

September 21, 2018

Michael Ferguson
Auditor General of Canada
240 Sparks Street
Ottawa, Ontario K1A 0G6

Dear Mr. Ferguson

We are writing to express as an urgent matter our deep concern that the Government of Canada is failing to meet its commitments to sustainable development in its handling of radioactive waste other than irradiated nuclear fuel. The nuclear wastes we refer to include a wide variety of post-fission wastes, including those involved in nuclear reactor decommissioning. Our concerns also have to do with the regulation of all these activities.

We are equally concerned that money is being spent by Atomic Energy of Canada (AECL) without due regard for economy, efficiency, and environmental protection. We believe these failures and inappropriate expenditures of public funds create serious risks to the health of current and future generations of Canadians and our environment.

In May 2014, the Government of Canada “launched” the Canadian Nuclear Laboratories, Limited (CNL) as a “wholly-owned subsidiary” of AECL. In 2015, the Government of Canada entered into a “Government-owned, Contractor-operated” (GoCo) arrangement with the multinational consortium Canadian National Energy Alliance (CNEA), giving the consortium all the shares in CNL, and awarding contracts (to both CNL and CNEA) to manage all of Canada’s federally-owned nuclear facilities.

AECL itself was reduced to a 40-person contract management organization with a mandate to “enable nuclear science and technology and fulfill Canada's radioactive waste and decommissioning responsibilities.” These “responsibilities” include dealing with a federal nuclear liability estimated at over \$7.9 billion as of 31 March 2016 (1).

One of the contracts between AECL and CNL emphasizes speed in reducing this liability:

1.3.5.4 CNL shall seek the **fastest**, most cost effective way(s) of executing the DWM [Decommissioning and Waste Management] Mission including **disposal of all waste**. (emphasis added)

In the first three fiscal years of the GoCo arrangement (2016-17, 2017-18, 2018-19), Parliamentary appropriations to AECL for “nuclear decommissioning and radioactive waste management” averaged \$547,577,479 per year. This represented a four-fold

increase over the \$137,800,000 per year appropriated during the 2006/08 to 2015-16 period when decommissioning and waste management was funded by Natural Resources Canada through the Nuclear Legacy Liabilities Program.

It does not appear that increased funding has yielded good results. CNL, supported by AECL, is proposing three projects that do not meet Canada's international commitments for responsible radioactive waste management:

- An above-ground landfill for one million cubic meters of "low level" radioactive waste, including significant quantities of long-lived alpha and beta/gamma emitters, beside the Ottawa River at Chalk River, Ontario. The International Atomic Energy Agency (IAEA) says above-ground disposal is unsuitable for waste with long-lived radionuclides. It recommends isolating such waste from the biosphere below ground for the duration of its radiological hazard (3).
- "Entombment" of the Whiteshell WR-1 reactor beside the Winnipeg River in Pinawa, Manitoba; and of the Nuclear Power Demonstration reactor beside the Ottawa River in Rolphton, Ontario. During entombment, the highly radioactive remains of the reactor would be covered in concrete and left in place, even though they contain radionuclides that will remain hazardous for hundreds of thousands of years beyond the lifetime of their concrete "tombs". The IAEA does not recommend reactor entombment except in emergencies (4).

These projects are mired in controversy. Their environmental assessments have been delayed owing to numerous critical comments submitted by provincial and federal government agencies, retired AECL scientists, First Nations, and NGOs. Contracting for the fastest and cheapest "disposal of all waste" creates perverse incentives to downplay negative environmental effects of the projects, to place undue burdens on future generations, and to ignore sustainable development principles.

We are concerned that "entombment" may be under consideration for other federally-owned defunct nuclear reactors, such as the Gentilly-1 reactor at Bécancour, Quebec; the Douglas Point reactor near Kincardine, Ontario; and the NRX and NRU reactors at Chalk River, Ontario. We are also concerned that Canada may be actively promoting entombment internationally and pressuring the IAEA to sanction "entombment" for routine decommissioning. These concerns are addressed in a new environmental petition entitled "Need for a national policy on decommissioning of nuclear reactors".

Environmental Petition 411, submitted to your office in September 2017, notes that the Government of Canada is grossly deficient in policies and strategies to guide the disposal or long-term management of the federal government's 600,000 cubic meters of radioactive waste (excluding irradiated nuclear fuel) (5). The Government of Canada has only ever released a "Radioactive Waste Policy Framework" composed of three

bullets (6). This “Framework”, developed with no public discussion or consultation, is now more than 20 years old. It states that waste owners must meet their responsibilities “in accordance with approved waste disposal plans.” However, the Government of Canada, as “owner” of the vast majority of Canada's non-fuel radioactive wastes, has never released an approved plan for long-term management of its own wastes.

The Canadian Nuclear Safety Commission (CNSC) appears to be promoting the three nuclear waste disposal projects described above. As responsible authority under the *Canadian Environment Assessment Act*, CNSC initiated environmental assessments (EAs) of the projects even though they do not align with IAEA guidance. CNSC dismissed warnings from scientific experts about serious flaws in the three projects during the project description/scoping phase (7) (8) (9). This allowed CNL to issue sub-contracts for environmental impact studies and for supporting documentation – a waste of millions of dollars of public funds. CNSC’s mishandling of these EAs is the subject of Environmental Petition 413, submitted to your office in January 2018 (10).

CNSC is widely perceived to be subject to “regulatory capture” (11). To the extent that CNSC serves the interests of the industry it is supposed to regulate - rather than the interests of current and future generations of Canadians - this creates waste and inefficiency. We believe that Canada lacks checks and balances in its nuclear governance system, and that the involvement of multiple agencies and departments is needed to strengthen the system.

All of the above concerns lead to our urgent request that you undertake an inquiry into whether the Government of Canada, Atomic Energy of Canada Limited and the Canadian Nuclear Safety Commission are expending public funds for nuclear waste management and nuclear reactor decommissioning in a responsible manner, and whether they are handling these matter in ways that are compatible with sustainable development principles. We feel it is urgent to address these questions now, as Canada has just begun to face the monumentally difficult and expensive task of safely managing over seven decades’ accumulation of nuclear waste.

Yours truly,

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Theresa McClenaghan, Canadian Environmental Law Association

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Grand Chief Joseph Tokwirot Norton, Mohawk Council of Kahnawake
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 Eugene Bourgeois, Friends of Bruce (Ontario)
 Eva Schacherl, Coalition Against Nuclear Dumps on the Ottawa River (Ontario)
 Faye Moore, Port Hope Community Health Concerns Committee (Ontario)
 Gareth Richardson, Green Coalition Verte (Quebec)
 Gary Schneider, Environmental Coalition of Prince Edward Island (Prince Edward Island)

Georges Karpát, Coalition Vigilance Oléoducs (Quebec)
Gilles Provost and Ginette Charbonneau, Ralliement contre la pollution radioactive (Quebec)
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Janet McNeill, Durham Nuclear Awareness (Ontario)
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Kate Chung, Raging Grannies of Toronto (Ontario)
Kirk Groover, Petawawa Point Cottagers' Association (Ontario)
Laura Tylor, Manitoba Energy Justice Coalition (Manitoba)
Linda Murphy, Inter-Church Uranium Committee Educational Co-operative (Saskatchewan)
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Martha Ruben, Ottawa Raging Grannies (Ontario)
Maryanne MacDonald, Water Care Allies, First United Church, Ottawa (Ontario)
Michael J. Keegan, Coalition for a Nuclear-Free Great Lakes (International)
Michelle Blanchette, Renewable Power The Intelligent Choice (Saskatchewan)
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Réal Lalande, Action Climat Outaouais (Québec)
Roger Short, Lecourt Renewables (Ontario)
Samuel Arnold, Sustainable Energy Group, New Brunswick (New Brunswick)
Siegfried (Ziggy) Kleinau, Bruce Peninsula Environment Group (Ontario)
Theodora Carroll, MySea-to-Sky and Squamish Environment Society (British Columbia)

cc.

The Right Hon. Justin Trudeau, Prime Minister of Canada
Chief Perry Bellegarde, Chief of the Assembly of First Nations
Ms. Julie Gelfand, Commissioner of Environment and Sustainable Development, Canada

The Hon. Amarjeet Sohi, Minister of Natural Resources, Canada
The Hon. Carolyn Bennett, Minister of Crown-Indigenous Relations, Canada,
The Hon. Catherine McKenna, Minister of Environment and Climate Change, Canada
The Hon. Ginette Petitpas Taylor, Minister of Health, Canada

Elizabeth May, Leader of the Green Party of Canada
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Marilyn Gladu, Conservative Party of Canada, Health Critic
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Monique Pauzé, Groupe parlementaire québécois Environment Critic

L'Hon. Isabelle Melançon, Minister of Sustainable Development, the Environment
and the Fight against Climate Change, Québec
The Hon. Rod Phillips, Minister of the Environment, Conservation and Parks, Ontario
The Hon. Rochelle Squires, MLA, Minister of Sustainable Development, Manitoba

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