December 17, 2018

To:

Canadian Nuclear Safety Commission P.O. Box 1046, Station B 280 Slater Street Ottawa, ON, Canada K1P 5S9

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From:

**Dodie LeGassick** 

Rev doc 1.2.1. repeats many of the concerns from 1987 and many of the concerns expressed by environmental groups such as Gene Watch, Northwatch and my group, Environment North. The question is ultimately can a safety case be made that can predict what may or may not occur over the next tens of thousands or millions of years. The following are our shared concerns about the proposed dgr.:

- 1. Will the excavation damage adjacent zones of rock that in time become routes for escaping radionuclides? Couldn't fractures and faults release radionuclides into groundwater?

  2. Could the formation of colloids and othe compounds speed up the transport of radioactive elements? Can we not expect a buildup of gas pressures within the repository over time?

  E. Will the intense heat that comes with radioactive decay compromise the backfill material and the cannisters?
- 4.Can any computer model/program safely predict the longevity of the steel and copper canister cladding to say that it will definitively last tens of thousands of years?5 Can we honestly predict the effects of future g laciations .earthquakes and earth tremours?6.Can a dgr exist that will be safe from human intrusions?

It is often said that this process is guided by the directions of Canadians. Just who are these Canadians? .How many Canadians in Northwestern Ontario are even aware that this project is in process? The host communities chosen were economically depressed and now with NWMO s funding of a variety of programs and the employment created these communities have become economically dependent on NWMO. If this is truly a fair and transparent process then to be fair to the people NWMO should precede any further surveys with studies of the socio economic impact on the affected people and make it their goal to educate those people about the concerns listed in your past and present reports . And to be clear about the contingency plan to perhaps have shallow rock repositories on the central site for decades before the building of the dgr.

To conclude ,I have noted our concerns but in addition I feel it necessary to ask again that there be much greater transparency and improved communications not only with the host communities but with the general public in the entire region of Northwestern Ontario.

Respectfully

Ms.Dodie LeGassick