Chalk River Nuclear Waste Mega-Dump: Five Fatal Flaws

Wrong Technology
A 25-meter-high radioactive waste mound is not “near surface”. A million cubic meters of radioactive waste would be exposed to wind, rain and snow. Storm events would leach radionuclides from the mound and wash them into ponds and wetlands. Erosion and weathering would allow radionuclides with million-year half-lives to move through the landscape in uncontained fashion. This proposal flaunts the IAEA Safety Standard for Disposal of Radioactive Waste, which calls for “impermeable and water diverting features” for low level radioactive waste disposal, and a “stable, geological environment” for intermediate level radioactive waste disposal.

Bad Location
According to the IAEA, the overall objective for disposal of radioactive waste is “to contain the waste and to isolate it from the accessible biosphere... [which] is taken generally to include those elements of the environment, including groundwater, surface water and marine resources, that are used by people or accessible to people.” Millions of people drink Ottawa River water. The Chalk River Laboratories are next to the Ottawa River only because reactors need cooling water. The chosen location for the dump is the already highly contaminated Perch Creek basin, with its many existing leaking waste sites. Chalk River may have been a good place to build reactors, but it is a bad place to abandon radioactive wastes.

Wrong Objective
Canadian taxpayers “own” the nuclear liabilities from 70 years of Chalk River operations. Parliament currently allocates over half a billion dollars per year to nuclear clean-up. Priority must be given to issues impacting water quality now -- such as the plume of fission products migrating from the damaged NRX reactor vessel buried in Waste Management Area A. Demolishing old buildings on site and finding a location for demolition wastes is a largely cosmetic exercise and should be given lower priority. This proposed project largely ignores contaminated sites already present in the Perch Creek basin, and could alter basin hydrology so as to increase contaminant discharges from these sites to the Ottawa River.

Bad Process
In 2012 The Harper Government gutted the Canadian Environmental Assessment Act. It gave the Canadian Nuclear Safety Commission, an unelected body, sole authority to approve nuclear projects, eliminated any decision-making role for the Minister of Environment, eliminated independent panel reviews, and “fast-tracked” project approvals in much the same way as pipelines. Reform of Canada’s flawed environment assessment process is urgently needed. This nuclear mega-dump project is being rammed through with a discredited “Decide, Announce, Defend” model. It would create a terrible precedent in Canada and around the world. Nuclear waste abandonment is forever, and must not “fly under the radar screen.”

Wrong Proponent
In 2015 the Harper Government downsized Atomic Energy of Canada Limited (AECL) by creating the “Canadian Nuclear Laboratories Limited” (CNL). The Harper Government awarded a consortium of five, for-profit multinational corporations a 6-year contract (renewable for two, 2-year terms) to operate CNL. Parliamentary appropriations for Chalk River flow through AECL – not directly to these corporations. Furthermore, AECL retains ownership of the Chalk River property and its waste liabilities. Why then isn’t AECL, and not CNL, the project proponent?