



THE NATIONAL COUNCIL OF WOMEN OF CANADA  
LE CONSEIL NATIONAL DES FEMMES DU CANADA

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Canadian Nuclear Safety Commission  
Senior Tribunal Secretariat  
[Cnsc.interventions.ccsn@canada.ca](mailto:Cnsc.interventions.ccsn@canada.ca)

**Submission Re: Ref. 2019-H- 100 Saskatchewan Research Council (SRC)  
application to amend licence for SLOWPOKE-2 reactor on the University of  
Saskatchewan Campus from an operating license to a decommissioning license**

by Gracia Janes, NCWC Vice President Environment

The National Council of Women of Canada (NCWC) has a significant interest in, and strong precautionary policies regarding, the life-cycle activities of nuclear power, such as decommissioning and waste management, particularly their potential to harm public and worker health and safety and the environment. In this regard, NCWC policy advocates for strong regulatory oversight as well as independent expert input and public participation in related hearings.

Therefore, we commend the Canadian Nuclear Safety Commission (CNSC) for responding favourably to requests by public-sector groups such as the Canadian Environmental Law Association (CELA), for a full public hearing on the Saskatchewan Research Council (SRC) application to amend its licence for its SLOWPOKE-2 reactor on the University of Saskatchewan Campus from an “*operating*” license to a “*decommissioning*” license.

NCWC’s immediate concerns with the SRC decommissioning application are:

- the planned in- situ burial and abandonment of the SRC concrete-filled reactor pool, given that in 2018 CNSC allowed the University of Alberta Slow-Poke reactor to be filled with concrete and abandoned although portions of the reactor were still radioactive. **1.**
- any acceptance that “*cores from the reactor pool floor have met clearance levels*” when these will not include measurements of long-lived , hard to measure, radioactive substances such as tritium, carbon- 14 and calcium-41. **2.**

- the planned in- situ abandonment of the reactor pool “*with no institutional control required*” despite the above noted concerns. 3.
- chemical and radiological dangers to workers from beryllium oxide dust as the reactor is decommissioned. For example, decommissioning of both the University of Dalhousie and the University of Toronto reported there were events where decommissioning staff received excessive doses of radiation during the removal of beryllium reflectors .4.
- the collective radiation dose for this application is higher than that allowed for Alberta. U SLOWPOKE reactor 5.
- the plans for ‘*unconditional release*’ into municipal landfills of “*as much waste as possible*”, and the “*processing*” of radioactive waste from the reactor pool and release into the municipal sewage system, given the difficulties municipalities are having with their waste management, including sewage systems.6.

To conclude, while it is commendable that this SLOWPOKE Reactor is being decommissioned, it is essential that no part of the core be abandoned, and that its radioactive waste not be placed in municipal landfills or released into the municipal sewage system. Rather, using good stewardship, it should be safely stored and retrievable - well away from waterways, sensitive natural systems and populated areas - and be under human control. 7.

### References:

1. .e-mail .August 18<sup>th</sup> 2019. Ole Ericson Concerned Citizens of Renfrew County : ‘ In the case of the University of Alberta SLOWPOKE , the post –decommissioning radiological survey found radiation levels in the floor of the reactor pool exceeding the “clearance level” of 0.5 microSieverts per hour.’
2. *ibid.* “Small SLOWPOKE reactors , are fuelled by highly enriched, weapons grade uranium -235,and when the atoms in the reactor fuel split they emit high-energy neutrons that “stick” to the nuclei of elements found in the reactor pool and make them radioactive...Some of these give off highly penetrating gamma radiation. Others emit forms of radiation that cannot be accurately measured with radiological surveys ...”
3. CNSC Staff submission re CMD 19-100: SRC’s end-state objective is to return the facility to state that allows for unrestricted use (Exec Summary pg. 15)
4. e-mail August 18<sup>th</sup>, 2019. Ole Ericson Concerned Citizens of Renfrew County
5. *ibid.*

**6. NCWC Policy Update 2018 Background** “Untreated waste water is still one of the largest sources of pollution in Canadian rivers, lakes and oceans; and approximately 25 per cent of Canadian communities, large and small, have inadequate treatment or management of the waste water that they generate every day”.

**7. NCWC Resolution 2018 Update:** “that the National Council of Women of Canada (NCWC) adopt as policy that nuclear waste not be abandoned, but be safely stored above ground, under human control using good stewardship” [NCWC.ca](http://NCWC.ca) communications-policies by year.