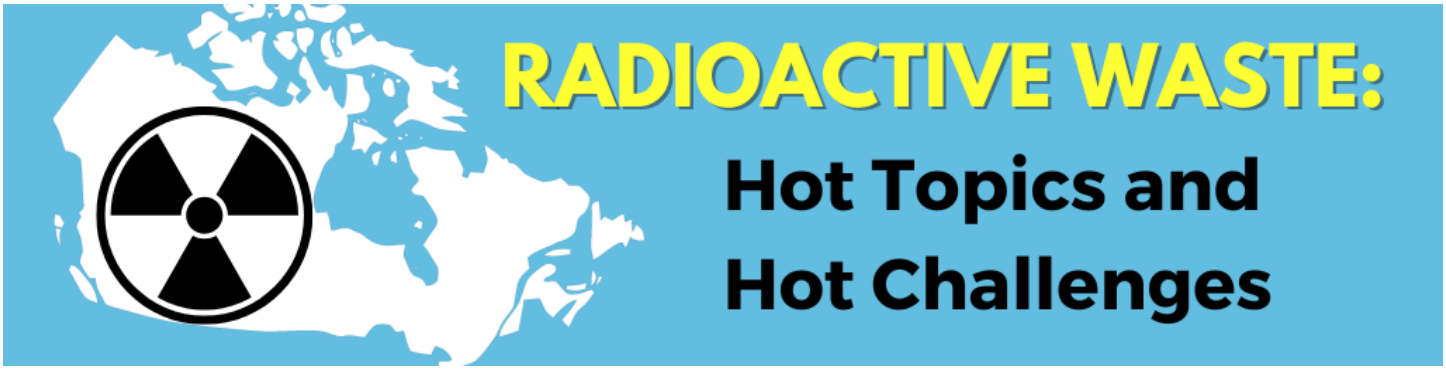

Don't ignore SMR's dangerous wastes...

If built and operated, SMRs would generate far more waste (of all types) per unit of electricity generated than current reactor types. In SMRs, waste is not fully recycled as lobbyists from the nuclear industry pretend. In certain types of SMR, the volume of high-level radioactive waste with long life could be reduced, but the volume and complexity of low and intermediate-level waste and used nuclear fuel could be substantially increased.

Fuel waste from SMRs such as molten salt reactors would require technically challenging and expensive processing prior to long-term storage or disposal. Sodium-cooled SMR fuel waste will be complex and reactive because sodium is corrosive and can ignite easily on contact with air. This places an additional burden on waste storage, packaging, and proposed geologic disposal.

The Canadian Nuclear Safety Commission (CNSC) review, so far, of SMR prototypes does not consider the waste. Waste will only be considered in the subsequent licensing processes as if the waste was not design-dependent. The CNSC would even allow SMRs to be abandoned in place ("in-situ decommissioning") if their removal is not "practicable".

Reduce the risk of nuclear proliferation...

All SMRs create plutonium and some are planning to use plutonium-based fuel, which creates a risk of nuclear proliferation. Plutonium is most widely used in atomic bombs. Canada must meet its legal obligations to the 1970 Treaty on the Non-Proliferation of Nuclear Weapons (NPT).

Reprocessing fuel waste to extract plutonium for SMR fuel would be expensive and dangerous; it would create weapons proliferation risks, and would ignore a history of serious accidents and widespread environmental contamination from handling the large quantities of liquid high-level waste generated by reprocessing.

The law exempts any fuel reprocessing facility that produces less than 100 tonnes of plutonium per year from requiring an impact assessment. A facility of this size would make enough plutonium each year to make 5,000 atomic bombs like the one that devastated Hiroshima.

... over

Stop exempting SMR's from impact assessments...

A small modular reactor (SMR) project will be designated for impact assessment:

- outside a nuclear facility, only if its thermal power exceeds 200 megawatts.
- inside an existing nuclear facility, only if its thermal power exceeds 900 megawatts

These criteria could exempt, from the application of the law, hundreds of small modular reactors eventually scattered across the country; they could all become small radioactive dumps. For example, Ontario Power Generation's proposal to build a General Electric Hitachi boiling water reactor at the Darlington nuclear site, for which the Canadian Infrastructure Bank is providing $970 million in low-interest financing; this project is exempted from an impact assessment because this reactor's thermal output would be 870 megawatts, just under the 900 megawatts limit for an existing nuclear facility.

Require the future radioactive waste management strategy to include all types of radioactive waste...

It is essential that the strategy:

- Minimize or even prohibit the production of new radioactive waste and monitor existing radioactive waste in perpetuity.
- Reinstate the polluter pays principle.
- Establishe a public oversight body for radioactive waste management and decommissioning.
- Forbid the licensing of new nuclear reactors until the waste issue is addressed.

It is unacceptable that the strategy ignores:

- waste from small modular reactors (SMRs).
- spent fuel waste.
- uranium mining waste.
- waste from the "reprocessing" of high-level waste (HLW) to extract plutonium.

Accept only radioactive waste from Canadian sources...

The import or return of radioactive waste must be stopped. We don't want Canada to become the world's nuclear dump!

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