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Written submission from the Kebaowek First Nation

Mémoire de la Première nation de Kebaowek

Regulatory Oversight Report for Canadian Nuclear Laboratories Sites: 2020 Rapport de surveillance réglementaire des sites des Laboratoires Nucléaires Canadiens : 2020

Commission Meeting

Réunion de la Commission

November 25, 2021

Le 25 novembre 2021





KEBAOWEK FIRST NATION SUBMISSION TO THE CANADIAN NUCLEAR SAFETY COMMISSION REGARDING THE REGULATORY OVERSIGHT REPORT FOR CANADIAN NUCLEAR LABORATORIES: 2020

**OCTOBER 25 2021** 

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#### 1. INTRODUCTION

This submission is filed by the Algonquin Nation of Kebaowek (the "intervenor") in response to the Canadian Nuclear Safety Commission's ("CNSC") Regulatory Oversight Report for Canadian Nuclear Laboratories Sites: 2020 (herein "2020 ROR"). released on August 26, 2021. Kebaowek First Nation has also requested to the commission to participate in the virtual meeting with respect to this and other matters scheduled for November 24-25, 2021. Kebaowek First Nation (herein "KFN") appreciates this opportunity to raise issues and concerns around safety performance of sites that are licensed to Canadian Nuclear Laboratories (CNL) by the Canadian Nuclear Safety Commission (CNSC) particularly CNL licensed sites at Chalk River Laboratories (CRL) – the focus of this submission as **CRL is located on unceded Algonquin Anishinaabeg lands.** KFN also fully support the submission of the Canadian Environemtnal Law Association (CELA) and the concerned citizens of Renfrew County and area.



# **Chalk River Laboratories (CRL)**

- Large Nuclear and Research Test Establishment
- · NRU Shutdown (2018)
- CNL's 10 year plan site revitalization
  - o Decommissioning legacy facilities
  - Construction of new science research facilities
  - Managing waste from CRL and other CNL sites



Aerial view of CRL (source: CNL)

September 9, 2021 CRL CNSC web page

#### **KEBAOWEK FIRST NATION**

KFN is one of eleven communities representing the Algonquin Nation in Canada. Nine of the communities are located in Québec and two are located in Ontario. These communities are subject to the Canadian Indian Act. Algonquin peoples continue to occupy both sides of the Ottawa River and have never relinquished title to our territory or rights as Anishinaabeg people. KFN is located on Lake Kipawa in Québec and is governed by an elected Chief and Council. Our on reserve population is about 300, while another 700 members live off reserve, mainly in Ontario. Off reserve members are dispersed between Témiscamingue Québec and Mattawa, North Bay and Ottawa Ontario. Together, all of our members remain connected to the territory and continue to occupy, manage, safeguard and intensively use OUR LANDS AND WATERWAYS as we carry out traditional and contemporary activities. All such initiatives are based on a model of self-determination and a history of Anishinaabeg traditional knowledge, eco-logical sustainability and land governance. As such, KFN does not accept, or acknowledge any claims to any Aboriginal or Treaty Rights made by the Algonquins of Ontario ("AOO") or recognize AOO as an entity entitled to consultation or accommodation on Algonquin Anishinaabeg territory.

The term Anishnaabeg, literally translates as "the real people." The Algonquin Nation emerges from a rich historical legacy deep within the Ottawa River watershed. The Kitchi sibi as we know it, or Ottawa River as settlers have since renamed it, has been our home and highway since time immemorial. Anthropologist Frank Speck recorded that families living along the Ottawa in 1913 were still known as the Kichi sipi anishnabeg or Kichississippirinis., "big river people". For centuries Anishinaabe peoples have relied on their lands and waterways for our ability to exercise our inherent rights under our own system of customary law and governance, known as Ona'ken'age'win. This law is based on mobility on the landscape, the freedom to hunt, gather and control the sustainable use of our lands and waterways.

#### CANADIAN NUCLEAR SAFETY COMMISSION AND INDIGENOUS ENGAGEMENT

"The Canadian Nuclear Safety Commission ("CNSC") recognizes and understands the importance of building relationships with Indigenous peoples in Canada." <sup>1</sup> Since KFN's comments on the 2018 ROR KFN and the CNSC continue to work towards meaningful discussions towards project consultation agreements that acknowledge and support our respective roles on the territory.

The Chalk River Laboratories CNL site as discussed in the 2020 ROR report lies within the unceded traditional rights and title lands of the Algonquin Nation. In 2021, KFN and CNSC staff are planning to meet consultation and accommodation obligations regarding activities at the CRL- CNL sites by developing on an overarching KFN engagement consultation

<sup>&</sup>lt;sup>1</sup> 2020 ROR, p. 3.

agreement and protocol.

Specific to this regulatory oversight report CNSC staff did not take the initiative to meet with KFN prior to the public consultation period. The following KFN comments on the 2020 ROR are intended to seek more information on CNL activities from the CNSC and identify opportunities for improvement regarding Indigenous engagement at the Chalk River Laboratories CNL site. KFN supports the view that ROR meetings are not a replacement for project specific consultation and accommodation process agreements. However, they are to ensure that CNSC Staff provides relevant, additional information that KFN is requesting when the ROR is before the Commission.

### **CANADIAN NUCLEAR LABORATORIES (CNL)**

KFN's understanding is CNL is a nuclear science and technology organization which took responsibility for operating all CNSC-licensed Atomic Energy of Canada Limited (AECL) sites in 2014, as part of AECL's transition to a Government-Owned, Contractor-Operated (GoCo) model of operations. That CNL is a wholly-owned subsidiary of AECL, but is managed and operated by the Canadian National Energy Alliance, a consortium of private engineering and technology companies. Where AECL retains ownership of the Chalk River Laboratories site, CNL is the licensee responsible for the safe operation. KFN understands CNL's purpose is to ensure federal nuclear waste disposal and decommissioning contracts are completed and that there is a return on investment for their shareholders. That CNL is a private, incomegenerating corporation owned by large multi-national corporations that at most enjoy limited, circumscribed, statutory rights that by their very nature are subordinate to, and subject to, the constitutional rights of the Algonquin Nation.

### 2. CNL NUCLEAR PROJECT AUTHORIZATIONS AND LACK OF INDIGENOUS CONSULTATION CONCERNS

The 2020 ROR provides that "CNL continues work on the proposal to construct and operate a Near Surface Disposal Facility ("NSDF") at the CRL site." The 2020 ROR also states "Additionally, Global First Power is proposing a small modular reactor ("SMR") at the CRL site." The CNSC states that because these projects will be the subject of separate Commission decisions, they are not specifically discussed in further detail in the 2020 ROR.

KFN is concerned over the potential increased nuclear waste contaminant load of the proposed "NSDF" into the Ottawa River as well as the continued lack of open discussion when the proponent GFP is proposing a first-of-a-kind small modular reactor (SMR) at the Chalk River Laboratories (CRL) site on Algonquin territory. In addition to the project

<sup>3</sup> 2020 ROR, p. 7.

<sup>&</sup>lt;sup>2</sup> 2020 ROR, p. 7.

description pertaining to this federal environmental assessment, the proponent has submitted an application for a licence to prepare a site for a SMR at CRL, on lands owned by Atomic Energy of Canada Limited.<sup>4</sup>

According to the project description, Global First Power aims to be operational by 2023 for a period of approximately twenty years. According to the Canadian Nuclear Association's (CNA) vision for SMRs in Canada, as stated in its A Call to Action: A Canadian Roadmap for Small Modular Reactors ("SMR Roadmap") released in November 2018, 5 this demonstration project at CRL could lead to the commercialization of SMRs by 2026. 6 (CELA 2020)

KFN also requests more information in the ROR 2020 on the Advanced Nuclear Materials Research Centre (ANMRC) construction site. KFN has not been consulted by CNL on the ANMRC and how it will consolidate existing laboratories and hot cells located at CRL and is "anticipated to be one of the largest active research laboratories in Canada."

As these proposed undertakings are fundamentally different from the existing CNL licences at Chalk River, KFN supports CELA's recommnedation to include a description of the current plans for the "NSDF", "ANMRC" and "SMR" in order to provide some context for the proposals and early engagement with the public and KFN. Furthermore, KFN supports that the ROR be a comprehensive and evergreen document to ensure that its text is updated when necessary, such as when these separate Commission decisions are made.

KFN is also concerned of the many projects CNL is carrying out at Chalk River that are not necessarily designated for environmental assessment. During the period from November 2020 to March 2021, numerous waste-related projects were posted on the federal Impact Assessment Registry under section 82 of the *Impact Assessment Act*<sup>8</sup>, with very little information other than the following headings:

- 81139 Canadian Nuclear Laboratories Cask Facility Project
- 81177 Canadian Nuclear Laboratories Intermediate Level Waste Storage Area
- 81178 Canadian Nuclear Laboratories Bulk Storage Laydown Area
- 81209 Canadian Nuclear Laboratories Material Pit Expansion Project

<sup>&</sup>lt;sup>4</sup> Canadian Nuclear Safety Commission, "New reactor facilities – Current licensing activities" (March 20, 2019), online: http://nuclearsafety.gc.ca/eng/reactors/power-plants/new-reactor-facilities/index.cfm

<sup>&</sup>lt;sup>5</sup> Canadian Small Modular Reactor Roadmap Steering Committee (2018) "A Call to Action: A Canadian Roadmap for Small Modular Reactors," Ottawa, Canada, p 9 [SMR Roadmap].

SMR Roadmap, p 22

<sup>&</sup>lt;sup>7</sup> 2020 ROR. P.7.

<sup>&</sup>lt;sup>8</sup> Impact Assessment Act, SC 2019, c 28.

- 81375 Canadian Nuclear Laboratories Building Demolition Project
- 81389 Canadian Nuclear Laboratories Waste Management Area Modification Project
- 81403 Canadian Nuclear Laboratories Heel Storage Removal Project
- 81424 Canadian Nuclear Laboratories Effluent Monitoring Stations Upgrade Project
- 81443 Canadian Nuclear Laboratories Multi-Purpose Waste Handling Facility

KFN was not consulted on any of the Chalk River location projects on the above list. KFN is further concerned that for each of these projects, a "Notice of Determination" has now been issued by CNL. The ROR should clarify that AECL, and not CNL, is the federal authority responsible for making determinations as to whether these projects have significant environmental and social cultural impacts to rights and title holders. KFN is asking the CNSC how does a privately-owned company, in this case CNL, determine that this long list of projects, carried out on federal lands, won't cause significant adverse environmental effects and impacts on Aboriginal Rights and Title holders? This CNL approval process is in question by KFN and other intervenors. Why are none of these projects are mentioned in the 2020 ROR? KFN requests a description of the current plans for these projects and an overview of CNL's analysis and consultation plan for determining that they are not likely to cause significant adverse environmental effects or impact on Algonquin Aboriginal Rights and Title.

One major area of uncertainty for KFN amongst all these active Chalk River site project assessments are the vast inconsistencies in the environmental assessment processes currently being employed by the Canadian Nuclear Safety Commission (CNSC) as a regulator and the Impact Assessment Agency of Canada (IAAC) as the federal lead agency for impact assessments. KFN is requesting that the ROR address interim review measures as KFN can not submit to imposed or lessor provisions and policies which eliminate and/or limit the scope of studies and Indigenous engagement that needs to be carried out in order to properly analyze potential nuclear projects that have significant potential to impact Algonquin territory. (KFN and AANTC to PMO May 2020)

## NUCLEAR POWER DEMONSTRATION ('NPD") IN SITU DECOMISSIONING PROJECT

CNLs Nuclear Power Demonstration ("NPD") in situ decommissioning project at Rolphton Ontario is currently undergoing a federal EA. The CNSC states that there will be separate Commission decisions on the proposals for WR-1 and NDP, for which reason the proposals are not specifically discussed further in this ROR. We support CELAs intervention in that "This approach, however, is insufficient, as it denies early engagement and information sharing on projects which have

<sup>&</sup>lt;sup>9</sup> 2020 ROR, p. 8.

critical health, safety and environmental ramifications. The CNSC's consideration of these complex matters should not be constrained to licensing forums and every opportunity, including the ROR, should be used to advance public knowledge and the sharing of information per section 21(1)(e) of the *NSCA*." The ROR should include a description of the current decommissioning plans of full dismantling to provide some context for any proposed changes to in situ decommissioning.

#### 3. INDIGENOUS WORLDVIEWS AND KNOWLEDGE AND THE CRL

It is important for our community to note that before the Government of Canada completed construction of the Chalk River Laboratories (CRL) in 1944, no assessment was undertaken to determine how the nuclear complex might affect upstream or downstream areas of the Kitchi sibi. No thought was given to how the nuclear complex might affect the members of the Algonquin Nation, our dependence on the then plentiful watershed resources of the Kitchi sibi , or our multi-generational socio-cultural connection to the places and customs associated with the Kitchi sibi. No thought was given to whether the promises of the Royal Proclamation could be upheld if the complex was built. No thought was given to Algonquin jurisdiction around the Kitchi sibi at all. Migizi Kiishkaabikaan (in Anishnaabemowin ), also called "Oiseau Rock" or "Bird Rock" is a rock face that rises 150 meters above the Kitchi sibi across from Chalk River Laboratories on the north side of the river. It is recognized as a sacred site by our peoples.

KFN asks the CNSC why is there no mention in the 2020 ROR of CNL's role in the implementation of the Federal Nuclear Science and Technology Work Plan, promoting Chalk River Laboratories – as Canada's largest science and technology complex? – "to contribute to the government's health, science, innovation and climate change objectives." KFN recommends that CNL's role in the implementation of this Plan be addressed in the context of inclusion of Indigenous history and worldviews and knowledge exchange regarding the Chalk River Laboratories at the upcoming Commission meeting.

#### 4. NULCEAR WASTE MANAGEMENT

The 2020 ROR provides one-sentence descriptions of site-specific waste management activities completed at CRL, WL, PHP, PGP, DP, G-1 and NDP.34 The ROR does not describe the type of waste that it intends to dispose of at each site in adequate detail, nor does it describe the specific steps taken to prevent unreasonable risk to the environment and human health. This level of depth is insufficient. KFN recommends that a detailed overview of waste management activities being undertaken at the CRL site be included in the ROR.

10 https://www.aecl.ca/science-technology/federal-science-and-technology-work-plan/

# Wastes already at Chalk River

- Seven decades' accumulation
  - 509,164 cubic meters total (102,462 m³ nuclear R&D; 382,841 m³ contaminated soil; 19,726 m³ radioisotope production/use; 4,135 m³ decommissioning)\*
  - Origins in World War II Manhattan Project, Cold War plutonium production for U.S. nuclear weapons
  - NRX, NRU, ZEEP, PTR, ZED-2 reactors
- Mostly post-irradiation (nuclear reactor) wastes
  - Wide range of fission and activation products, hard to manage
  - 1952 NRX accident
  - Leaking waste management areas (WMAs) with liquid waste discharges in sand pits, "special burials" of three reactor cores
- In addition to the medical isotope wastes produced at Chalk River, additional commercial wastes from universities, hospitals, industry

\*Source: CNL 2015. <u>Inventory of Radioactive Waste in Canada: 2013 Inventory</u>
<u>Summary Report</u>. Canadian Nuclear Laboratories. Low Level Radioactive Waste Management Office.

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<sup>11</sup> Hendrickson, O. (2021, June). Chalk River Federal Nuclear Waste. Sierra Club Webinar. Montreal; Quebec.

#### **CNL INTEGRATED WASTE STRATEGY**

The 2020 ROR makes no mention of CNL's Integrated Waste Strategy<sup>12</sup>, which lays out a plan to dispose of CNL managed Low Level Waste at CRL and to transfer CNL managed Intermediate Level Waste and High Level Waste from other sites to CRL for storage until final disposal is available. Since this strategy represents a radical departure from radioactive waste practices and strategies previously espoused by Atomic Energy of Canada, KFN recommends that a discussion of the Integrated Waste Strategy and the consolidation of high, intermediate, and low-level waste at CRL be included in the ROR.



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<sup>12</sup> CNL Integrated Waste Strategy, p. 1-2.

<sup>&</sup>lt;sup>13</sup> Hendrickson, O. (2021, June). Chalk River Federal Nuclear Waste. Sierra Club Webinar. Montreal; Quebec.

#### NUCLEAR WASTE TRANSPORTATION

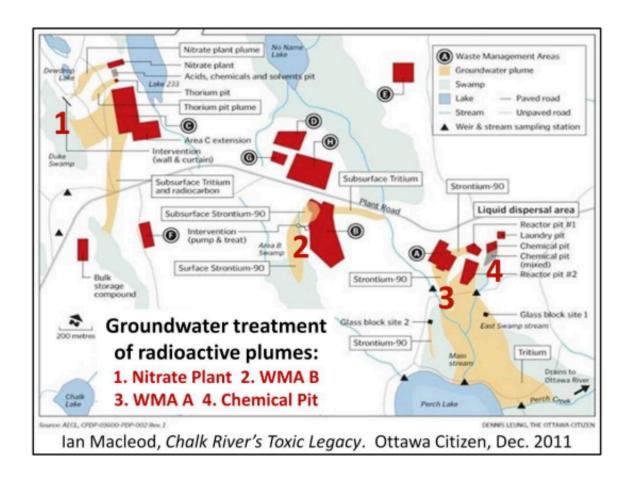
The 2020 ROR also makes no mention of the extensive transport of radioactive materials that has been, continues to be, and will be taking place on Algonquin Anishinaabeg lands in order to achieve the aforementioned consolidation of radioactive waste at CRL. CELA notes at the "Environmental Stewardship Council" virtual meeting on October 21, 2021, CNL said that it plans to start the Whiteshell High Level Waste shipments next summer. Since there are increased risks associated with the transportation of radioactive waste—specifically increased radiation exposures and increased risks of transport accidents—the ROR should provide an update on the status of CNL's waste transfer activities, and specifically, state that the High Level Waste transfer from Whiteshell to CRL will begin in summer 2022.

The transfer of wastes is critical to the CNSC's oversight as Canada's nuclear safety regulator. The ROR provides an opportunity for the CNSC to consider issues like waste transfers and the licensing of the casks in which these transfers occur. This should be addressed at the upcoming Commission Meeting, as a matter of significant public interest, especially to the communities living en route.

#### RADIONUCLIDE DATA REPORTING

KFN recommends the ROR 2020 addresses that radionuclides data should be reportable and accessible on Canada's National Pollutant Release Inventory ("NPRI") in a similar manner as pollutants currently reported.

<sup>14</sup> K. Schruder, Chalk River Laboratories Environmental Stewardship Council virtual meeting, October 21, 2021



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#### **CHALK RIVER LEAKING WASTE AREAS**

KFN requests the 2020ROR addresses the Chalk River Leaking Waste Areas and Contaminants currently onsite. It is unclear to KFN what work is in progress. What is the contaminant load in the Ottawa River?

<sup>&</sup>lt;sup>15</sup> Hendrickson, O. (2021, June). Chalk River Federal Nuclear Waste. Sierra Club Webinar. Montreal; Quebec.

#### 5. CONSIDERING CLIMATE CHANGE

In conclusion, as climate impacts become more frequent and pronounced, KFN urges the CNSC to discuss climate change in the context of licensee oversight because of the major safety and environmental issues that they pose to operations. KFN submits oversight of potential climate impacts is within the purview of the CNSC's review because of the both the CNSC and Algonquin Nation's responsibility to protect the environment from unintended radioactive releases. Catastrophic weather events are becoming more frequent and KFN like other intervenors recommend the CNSC review the climate resiliency of licensees as part of their regulatory oversight reporting and ask that the Commission direct CNSC Staff to include this in future RORs.