



**Final submission from the  
Ottawa Chapter of the Council  
of Canadians**

**Mémoire définitif du  
Conseil des Canadiens,  
chapitre d'Ottawa**

In the Matter of the

À l'égard des

**Canadian Nuclear Laboratories (CNL)**

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**Laboratoires Nucléaires Canadiens (LNC)**

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Application from the CNL to amend its  
Chalk River Laboratories site licence to  
authorize the construction of a near surface  
disposal facility

Demande des LNC visant à modifier le permis  
du site des Laboratoires de Chalk River pour  
autoriser la construction d'une installation de  
gestion des déchets près de la surface

**Commission Public Hearing  
Part 2**

**Audience publique de la Commission  
Partie 2**

**May and June 2022**

**Mai et juin 2022**

**Final submission on the matter of the Near Surface Disposal Facility,  
Canadian Nuclear Laboratories**

**Submitted by: The Council of Canadians Ottawa Chapter**

**June 5, 2023**

**Table of Contents:**

**A. Response to CNL written response to questions contained in the Ottawa Chapter of Council of Canadians intervention submitted as part of the Near Surface Disposal Facility public hearing process (Dated December 5, 2022)**

**B. Response to submissions of Kebaowek First Nation and Kitigan Zibi Anishinabeg First Nation (May 2023)**

**Part A:**

**Response to CNL written response to questions contained in the Ottawa Chapter of Council of Canadians intervention submitted as part of the Near Surface Disposal Facility public hearing process - Dated December 5, 2022**

The Council of Canadians' Ottawa Chapter received on January 18, 2023 an email from Nicole LeBlanc, Senior Communications Officer, CNL with an attached letter from Sandra Faught, Manager, Environmental Remediation Licensing Support, CNL and a formal response from CNL to questions contained in our public hearing intervention. (This document is attached for reference.) Below is a summary of the responses and our rebuttal.

**Question # 1:** Current application before CNSC fails to meet the requirements of section 3(1) (c) and (j) of the General Nuclear Safety and Control Regulations (GNSCR) . . . .Section 3 of the GNSCR regulations states, in part, that:

3 (1) An application for a licence shall contain the following information:

(c) the name, maximum quantity and form of any nuclear substance to be encompassed by the licence;

(j) the name, quantity, form, origin and volume of any radioactive waste or hazardous waste that may result from the activity to be licensed, including waste that may be stored, managed, processed or disposed of at the site of the activity to be licensed, and the proposed method for managing and disposing of that waste;

The NSDF Safety Case does not adequately meet these requirements because it does not include the name, quantity, form, origin and volume of hazardous material which is information essential to knowing the environmental and health risks the project poses.

**COMMENT:**

THE CNL response refers to the NSDF Safety Case and claims it does meet the requirements of Section 3(1) (c) and (j) of the General Nuclear Safety and Control Regulations (GNSCR). However, on examining the NSDF Safety Case, we find that it does not contain the name, quantity, form, origin and volume of

hazardous material destined for the NSDF. To quote the Safety Case: “this modified reference inventory, known as the Licensed Inventory is part of the NSDF safety and licensing basis, and represents a *maximum* radiological inventory limit for the NSDF.” (Section 5.7 – emphasis added). In other words, all of the information provided about radioactive and hazardous waste that will be disposed of at the site is based on targets and upper limits. To be in compliance with the Regulations, the proponent must provide whatever information it has on the name, quantity, form, origin and volume of material that it intends to put for the NSDF, even if that information is incomplete. It’s not clear how the wastes were characterized. The waste was generated over a 75-year period, for which clear and accurate records are not available.

**Question # 2:** There are concerns about instances of improper classification and placarding of transported radioactive waste by CNL. For example, transportation issue was raised during the CNSC’s Fall Webinar Series: Proposed NSDF and In Situ Decommissioning Projects, specifically at Fall Series #1: Transportation of Radioactive Waste, which was held on October 12, 2021. Transportation is outside the scope of the Environmental Assessment. There has never been sufficient evidence before the commission as to how CNL will adhere to the Transportation of Dangerous Goods (TDG) regulations.

**COMMENT:**

The CNL response refers to the Chalk River Licence Condition Handbook, its Transportation of Dangerous Goods Program and its own audit function. It does not however address or deny the statement in CNSC’s own Environmental Assessment Report that transportation is not included in the scope of the environmental assessment (e.g. page 362 of 590 in CMD 22-H7).

**Question # 3:** Regarding section 14(2) of the Class I Nuclear Facilities Regulations: Records to Be Kept and Retained

14 (2) Every licensee who operates a Class I nuclear facility shall keep a record of... (d) the nature and amount of radiation, nuclear substances and hazardous substances within the nuclear facility. CNL claims that this requirement does not apply to the NSDF Project, as seen in Table B-1, Concordance Table for Class I Nuclear Facilities Regulations, in the Safety Case Near Surface Disposal Facility (NSDF) 232-03610-SAR-001 Revision 2:

[https://www.cnl.ca/wpcontent/uploads/2021/03/Near\\_Surface\\_Disposal\\_Facility\\_Safety\\_Case\\_Rev\\_2.pdf](https://www.cnl.ca/wpcontent/uploads/2021/03/Near_Surface_Disposal_Facility_Safety_Case_Rev_2.pdf)

CNL states (on page 569 of 622, available in Appendix 4): “14 - Records to be kept and retained – Not applicable to the NSDF Project.” No justification for this claim is given.

**COMMENT:**

CNL responds that “the Safety Case document meets the requirements for the application to construct” and that “the requirement for managing records for individual radioactive waste packages is not applicable at this phase of the NSDF Project. If CNL is granted a licence amendment to begin construction of the NSDF, a separate application for a licence to operate will be subsequently submitted to the CNSC. This application will include a revised concordance table to demonstrate that NSDF is compliant through CNL’s existing Waste Management Function.”

This is tantamount to saying “trust us.” This relates closely to Question #1 above and our concern that waste and waste packages have not been properly characterized before designing the facility to contain them.

**Question #4:** [The decision to approve the findings of the EA for the NSDF] can be submitted to Cabinet pursuant to section 52 of the Canadian Environmental Assessment Act [2012]. Section 52(3) refers to responsible authorities listed in section 15. The authority listed in section 15(a) is the Canadian Nuclear Safety Commission, and therefore, a referral to the Governor in Council for this matter would be made through the Minister of Natural Resources. The decision maker must decide if the [NSDF] project is likely to cause significant adverse environmental effects referred to in subsection 5(1) or 5(2). A number of these situations are met, and therefore this matter should be submitted to the Minister. For example, subsections 5(1)(a)(i) and (ii) refer to changes to fish, fish habitats, and aquatic species. Given the proposed location for the NSDF, a leak or spill would easily reach the Ottawa River and have devastating consequences to fish, their habitats, and a number of aquatic species. Relatedly, subsection 5(1)(b)(ii) refers to changes to the environment that cross provincial boundaries. As the Ottawa River divides Ontario and Quebec, any contamination of the Ontario side will undoubtedly adversely affect the Quebec side.

**COMMENT:**

The CNL response refers to the federal-provincial review of the Environmental Impact Statement. This does not, however, address the main point, which is that the Canadian Environmental Assessment Act 2012 requires that a decision be referred to Governor in Council if the project “is likely to cause significant adverse environmental effects.” These effects are clearly described in the Act:

“5 (1) For the purposes of this Act, the environmental effects that are to be taken into account in relation to an act or thing, a physical activity, a designated project or a project are

(a) a change that may be caused to the following components of the environment that are within the legislative authority of Parliament:

- (i) fish and fish habitat as defined in subsection 2(1) of the Fisheries Act,
- (ii) aquatic species as defined in subsection 2(1) of the Species at Risk Act,
- (iii) migratory birds as defined in subsection 2(1) of the Migratory Birds Convention Act, 1994, and
- (iv) any other component of the environment that is set out in Schedule 2;

(b) a change that may be caused to the environment that would occur

- (i) on federal lands,
- (ii) in a province other than the one in which the act or thing is done or where the physical activity, the designated project or the project is being carried out, or
- (iii) outside Canada; and

(c) with respect to aboriginal peoples, an effect occurring in Canada of any change that may be caused to the environment on

- (i) health and socio-economic conditions,
- (ii) physical and cultural heritage,
- (iii) the current use of lands and resources for traditional purposes, or

(iv) any structure, site or thing that is of historical, archaeological, paleontological or architectural significance.

The NSDF clearly will cause changes to the environment related to Indigenous Peoples, their heritage and lands, animal habitat, federal lands and a province other than the one in which it is built. A decision on the project must therefore be referred by the CNSC to the Governor in Council.

**Question Submitted to Commission by Oral Intervenor:** Eva Schacherl Council of Canadians - Ottawa Chapter CMD 22-H7.117 CMD 22-H7.117A: The decommissioning of the Waste Water Treatment Plant and Equalization Tanks will create significant radioactive waste. That is because the wastewater treatment plant's purpose is to remove as many radionuclides and hazardous substances as possible from the leachate, and it will operate for at least 50 years. This physical activity will generate significant amounts of radioactive waste that cannot be placed in the NSDF (because performed after closure). Yet the EA fails to seriously consider the management of this waste generated during closure of the NSDF Project and decommissioning of support facilities. Does the Commission recognize that this is an omission from the EA?

**COMMENT:**

CNL's response states in part:

"Decommissioning of the Waste Water Treatment Plant (WWTP) and all associated structures will be performed after the leachate quantity is *able to be treated using a different technique* or it becomes more cost-effective to send leachate to an alternate off-site facility. Once the ECM is closed, the volume of wastewater for treatment in the WWTP will reduce to a substantially smaller flow, as will the quantity of residual solids. The solid wastes generated during the decommissioning of the WWTP will be packaged to meet the *future storage or disposal capability*. Waste associated with demolition of the WWTP and associated facilities will be disposed of off-site *as determined at the time of closure*." (Emphasis added.)

This response appears to confirm that the EA does not provide for the management of the radioactive waste generated during the NSDF operation and closure. It refers to possible different techniques available in the future and possible future capability for storage or disposal. All of this is to be determined at the time of closure. This is simply too vague to be considered a serious outline of the plans for the waste generated by decommissioning the wastewater treatment plant.

Again, as in Question #1 above, the application fails to meet the requirements of section 3(1) (c) and (j) of the General Nuclear Safety and Control Regulations (GNSCR) requiring that an application for a licence contain details of "any radioactive waste or hazardous waste that may result from the activity to be licensed, including waste that may be stored, managed, processed or disposed of at the site of the activity to be licensed, and the proposed method for managing and disposing of that waste."

**Part B. Response to submissions of Kebaowek First Nation and Kitigan Zibi Anishinabeg First Nation – May 2023**

Since our last submission and presentation in June 2022, the CNSC has received further detailed submissions from Kebaowek First Nation and the Kitigan Zibi Anishinabeg First Nation.

The Council of Canadians Ottawa Chapter fully supports the conclusions of Kebaowek First Nation and Kitigan Zibi Anishinabeg First Nation and their rights to “free, prior and informed consent” (FPIC) with respect to radioactive waste storage or disposal on their unsundered homelands, as stated in Article 29(2) of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP). UNDRIP was affirmed by Canada in 2021 as a universal international human rights instrument with application in Canadian law.

The Kitigan Zibi Anishinabeg submission states clearly:

“KZA has never been consulted on the implementing of the Chalk River nuclear site on its territory. The site creation went on without KZA’s free, prior and informed consent and KZA has never agreed to its continued operation. In addition, KZA has never given its free, prior and informed consent to nuclear activity-related strategies and regulations. We have consistently expressed our opposition to further nuclear development and activity in Algonquin territory.” (4.3(b)).

They further state: “KZA is of the view that considering these high impacts on KZA Indigenous rights and interests, and since no meaningful consultation occurred, KZA opposes the NSDF project. To open a window for meaningful consultation and accommodations, as stated by the Crown’s Duty to Consult and accommodate, the consultation has to start back from the project-planning stage, at the very beginning. Meaningful consultation will have to allow KZA free, prior and informed consent.”

It is particularly significant that the Algonquin First Nations were never consulted when the Chalk River nuclear facility was created by the federal government in the 1940s or on any development of the site since then. During that time the Government of Canada has built and operated several nuclear reactors on unceded Algonquin territory (including the NRX and NRU reactors at Chalk River and the NPD reactor at Rolphton, Ontario), has managed two major reactor accidents at Chalk River, has extracted plutonium for the U.S. nuclear weapons program, is decommissioning over 100 buildings and structures at Chalk River, has transported decommissioning wastes from the Whiteshell laboratories in Manitoba and the Gentilly reactor site in Québec to Chalk River, and has imported and stockpiled commercial waste from industries, hospitals, and universities, all without consultation or consent from the Algonquin peoples.

While these practices in earlier decades may have reflected values of the time, in 2023 it is completely unacceptable for Canada to ignore its impact on the territorial, cultural, economic and environmental rights of Indigenous peoples. Nor can Canada ignore its international agreements such as UNDRIP, and its own stated commitment to reconciliation, by continuing to manage and even import radioactive contamination to Chalk River without the free, prior and informed consent of Indigenous peoples from this territory.