

Cottage association member with public and environmental interest

March 4, 2021

1. Views on waste minimization and concept of waste hierarchy

First, let me say thank you for this opportunity. I hope it will be beneficial for all of us.

Radioactive waste minimization is most important and the first step is to work towards eliminating the production of nuclear waste. This means phasing out nuclear energy over the coming decade or two. New nuclear plants should not be built and small modular nuclear reactors should not be developed. Canada's goal should be to stop producing radioactive waste (this is happening in other countries). There are other means to produce power and to conserve energy. The government should be investing in the development of renewables - they do not produce radioactive waste. This is truly the only plan for waste minimization.

In the meantime while our existing nuclear plants are still operating and Canada is getting up to speed on alternatives, other forms of minimization must be discussed and the best plans implemented. I believe what is happening now is endangering our health and environment.

Both the principles of precautionary approach and pollution prevention should be foremost in mind.

Radioactive wastes must be managed safely with public health and protection of the environment as the primary goal.

It is essential that radioactive wastes be contained and isolated from the environment.

The hierarchy of reduce, reuse, recycle is not internationally recognized and there are very serious concerns about this:

First, there must be transparency and indigenous and public input in these decisions. Right now no one really knows what is happening and the environment and public health are being jeopardized.

The concept of Clearance Levels must be seriously reviewed.

Certainly radioactive wastes must not contaminate or be mixed with non-radioactive materials - radioactive waste must be segregated. Radioactive materials should not be put in landfills or recycled and end up in consumer products or building materials. Radioactive waste must not be incinerated. This is certainly an area where I and others completely disagree with IAEA. On what conceivable basis can radioactive materials be considered no longer radioactive? "Likely clean waste" is not acceptable on any grounds. Apparently the IAEA has set clearance levels that have been adopted in Canada and these materials are released without any public knowledge. This definitely needs review!

Radioactive materials should not be released into the air and water

So called "acceptable levels" of radioactivity are way too high in Canada and are not controlled in terms of how much dosage a person receives in a year's period. Actually there is no safe level of exposure to man-made radioactivity:

"There is no safe level of exposure to any man-made radioactive material. All discharges, no matter how small, into our air and water can cause cancer and many other diseases as well as genetic damage and birth defects" according to Dr. Eric Notebaert, Canadian Association of Physicians for the Environment.

Reprocessing should also be banned or at a minimum there should be parliamentary debate on this subject. Extracting plutonium from irradiated fuel raises concerns about plutonium falling into the hands of terrorists who could make nuclear weapons (dirty bombs) with the plutonium. In addition, particularly dangerous new forms of radioactive waste are created by this process.

So this subject needs discussion and current practices need review. New policies need to be implemented to protect health and safety of people and the environment - protecting health and safety of people and the environment should always be the guide and goal.

The public and indigenous communities need to participate and be heard and new policies must reflect their input.

But the ultimate goal should be to phase out nuclear power.

2. Roles of government, regulator and waste owners with respect to minimizing radioactive waste

The government should be aiming toward the phaseout of nuclear power and not investing money in new nuclear projects. The energy policy should be geared toward this goal - stop producing radioactive wastes when there is no way to adequately and safely deal with the waste. This alone is a problem as Natural Resources is so heavily invested in the nuclear industry and pushing for SMRs - how can Natural Resources then be working with us on this - it must be the whole government - all ministries who are involved in establishing the best policies and goals.

Energy companies should begin to transition toward renewable energy- truly clean energy - that will not produce radioactive waste.

In the meantime regulators must ensure that waste generators are managing their radioactive wastes following the five principles adopted by The Assembly of First Nations in 2017 : No abandonment, Monitored and Retrievable Storage, Better Containment & More Packaging, Away from Major Water Bodies, No Imports or Exports: Assembly of First Nations Resolution Adopted 2017

http://ccnr.org/AFN_Resolution_2017.pdf

3. Principles

The [U.N. Declaration on the Rights of Indigenous Peoples](#) must be applied with all nuclear operations.

The five principles adopted by The Assembly of First Nations in 2017 are extremely important: No abandonment, Monitored and Retrievable Storage, Better Containment & More Packaging, Away from Major Water Bodies, No Imports or Exports: Assembly of First Nations Resolution Adopted 2017

http://ccnr.org/AFN_Resolution_2017.pdf

The IAEA has stated a number of different principles at different times - all these principles should be incorporated - right now the “Framework” lacks any guiding principles and there are no objectives:

IAEA’s 9 Principles: Protection of human health, Protection of the environment, Protection of national borders (with respect to radioactive waste), Protection of future generations, Burdens on future generations, National legal framework,

Control of radioactive waste generation, Radioactive waste generation and management interdependencies and finally Safety of facilities. All essential. Other IAEA principles include (all key) : transparency , protection of people and the environment, physical protection, non-proliferation, long-term commitment, and continual improvement. All essential principles to a functioning and safe radioactive waste management program. These principles need to be clearly stated in Canada's policy.

Some of CNSC language mimics some of these principles. Regulations do not use the word shall - and are therefore not enforceable. And the CNSC seems to listen only to the nuclear industry, possibly to indigenous communities - though this is in question, but certainly not to the general public. The experience is that our opinion or concerns are only tolerated because public engagement is something to be checked off - but we are not heard and our opinions and concerns are not taken into account.

Hopefully this will not be true for this process. Will NRCan actually incorporate what we are saying? Can we trust this process and the outcome? Or is NRCan beholden to the nuclear industry?

Thank you.

I hope the results will be the very best.

Johanna