiation and health effects relates to more than three decades studying the health effects of nuclear technology specifically, uranium mining and radon gas, the radiation concerns of nuclear power plants their operations and their toxic waste productions /management and the medical consequences of nuclear war. This in the context of being a past president and current board member of Physicians for Global Survival, the Canadian affiliate of IPPNW, winner of the 1985 Nobel Peace Prize for our tireless work of trying to rid the world of nuclear weapons and the nuclear power plants required to make them.

Currently, I am an associate director of the McGill Cancer Prevention Unit, specializing in ionizing radiation and carcinogenesis.

It is for these reasons that I have an educated concern about the serious environmental impact of the dumping of nuclear waste so close to the ground water systems of the Ottawa river.

There has been enormous published documentation and research on the cumulative effects of ionizing radiation and cancer. The dose response curve is linear. (BEIR reports). It has been accepted by the research community that ionizing radiation especially as an internal emitter can cause cancer in tiny doses of radiation especially plutonium and other radionuclides, where micrograms inhaled will most certainly cause lung cancer.

Even chronic low dose exposure over time in years can have devastating consequences especially looking on a population basis.

However, with a long latency period as much as thirty years, the cause and effect can be challenging. This is particularly true of foetal exposure where genetic damage may be extreme, for example, childhood leukaemia have been reported as early as five years of exposure in the uterus of mothers exposed to low doses of ionizing radiation. (KIKK study). The elderly have a known increased risk as well as woman, to develop all kinds of cancers, with chronic exposure to radiation from the water we drink, the air we breath and the foods that we eat.

The fact that there is no guaranteed technology that can contain nuclear wastes for the required thousands of years, is clearly a major reason for concern. It is partially why no safe cost effective solution has been found in the last sixty-seven years of the nuclear age, for no lack of trying, by scientists all over the world.

The Chalk River Nuclear waste project is crucially needed but does it have to be so near to a major water way and creating a health hazard for millions of people now and into the distant future? Are the best most costly but secure options being considered so there will be not the smallest chance of environmental exposure? One cannot cut corners for additional profit on a project so important to us all. Remember dilution is no solution for pollution. This is especially true for nuclear wastes, even if they are not high level as is proposed in the current plan for their management.

I would greatly appreciate a response to this letter and to have my Email address added to your public consultation list, so that I may be informed of the developments as they unfold in the future.

With great respect for the challenging work and responsibility you have ahead of you.
I remain, sincerely,

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