



The Honorable Catherine McKenna MP
Environment and Climate Change Canada
200 Sacré-Cœur Boulevard
Gatineau, QC K1A 0H3

April 18, 2017

Dear Minister McKenna,

SUBJECT : CHALK RIVER NEAR SURFACE DISPOSAL FACILITY IN ONTARIO NUCLEAR WASTE PROJECT (Project No. 1547525)

I am writing to you on behalf of the Canadian Association of Physicians for the Environment (CAPE). CAPE is a non-profit organization, run by physicians, that seeks to improve human health by protecting the planet.

We have learned about this proposed dump site proposed by the Canadian Nuclear Laboratories at the Chalk River site. We are extremely concerned about this project, which we believe will expose the population to significant pollution and radioactivity. We are therefore of the opinion that this bill is absolutely inadmissible in its present form.

This radioactive waste dump would be the largest ever built in the world. It would have an area of 11 hectares and 25 meters in height. It would contain one million cubic meters of low- and intermediate-level radioactive waste. If approved, this radioactive waste dump will be created on the banks of the Ottawa River at the Canadian Nuclear Laboratories in Chalk River, Ontario, 100 km upstream of Ottawa.

Such a permanent disposal facility for nuclear waste has never been authorized in Canada. At present, there are no regulations to limit the levels of radiation emission allowed for this Near-Surface Waste Management Facility.

The proposed site is located in a swamp less than one kilometer from the Ottawa River, which flows to many municipalities in Quebec and Ontario, through the Ottawa-Gatineau region, the Houses of Parliament, then to Montreal, Laval and a multitude of towns and villages on the shores of the St. Lawrence. The proposed site is practically surrounded by water. The site was an island in recent geological times. Leaks from this facility could significantly contaminate drinking water downstream.

Moreover, in the proposed project, the surface of the site will be constantly exposed to rain and snow until 2070, when the site is expected to close. It is expected that the water will be partially recovered and returned to the dump, but the tritium will be released into the river. It is

pertinent to point out that all landfill projects of this type are currently designed in desert areas, with concrete sarcophagus around the waste. This is obviously not the case at Chalk River.

In the 1990s, elected representatives from 50 municipalities in Quebec and Ontario adopted resolutions against a radioactive waste storage project in Chalk River because of the negative characteristics of this site.

In addition to the waste accumulated over more than 50 years of operation of the Chalk River Nuclear Laboratories (demolition debris, contaminated soil, stored waste), radioactive waste could be transported from across Canada to this site. Mixed waste (which may include PCBs, arsenic and mercury) could also be stored in this facility.

The initial proposal of the LNCs included only low-level radioactive waste. The consortium then added medium-level radioactive wastes - waste that produces enough radioactive emissions to require shielding and can have half-lives of up to tens of thousands of years. Because of the radioactivity they emit, some of this waste will have to be confined in concrete or metal containers and moved by remote control.

The radioactive waste in this facility would be stored over two plastic liners such as those used in municipal dumps. These coatings, also called "geomembranes", are not waterproof. The causes of leakage could be numerous and related to incorrect installation, physical deterioration of membranes, perforations by sharp or heavy objects, chemical deterioration, seismic activity, flooding or sabotage. More over the storage is so superficial that one can access the waste by means of a simple shovel (see attachment).

The proposed dump has a lifetime of 50 years, while radioactive waste of medium activity remains radioactive for tens of thousands of years. During the 50+ years, the waste would be exposed to rain and snow. Failure of the proposed sewage treatment plant could result in rapid contamination of the Ottawa River. This dump is scheduled to be operational until 2070, but it is also stated that any monitoring activity may cease in 2100, which is nonsense when it is known that the radioactivity at this site will last for thousands of years.

In 2015, the Harper government transferred the operation and management of Canadian Nuclear Laboratories to a consortium of five for-profit multinational corporations based in the United States, the United Kingdom and Canada, although the Chalk River site and its waste remains under public ownership. The Harper government has mandated these companies to "take steps to increase revenues from commercial activities". They indicated their intention to dispose of "waste from commercial activities" under the IGDPS. Their current contract is ten years, while the radioactive waste they will store in this facility has a lifetime of tens of thousands of years. In 2025, they can decline any responsibility. It should be emphasized here that the consortium has arrived at the current solution because it believed that all other safer solutions would cost tens or even hundreds of times more.

WHY IT IS IMPORTANT TO ACT NOW.

Changes made to the Canadian Environmental Assessment Act by the Harper government in 2012 eliminated independent panel assessments for nuclear projects and excluded the Minister of the Environment from the decision-making process.

The non-elected Canadian Nuclear Safety Commission (**CNSC**) is solely responsible for approving projects. The Commission has demonstrated an inability to protect the environment and a tendency to favor the interests of the nuclear industry in relation to public safety.

The CNSC will only provide two two-month periods to allow the public to comment on the NSDF Environmental Assessment (the first began on March 17, 2017).

A final decision on this project is expected during the CNSC's January 2018 hearings on the renewal of the "site license" for the LNCs. With the approval of the CNSC, construction of the mega-dump site could begin in the fall of 2018.

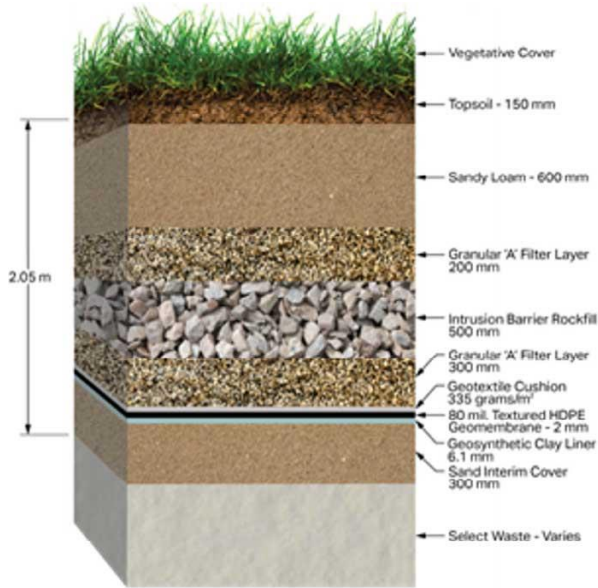
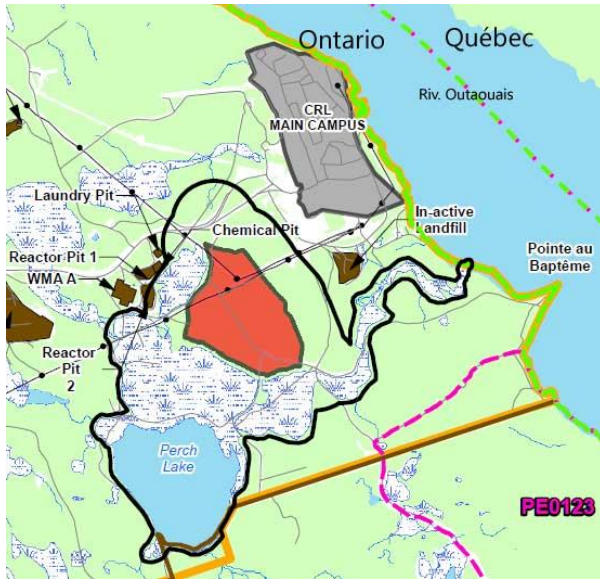
We therefore believe it is important to unite the voice of our association with those of individuals and groups who oppose this project. We ask for its cancellation outright and believe that the consortium must completely rethink its concept of waste management. It is certainly better to store them temporarily than to have the illusion of having buried them safely for centuries to come.

Yours sincerely,

Dr Éric Notebaert
CAPE Board Member

cc. Anishinabek Nation Leadership
Ontario First Nation Leadership
Ontario Regional Grand Chief Isadore Day, Chiefs of Ontario
National Chief Perry Bellegarde, Assembly of First Nations
Michael Binder, President and Chief Executive Officer, Canadian Nuclear Safety Commission
Mark Lesinski, Canadian Nuclear Laboratories, Chalk River
Hon. Jim Carr, Natural Resources Canada
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Hon. Marc Garneau, Transport Canada
Hon. Carolyn Bennett, Indian and Northern Affairs Canada
Hon. Kathleen Wynne, Ontario Premier
Hon. Glen Murray, Ontario Ministry of the Environment
Hon. Kathryn McGarry, Ontario Ministry of Natural Resources and Forestry

Hon. Jane Philpott, Minister of Health



CNL Company Landfill Project.

Thanks:

Gordon Edwards, Canadian Coalition for Nuclear Responsibility
Gilles Provost, Journalist