

Sophie Chatel Députée de / Member of Parliament for Pontiac



April 11, 2022, Gatineau

Sophie Chatel, MP of Pontiac House of Commons Confederation Building Suite 679 Ottawa, Ontario K1A 0A6

### Subject: Canadian Nuclear Laboratories' application to amend its Chalk River Laboratories site licence to authorize the construction of a near surface disposal facility

Dear Commission Secretariat,

I am writing to kindly request to intervene, by way of written submission and oral presentation, in the Canadian Nuclear Safety Commission (CNSC) public hearing on Canadian Nuclear Laboratories' application to amend its Chalk River Laboratories site licence to authorize the construction of a near surface disposal facility and this letter represent my written submission. In particular, I would like to intervene on environment and safety issues, and on the consultation process.

#### **Executive Summary**

Protecting the health and safety of Canadians, and securing the environment represents a nonnegotiable condition relative to any plan to dispose of nuclear waste at the Chalk River Laboratories property located in the Town of Deep River in Ontario ("Chalk River").

The Riding of Pontiac, from Rapides-des-Joachims to Gatineau, abuts the Ottawa River. Pontiac's economy, drinking water and future depends on the Ottawa River. Many community organizations in my riding are actively working to protect our forests, rivers, wetlands and other wild spaces for future generations. My office has launched a green initiative (<u>www.outaouaisvert.ca</u>) to mobilize citizens around concrete solutions to ensure a green and prosperous future by 2040. My intervention in this process is motivated by a concern to ensure that the proposed a near-surface disposal facility ("NSDF") poses no risk to the citizens of Pontiac now and in perpetuity.

Although this is not the immediate subject of this public hearing, I need to flag that my principal concern is the permanent removal and safe storage of the intermediate-level and high-level radioactive waste currently stored (safely but temporarily) at Chalk River. I understand that this waste will be moved in the intermediate future under the terms of <u>Canada's radioactive waste</u> policy framework, and that the Nuclear Waste Management Organization will soon identify sites

where Canada's used nuclear fuel (i.e. high-level waste) can be safely contained and isolated in a deep geological repository. Similarly, the policy framework will also identify safe sites to permanently store intermediate-level waste currently housed at Chalk River, but which cannot be safely placed in the NSDF. To be clear, constituents have expressed that they do not want the NSDF Project to open the doorway for the storage of intermediate-level waste at Chalk River in perpetuity.

Regarding the immediate removal and safe storage of the low-level radioactive waste currently in open fields at Chalk River, and abandoned buildings on the shore of the Ottawa River (currently vulnerable to fire hazard), I understand that the Licence Application<sup>1</sup> intends to provide a permanent solution for the storage of this low-level waste, and that the CNSC staff's, after their review of the licence and the environmental impact assessment,<sup>2</sup> recommends the construction of the NSDF Project.

After reading the above documents and discussing with many constituents in my riding, and following a visit to Chalk River with a select group, I am raising some questions/concerns to ensure that the citizens of Pontiac and future generations can have full confidence that the NSDF Project poses no threat. If the Commission does accept the Licence Application, they should ensure that the following concerns are addressed or satisfied:

- 1. Classification Protocol: An iron-clad protocol must be established to ensure that *only* low-grade waste is stored in the NSDF, and that the site's engineering specifications exceed the life of the radioactive materials so that the waste poses no public or environmental threat.
- 2. Origin of Waste: Nearly all the volume of waste for the NSDF is slated to come from Chalk River (90%). To secure public confidence, I propose that the CNSC impose a formal rule that waste from other Canadian sites, like hospitals and universities, or from medical isotopes returned by developing countries after use, never exceeds this 10% ratio. Additionally, the plan should also impose a formal rule that the NSDF will never accept any waste from the U.S. or other developed countries. My constituents have expressed that they do not want the NSDF Project to serve as a magnet for low-level waste from other regions.
- **3. Fail-Proof Monitoring:** In addition to the CNSC oversight, an independent agency like the International Atomic Energy Agency should be tasked with verifying the NSDF's compliance with international standards and best practices, with a permanent body of experts tasked with making regular on-site visits to ensure:
  - a. the security of currently stored radioactive waste at Chalk River, and to ensure its proper low-level classification before disposal in the NSDF site,
  - b. that during the construction of NSDF Project and the disposal phase *only* low-level waste is deposited into the facility, and

<sup>&</sup>lt;sup>1</sup> Canadian Nuclear Laboratories Licence Application at <u>https://www.nuclearsafety.gc.ca/eng/the-commission/hearings/cmd/pdf/CMD22/CMD22-H7-1.pdf</u>

<sup>&</sup>lt;sup>2</sup> CNSC staff's Commission Member Document at <u>https://www.nuclearsafety.gc.ca/eng/the-commission/hearings/cmd/pdf/CMD22/CMD22-H7.pdf</u>

- c. that the less than 10% off-site ratio is respected for each of the NSDF Project's cells.
- **4. Passive Safety:** The NSDF needs to be safe for 500 years and should be engineered to be "passively safe", i.e. it will not pose public or environmental risks despite the possible absence of human intervention.
- **5. Decommissioning Activities:** The decommissioning of old facilities at Chalk River must be subjected to a thorough plan that ensures that the Ottawa River and the surrounding environment is never put at risk.
- 6. Greater Transparency: Transparency and the consultation process should be extended beyond this public hearing, by committing to some form of public engagement that will enable local communities and Indigenous groups (with considerations for forming an Ottawa Valley group of the Canadian Association of Nuclear Host Communities and a community oversight committee for the NSDF Project that includes members from surrounding municipalities, cottagers associations and Indigenous communities in both Ontario and Quebec) to access water samples and other data to alleviate concerns about public safety.

# I - Key facts

**Chalk River.** The Chalk River site is located in the Town of Deep River in Ontario ("Chalk River"). Chalk River is adjacent to the Ottawa River, and within the traditional unceded territory of the Algonquin Anishnaabe Nation. Chalk River is owned by Atomic Energy of Canada, a federal Crown corporation.

**Management Structure.** Atomic Energy of Canada owns Chalk River, and must protect the environment by fulfilling the government of Canada's radioactive waste and decommissioning responsibilities. Atomic Energy of Canada has contracted to a private sector company, *Canadian Nuclear Laboratories*, to manage and operate its sites, which includes Chalk River, but will continue to own the sites, facilities, assets, intellectual property, and responsibility for environmental remediation and radioactive waste management. Canadian Nuclear Laboratories is responsible for the day-to-day operations of the sites, and is the licensee responsible for the Chalk River Operating Licence submitted to CNSC to construct the NSDF Project in Chalk River for the permanent disposal of solid low-level radioactive waste.

**Oversight.** CNSC is an agency of the Government of Canada, and a regulator of nuclear power and materials in Canada. CNSC acts as an independent, quasi-judicial administrative tribunal. The regulatory system is intended to protect people and the environment from radioactive materials resulting from the use of nuclear energy and other wastes at licensed sites. Through a licensing process, licensees like Canadian Nuclear Laboratories have to prove that their operations adhere to regulatory standards (the regulatory system is based on the principle that no technology is fail-proof, so licensees must incorporate multiple layers of protection whenever radioactive materials are used). **Chalk River Waste.** For over 70 years, low-level, intermediate-level and high-level radioactive waste have accumulated at Chalk River. Past waste management practices, which perhaps met the standards of the day, are no longer acceptable. The *high-level radioactive waste*<sup>3</sup> is presently housed in secure temporary storage facilities, until a national deep geological repository designed for used fuel becomes available. The *intermediate level radioactive waste*<sup>4</sup> from all Canadian Nuclear Laboratories managed sites is also in a safe and secure temporary storage facility on site, until a suitable permanent disposal facility becomes available.

**Waste for NSDF Project.** The license application states that the NSDF Project will *only hold low-level radioactive waste*<sup>5</sup>. This consists of contaminated soils, building materials (mainly from decommissioning activities underway at the Chalk River site), and general items such as mops, protective clothing, and rags.

**The NSDF Project.** The project would move the existing low-level waste at Chalk River into an engineered storage facility 1 kilometre away from the Ottawa River water. The facility will include an engineered containment mound to fully isolate the waste from the surrounding environment, and a dedicated wastewater treatment plant for the collection and treatment of precipitation that comes into contact with the waste, producing treated effluent that meets discharge targets established to be protective of surrounding waterways. The design life of the engineered storage facility, including both the cover and base liner systems, is assumed to be 550 years, while testing and research has shown that their service life could extend up to 2000 years.

**Waste Inventory.** Approximately 90% of the low-level radioactive waste planned to be placed in the NSDF Project is currently located at Chalk River. A small percentage (10%) of low-level radioactive waste from commercial sources, such as Canadian hospitals and universities, will also be accepted.

**Consultation.** Canadian Nuclear Laboratories submitted the NSDF Project to the *Canadian Nuclear Safety Commission* (CNSC) for approval. The Commission Members must take a decision on (1) the licensing, (2) the <u>Environmental Impact Assessment</u><sup>6</sup> and (3) whether the honour of the Crown has been met in fulfilling the CNSC's duty to consult. On these three

<sup>&</sup>lt;sup>3</sup> Generates significant heat, long-lived, requires greatest levels of heavy barriers for handling, interim storage and long-term isolation. Some examples include nuclear fuel waste and to a small degree from the creation of medical isotopes. (https://www.nrcan.gc.ca/our-natural-resources/energy-sources-distribution/nuclear-energy-uranium/radioactive-waste/7719#d)

<sup>&</sup>lt;sup>4</sup> Intermediate-level waste requires containment beyond several hundred years and requires heavy barriers (shielding). Examples include products refurbishing nuclear power plants and waste from some forms of radiation therapy. (<u>https://www.nrcan.gc.ca/our-natural-resources/energy-sources-distribution/nuclear-energy-uranium/radioactive-waste/7719#d</u>)

<sup>&</sup>lt;sup>5</sup> Low-level waste requires containment up to a few hundred years, does not usually require heavy barriers (e.g. concrete or protective clothing) during handling and interim storage. Includes contaminated rags, shoe covers and tools needed for the operation of nuclear power plants. (<u>https://www.nrcan.gc.ca/our-natural-resources/energy-sources-distribution/nuclear-energy-uranium/radioactive-waste/7719#d</u>)

<sup>&</sup>lt;sup>6</sup> <u>https://www.iaac-aeic.gc.ca/050/documents/p80122/139596E.pdf</u>

FR ÉNONCÉ DES INCIDENCES ENVIRONNEMENTALES: <u>https://www.iaac-aeic.gc.ca/050/documents/p80122/139596F.pdf</u>

points, the CNSC staff prepared a <u>Commission Member Document</u><sup>7</sup> (the "Commission Member Document") with their assessment and recommendation.

### II – Concerns About Environment and Safety Issues

### A. Site Location

At first glance it seems very odd to locate the NSDF Project so close to the Ottawa River. From the Licence Application, alternative locations were considered (Whiteshell Laboratories and Nuclear Power Demonstration sites), but the Chalk River site was determined to be the most suitable location for the NSDF Project because of its geological characteristics, its location well above the floodplain, and its proximity to current waste storage areas, alleviating the need to transport the waste material along public roadways (estimated to constitute over 45,000 shipments). Canadian Nuclear Laboratories stated that the Chalk River location has been well studied, and is located along a bedrock ridge that naturally forces water directly away from the Ottawa River. Overall, the Canadian Nuclear Laboratories concluded that with the identified mitigation measures, the implementation of the NSDF Project is not likely to result in significant adverse effects.

### Concern/Question

1. How rigorous was the assessment and the review of other site locations, and why were they not retained as alternative venues for Chalk River's low-level waste?

## B. Demolition and waste transfer

A large proportion of the nuclear waste will be generated by the decommissioning of Chalk River's outdated infrastructure to facilitate the site's revitalization. Some of the decommissioning activities will take place on the shore of the Ottawa River where many of these old buildings are located. The Commission Member Document states that Canadian Nuclear Laboratories will have a decommissioning plan which will need to follow the CNSC *Decommissioning regulatory documents*, and the Canadian Standard Association's requirements. Reviews of these plans will be undertaken by CNSC staff during the construction phase to verify their readiness before initiating the operation phase.

<sup>&</sup>lt;sup>7</sup> CNSC staff's Commission Member Document at <u>https://www.nuclearsafety.gc.ca/eng/the-</u> <u>commission/hearings/cmd/pdf/CMD22/CMD22-H7.pdf</u>

#### Concerns/Questions

- 2. How will the Canadian Nuclear Laboratories decommissioning plan ensure that the Ottawa River (and the surrounding environment) will be protected during the decommissioning of old facilities close sited near the shore? How will the dust and other debris be contained and prevented from washing into the Ottawa River?
- 3. Who will have oversight of the decommissioning activities to ensure that their procedures are safe (not just to verify the plan, but also that the plan is professionally implemented according to international standards)?

#### C. Radioactive Waste Inventory

As explained in the Commission Member Document, the Canadian Nuclear Laboratories had initially proposed including intermediate-level radioactive waste in the NSDF Project. However, following the CNSC staff assessment and concerns raised by the public and Indigenous Nations and communities, Canadian Nuclear Laboratories had to remove intermediate-level waste from the NSDF Project waste inventory. This initial proposal may have contributed to alter the public confidence in Canadian Nuclear Laboratories.

According to the Licence Application, the NSDF Project will now only hold low-level radioactive waste, which contains primarily short-lived radionuclides, and limits the number of long-lived radionuclides. This material will require isolation and containment for up to a few hundred years. The "Engineered Containment Mound's" design life of 550 years has been established to meet the required time period to allow for the radiologic decay of the waste inventory. The types of waste destined for the NSDF include contaminated soils from remediation activities, demolition debris from decommissioning work, and general waste such as used personal protection clothing or equipment. These items are considered low-level radioactive waste as they can be safely handled with limited precautions. A small percentage of the waste volume (approximately 10%) will come from other sites owned by Atomic Energy of Canada sites (e.g., Whiteshell Laboratories) or from commercial sources such as Canadian hospitals and universities.

The Licence Application also explains that the low-level radioactive waste contains primarily short-lived radionuclides (i.e., half-life  $\leq$ 30 years) and restricts the number of long-lived radionuclides (i.e., half-life > 30 years). Long-lived radionuclides will be stored at the NSDF Project because they are intrinsically part of the radiological fingerprints of waste streams at Chalk River and other Canadian Nuclear Laboratories sites. The Commission Member Document explains that it is not practical, technical, or economical to separate the long-lived radionuclides from the waste streams, especially since many of the waste streams are in the form of soil and building debris. However, the concentrations of long-lived radionuclides that are proposed in the NSDF Project are limited.

#### Concerns/Questions

- 4. What would happen to the long-lived radionuclides after the expected life cycle of the NSDF Project (say the most prudent projection of 550 years)?
- 5. What will be the concentration of long-lived radionuclides in the NSDF Project?
- 6. Are there any risks that intermediate-level waste might end up into the NSDF Project?
- 7. What will happen to the Nuclear Power Demonstration Reactor and Whiteshell Reactor 1 facilities which are proposed to be decommissioned do they contain intermediate-level waste and, if yes, how will such waste be separated and stored elsewhere?
- 8. Will the waste generated from decommissioning activities be screened for contamination to ensure only low-level waste is stored in the NSDF Project?
- 9. Who will have the oversight of the NSDF Project? Would an independent body assess that the nuclear waste that is stored to the NSDF Project to ensure that only low-level waste is stored?
- 10. If intermediate-level waste was to be found in the NSDF Project, would Canadian Nuclear Laboratories be accountable and subject to an obligation to clean-up the NSDF Project from intermediate-level waste?

### **D.** Operation and Oversight

The proposed NSDF Project site lies within the Perch Lake watershed, which is located adjacent to the Ottawa River. Due to the existence of nearby waste sites, the surrounding surface water features, including Perch Lake and Perch Creek, receive several different contaminants, including gross beta (mainly strontium-90 and progeny), tritium, chloride, and various metals. While the Ottawa River has to date been unaffected due to dilution of contaminants, historical contamination of the Perch Lake watershed is already a source of concern. Community members and Indigenous communities expressed concerns regarding the potential for contamination of the Ottawa River and surrounding waterways due to the NSDF Project, which could negatively impact water quality. The Ottawa River is the primary source of drinking water for millions of Canadians, and holds both social and economic value, through fishing, recreational activities, transport, and cultural expression. The CNSC staff concluded that while the identified changes to surface water (from changes to surface water quality and changes to downstream discharge patterns) are long-lasting due to the nature of the project, the risks are anticipated to be negligible due to the implementation of mitigation measures, and will not cause significant changes to the surface water environment.

The Commission Members Document states that the CNSC staff will continue to verify, monitor and evaluate Canadian Nuclear Laboratories' compliance with regulatory requirements through

compliance oversight of the NSDF Project waste management, and decommissioning plans and procedures, with a focus on the ongoing waste characterization program. CNSC staff inspections will cover all waste streams (legacy waste, facilities decommissioning, operational wastes, and environmental remediation).

#### Concerns/Questions

- 11. What are the mitigation measures to protect the Ottawa River and surrounding waterways from contamination from the NSDF Project?
- 12. In addition of the CNSC oversight, could an independent agency like the International Atomic Energy Agency also verify the site's compliance with international standards and best practices, and make recommendations if needed?

### E. Canadian vs International Safety Standards

Section 2.4 of the Commission Member Document detailed how CNSC staff assessed Canadian Nuclear Laboratories' submissions of technical documents and safety assessments against the regulatory requirements of the *Nuclear Safety and Control Act* and its associated regulations, as well as CNSC regulatory and guidance documents, Canadian Standards Association standards, and International Atomic Energy Agency requirements and guidance. However, several members of the communities have questioned the robustness of the applicable Canadian safety standards compared to international standards.

#### Concern/Question

13. Are the Canadian applicable standards as robust as international standards?

#### III – Concerns About the Long-Term Management and Safety

#### A. Disruptive Events and Human Intrusion Scenarios

Disruptive event scenarios, which include inadvertent human intrusion, as well as earthquakes, fires, floods, landslides that could cause loss of containment were analyzed by CNSC staff using Canadian and international guidance (see section 3.5 of the Commission Member Document).

The long-term safety of the NSDF Project was examined by CNSC staff through the use of mathematical modelling. They analyzed the impact of a variety of scenarios, the normal evolution, disruptive events, human intrusion, and other worst-case scenarios, and evaluated radiological doses and risks. CNSC staff assessed the NSDF Project against Canadian and international requirements and guidance, and found that the predictions for long-term impacts

from the NSDF Project will comply with these standards and that people and the environment will be protected.

CNSC also assessed the "What if" scenarios (an extreme set of assumptions or to depict the impact of events that are extremely low probability or worst-case failures of the disposal system). One such scenario was a permanent bathtub (a flooding scenario in which it is assumed that the final cover fails while the base liner remains intact and flooding of the engineered storage facility occurs resulting in pooling in the containment and spilling over the sides). Using Canadian and international guidance, CNSC staff concluded that "the peak annual dose from the 'what if' scenarios is greater than the normal evolution scenario".

### Concerns/Questions

- 14. What are the risks to the public in the event of inadvertent human intrusion, earthquakes, tornados, fires, floods, landslides, or in a "bathtub" scenario?
- 15. It is difficult to predict hundreds of years into the future, especially with accelerating climate change. Will there be other long-term safety assessments to ensure that the mathematical modelling predicated upon assumptions remains relevant, and that under the conclusion reached in any scenario, the public is not at risk?

### **B.** Post-Closure – Passively Safe

The Licence Application and the environmental assessment under the CNSC concluded that the NSDF design incorporates passive safety features, which will ensure the protection of future generations. During the post-closure phase of the project, monitoring and surveillance activities continue to verify the integrity of the facility, while environmental monitoring activities will verify that the performance continues to demonstrate compliance with the environmental assessment predictions. Upon closure, controls will be established to limit land usage, including recognition on the property title or deed to ensure the appropriate zoning restrictions and the creation of a buffer or attenuation zones. Such administrative or legal controls help to reduce the potential for inadvertent human exposure. While other areas of the site may be reused, the NSDF Project site will continue to be restricted as a waste disposal facility.

#### Concerns/Questions

- 16. What safeguards will be in place to ensure that the Project is "passively" safe for 550 years?
  - a. What would happen if the site is left unattended?
  - b. What type of nuclear waste will be left after 550 years, and how safe would the site be?

### C. Future activities

The Licence application states that reasonably foreseeable development activities included in the assessment were activities related to the proposed Small Modular Reactor on Chalk River, new support infrastructure, decommissioning and environmental remediation at Chalk River, the proposed Nuclear Power Demonstration in situ decommissioning project in nearby Rolphton, Ontario, and activities at Garrison Petawawa.

#### Concerns/Questions

- 17. Are there any reasonably foreseeable development activities in addition to those listed in the Licence Application? What are the risks that this licence will invite even more activities that will generate additional nuclear waste on the shore of the Ottawa River?
- 18. What are the guarantees that Chalk River will not be selected as a site for intermediate-level waste disposal permanently? In other words, my constituents have expressed that they do not want the NSDF Project to open the doorway for the permanent storage of intermediate-level waste at the Chalk River site, or serve as a magnet for low-level waste from other regions.

### **IV – Concerns About Transparency and Consultation Process**

### A. Ongoing engagement

The consultation process should extend beyond this public hearing. There should be an ongoing engagement with stakeholders in the Ottawa Valley and affected Indigenous communities. There should be resources dedicated to forming an Ottawa Valley branch of the Canadian Association of Nuclear Host Communities and a community oversight committee for the NSDF project that includes members from surrounding municipalities, cottagers associations and Indigenous communities in both Ontario and Quebec, such would ensure the ongoing proactive relationship with the Canadian nuclear industry and regulators and local municipalities and Indigenous communities.

### **B.** Consultation With Indigenous Communities

The Commission Member Document determines that the CNSC, as an agent of the Crown, has upheld the Honour of the Crown, and has fulfilled its common law obligations to consult, and where appropriate accommodate, Indigenous peoples, pursuant to section 35 of the Constitution Act, 1982. Although Chapter 5 of the document details the consultation activities of the CNSC with Indigenous groups, recent submissions by Indigenous communities in my riding has raised concerns about the consultation process.

### Concern/Question

- 19. Could resources be dedicated to forming an Ottawa Valley branch of the Canadian Association of Nuclear Host Communities and a community oversight committee for the NSDF project that includes members from surrounding municipalities, cottagers associations and Indigenous communities in both Ontario and Quebec?
- 20. What were the consultation activities with Indigenous communities by the Canadian Nuclear Laboratories, Atomic Energy of Canada and CNSC to ensure their full participation and that their concerns were heard, and their concerns appropriately mitigated?

## **Summary of the Concerns and Questions**

#### **Concerns About Environment and Safety Issues**

- 1. How rigorous was the assessment and the review of other site locations, and why were they not retained as alternative venues for Chalk River's low-level waste?
- 2. How will the Canadian Nuclear Laboratories decommissioning plan ensure that the Ottawa River (and the surrounding environment) will be protected during the decommissioning of old facilities near the shore? How will the dust and other debris be contained and prevented from washing into the Ottawa River?
- 3. Who will have oversight of the decommissioning activities to ensure that their procedures are safe (not just to verify the plan, but also that the plan is professionally implemented according to international standards)?
- 4. What would happen to the long-lived radionuclides after the expected life cycle of the NSDF Project (say the most prudent projection of 550 years)?
- 5. What will be the concentration of long-lived radionuclides in the NSDF Project?
- 6. Are there any risks that intermediate-level waste might end up into the NSDF Project?
- 7. What will happen to the Nuclear Power Demonstration Reactor and Whiteshell Reactor 1 facilities which are proposed to be decommissioned do they contain intermediate-level waste and, if yes, how will such waste be separated and stored elsewhere?
- 8. Will the waste generated from decommissioning activities be screened for contamination to ensure only low-level waste is stored in the NSDF Project?
- 9. Who will have the oversight of the NSDF Project? Would an independent body assess that the nuclear waste that is stored to the NSDF Project to ensure that only low-level waste is stored?
- 10. If intermediate-level waste was to be found in the NSDF Project, would Canadian Nuclear Laboratories be accountable and subject to an obligation to clean-up the NSDF Project from intermediate-level waste?
- 11. What are the mitigation measures to protect the Ottawa River and surrounding waterways from contamination from the NSDF Project?
- 12. In addition of the CNSC oversight, could an independent agency like the International Atomic Energy Agency also verify the site's compliance with international standards and best practices, and make recommendations if needed?

13. Are the Canadian applicable standards as robust as international standards?

#### Concerns About the Long-Term Management and Safety

- 14. What are the risks to the public in the event of inadvertent human intrusion, earthquakes, fires, tornados, floods, landslides, or in a "bathtub" scenario?
- 15. It is difficult to predict hundreds of years into the future, especially with accelerating climate change. Will there be other long-term safety assessments to ensure that the mathematical modelling predicated upon assumptions remains relevant, and that under the conclusion reached in any scenario, the public is not at risk?
- 16. What safeguards will be in place to ensure that the Project is "passively" safe for 550 years?
  - a. What would happen if the site is left unattended?
  - b. What type of nuclear waste will be left after 550 years, and how safe would the site be?
- 17. Are there any reasonably foreseeable development activities in addition to those listed in the Licence Application? What are the risks that this licence will invite even more activities that will generate additional nuclear waste on the shore of the Ottawa River?
- 18. What are the guarantees that Chalk River will not be selected as a site for the permanent disposal of intermediate-level waste? In other words, my constituents have expressed that they do not want the NSDF Project to open the doorway for the storage of intermediate-level waste, or serve as a magnet for low-level waste from other regions at the Chalk River site.

#### **Concerns About Transparency and Consultation Process**

- 19. Could resources be dedicated to forming an Ottawa Valley branch of the Canadian Association of Nuclear Host Communities and a community oversight committee for the NSDF project that includes members from surrounding municipalities, cottagers associations and Indigenous communities in both Ontario and Quebec?
- 20. What were the consultation activities with Indigenous communities by the Canadian Nuclear Laboratories, Atomic Energy of Canada and CNSC to ensure their full participation and that their concerns were heard, and their concerns appropriately mitigated?