

Decommissioning and Environmental Remediation
Reactor Decommissioning
G-1 & DP Decommissioning

2026 April 15

Ms. Candace Salmon
Commission Registrar
Canadian Nuclear Safety Commission
280 Slater Street
PO Box 1046, Station B
Ottawa, Ontario K1P 5S9

Dear Ms. Salmon:

**Revised Application for Licence Amendment to Proceed with Execution of Decommissioning
at the Gentilly-1 Waste Facility**

The purpose of this letter is to submit a revised licence amendment application to the Canadian Nuclear Safety Commission (CNSC) for an amendment to the *Waste Facility Decommissioning Licence, Gentilly-1 Waste Facility*, WFDL-W4-331.00/2034 [1] to proceed with execution of decommissioning involving the removal of all buildings and structures from the Gentilly-1 Waste Facility (G1WF) site.

The original licence amendment application [2] did not include the Engagement Reports [3], [4] and the finalized *Gentilly-1 Waste Facility Licence Amendment Application Environmental Protection Measures for Decommissioning and Demolition* [5] (formerly called Environmental Effects Review). This revised licence amendment application also addresses feedback received from CNSC staff.

BACKGROUND INFORMATION

The Gentilly-1 Nuclear Generating Station (250 MWe) is a prototype CANada Deuterium Uranium (CANDU) Boiling Water Reactor located at the Gentilly site in Bécancour, Québec. The Gentilly-1 Nuclear Generating Station was owned and operated by Hydro-Québec and Atomic Energy of Canada Limited (AECL) under an Atomic Energy Control Board Operating Licence. This reactor was put into service in 1972. It was operated intermittently for a total of 183 effective full power days until 1978, when it was determined that certain modifications and considerable

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repairs would be required. The reactor was then put into a lay-up state in 1980, and the decision to decommission the reactor was made in 1983. In 1985, Hydro-Québec turned over the Gently-1 Nuclear Generating Station site to AECL after the spent fuel had been transferred to safe storage.

The safe shutdown state of the reactor was achieved in 1986. Since 1986, the Gently-1 site has been maintained in the storage with surveillance phase. In 1999, a Waste Management Facility Operating Licence was issued by the Atomic Energy Control Board to the Gently-1 site, becoming the Gently-1 Waste Management Facility.

In 2014, the CNSC issued a 20-year Waste Facility Decommissioning Licence (WFDL) that included three prototype waste facilities (G1WF, Douglas Point Waste Facility, and Nuclear Power Demonstration Waste Facility) [6]. With the restructuring of AECL in 2015, the prototype waste facilities WFDL [6] was transferred to Canadian Nuclear Laboratories Ltd. (CNL), which operates the licenced facilities on behalf of AECL.

In 2018 July, CNL requested CNSC approval [7] to divide the combined prototype waste facilities WFDL into three separate licences, one for each prototype waste facility as the decommissioning strategies for these three prototype waste facilities are diverse and will be carried out under different timelines depending on the reactor characteristics, site characteristics, and the surrounding environment including, without limitation, the interests of the respective communities. The CNSC issued a new WFDL to CNL solely in respect of the G1WF in 2019 February [1], which is valid until 2034 December 31, authorizing only storage with surveillance activities.

CNL is now planning to execute decommissioning at the G1WF to remove all buildings and structures, which requires an amendment to the G1WF WFDL [1].

APPLICATION FOR LICENCE AMENDMENT

Pursuant to the *Nuclear Safety and Control Act* (hereafter – the Act) [8] and associated Regulations, CNL is requesting that the Commission, or a person authorized by the Commission, amend the G1WF WFDL [1] to authorize CNL to proceed with the execution of decommissioning as detailed in the *Gently-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview* [9]. CNL is proposing that the amended licence be valid for a period of 15 years. This proposed licence period will allow CNL to complete decommissioning activities at the G1WF, with additional time considered for close-out of the decommissioning project and submission of final regulatory documents. CNL will continue to ensure compliance with all licensing and regulatory requirements at the G1WF during the proposed 15-year licensing period and will report progress to CNSC staff through Annual Compliance Monitoring Reports. Additionally, CNL will be available to respond to any questions from CNSC staff and/or CNSC Commission Members on decommissioning progress and safety performance throughout the licensing period.

This Licence Amendment Application, along with the following enclosed documents, constitutes the Licence Amendment Application Package as required by the Act [8] and associated Regulations:

- *Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview* [9]
- *Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 Program Overview – Addendum* [10]
- *Gentilly-1 Waste Facility Licence Amendment Application Environmental Protection Measures for Decommissioning and Demolition* [5]
- *Environmental Risk Assessment for Gentilly-1 Waste Facility* [11]
- *Safety Analysis Report for the Gentilly-1 Waste Facility* [12]
- *Gentilly-1 Waste Facility Decommissioning Public Communications Supplementary Report (2023 January – 2026 February)* [3]
- *Gentilly-1 Waste Facility Decommissioning Indigenous Communications Supplementary Report (2023 January – 2026 February)* [4]
- *Preliminary Hazard Analysis for the Gentilly-1 Waste Facility* [13]
- *Bounding Accident Analysis for the Phase 3 Decommissioning of the Gentilly-1 Waste Facility* [14]

All enclosures are available on CNL's Secure File Transfer Protocol (SFTP) site in a folder named, "G1WF Revised Licence Amendment Application". Access information will be provided in a separate email.

Attachment A describes how CNL meets the requirement to amend the G1WF WFDL [1] by providing a clause-by-clause statement for the relevant excerpts from the Act [8] and associated Regulations.

CNL requests that the Commission accepts the Commitment from the Minister of Natural Resources issued in 2015 as the financial guarantee for the G1WF site for the entire term of the proposed licence period. Additional details are provided in Attachment B.

CNL looks forward to hearing from the CNSC with respect to this application. In the interim, should you require any further information, please contact me directly at 613-633-8157.

Sincerely,



Kristan Schruder
G1WF Site Licence Holder

KS/sf

Attachment (2)

Enclosures (9 via SFTP)

References:

- [1] *Waste Facility Decommissioning Licence, Gentilly-1 Waste Facility, WFDL-W4--331.00/2034, Expiry date: 2034 December 31.*
- [2] Letter, K. Schruder (CNL) to C. Salmon (CNSC), *Application for Licence Amendment to Proceed with Execution of Decommissioning at the Gentilly-1 Waste Facility, 61-CNNO-24-0008-L, 2024 July 17.*
- [3] *Gentilly-1 Waste Facility Decommissioning Public Communications Supplementary Report (2023 January – 2026 February), 61-513000-REPT-011931, 2026 April 08. (Enclosed)*
- [4] *Gentilly-1 Waste Facility Decommissioning Indigenous Communications Supplementary Report (2023 January – 2026 February, 61-513130-REPT-011919, Revision 0, 2026 April 02. (Enclosed)*
- [5] *Gentilly-1 Waste Facility Licence Amendment Application Environmental Protection Measures for Decommissioning and Demolition, 61-03710-ENA-005514, Revision 1.0, 2026 April 08. (Enclosed)*
- [6] *Waste Facility Decommissioning Licence – Prototype Waste Facilities, WDL-W4-332.00/2034, 2014 July 16.*
- [7] Letter, K. Kehler (CNL) to H. Tadros (CNSC), *Request to Separate the Waste Facility Decommissioning Licence, WFDL-W4-332.01/2034 to Three Separate Licences for Douglas Point, Gentilly-1, and Nuclear Power Demonstration Waste Facilities, 140-CNNO-18-0003-L, 2018 July 11.*
- [8] *Nuclear Safety and Control Act, S.C. 1997, c. 9.*
- [9] *Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview, 61-508310-DDP-001817, Revision 1, 2024 August. (Enclosed)*
- [10] *Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 Program Overview – Addendum, 61-508310-DDP-010801, Revision 0, 2026 January. (Enclosed)*
- [11] *Environmental Risk Assessment for Gentilly-1 Waste Facility, 61-505210-ASD-001, Revision 2.0, 2025 May. (Enclosed)*
- [12] *Safety Analysis Report for the Gentilly-1 Waste Facility, 61-03610-SAR-001, Revision 3.1, 2025 August. (Enclosed)*
- [13] *Preliminary Hazard Analysis for the Gentilly-1 Waste Facility, 61-01320-HA-001, Revision 0, 2019 December. (Enclosed)*
- [14] *Bounding Accident Analysis for the Phase 3 Decommissioning of the Gentilly-1 Waste Facility, 61-01320-ASD-001, Revision 0, 2020 February. (Enclosed)*

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Attachment A
Compliance Verification for 2026 Gentilly-1 Waste Facility Licence Amendment

Section	Requirement	CNL Response
General Nuclear Safety and Control Regulations		
3(1)	<p>An application for a licence shall contain the following information:</p> <p>(a) the applicant's name and business address;</p>	<p>Applicant's Name: Canadian Nuclear Laboratories Ltd.</p> <p>Business Address:</p> <p style="padding-left: 40px;">Chalk River Laboratories 286 Plant Road Chalk River, Ontario K0J 1J0</p> <p>Contact Person, Signing Authority, and Licence Holder:</p> <p style="padding-left: 40px;">Kristan Schruder Deputy VP, Site Infrastructure & Asset Management Canadian Nuclear Laboratories Ltd. Telephone: 613-633-8157</p>
	(b) the activity to be licensed and its purpose;	<p>CNL plans to proceed with execution of decommissioning of the G1WF as described in the <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1]. CNL is requesting an amendment to the G1WF WFDL [A-2] to allow CNL to proceed with execution of decommissioning at the G1WF while continuing with storage with surveillance activities.</p>

Section	Requirement	CNL Response
	(c) the name, maximum quantity, and form of any nuclear substance to be encompassed by the licence;	<p>The G1WF WFDL [A-2] encompasses all nuclear substances contained within systems and stored waste.</p> <p>The stored waste information is reported in the <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1] and updated annually through the Annual Compliance Monitoring Report (ACMR).</p> <p>CNL has consolidated the G1WF spent fuel inventory (under the G1WF WFDL [A-2]) at the Chalk River Laboratories Waste Management Area. The fuel consolidation activities were completed in 2025.</p>
	(d) a description of any nuclear facility, prescribed equipment or prescribed information to be encompassed by the licence;	<p>The current configuration of the G1WF is described in the <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1].</p>
	(e) the proposed measures to ensure compliance with the Radiation Protection Regulations, the Nuclear Security Regulation, and the Packaging and Transport of Nuclear Substances Regulations	<p>Compliance with the <i>Radiation Protection Regulations</i> [A-3] at the G1WF is ensured by the implementation of the following CNL Functional Support Areas (FSAs):</p> <ul style="list-style-type: none"> • Radiation Protection, through the documents referenced in SCA – Radiation Protection, Licence Condition 9.1: Radiation Protection Program of the G1WF Licence Conditions Handbook (LCH) [A-4]. • Environmental Protection, through the documents referenced in SCA – Environmental Protection, Licence Condition 11.1: Environmental Protection Program of the G1WF LCH [A-4]. <p>The G1WF is no longer a high security site, as such the <i>Nuclear Security Regulations</i> [A-5] no longer apply [A-6].</p>

Section	Requirement	CNL Response
		Compliance with the <i>Packaging and Transport of Nuclear Substances Regulations</i> [A-7] at the G1WF is ensured by the implementation of the CNL Transportation of Dangerous Goods FSA, through the documents referenced in SCA Packaging and Transport, Licence Condition 16.1: Packaging and Transport Program of the G1WF LCH [A-4].
	(f) any proposed action level for the purpose of Section 6 of the Radiation Protection Regulations;	Compliance with the radiation action levels at the G1WF is ensured by the implementation of the CNL Radiation Protection FSA, through the <i>Radiation Protection Action Levels</i> [A-8] document, referenced in SCA – Radiation Protection, Licence Condition 9.2: Radiation Protection of the G1WF LCH [A-4].
	(g) the proposed measures to control access to the site of the activity to be licensed and the nuclear substance, prescribed equipment or prescribed information;	Security arrangements proposed by CNL [A-9] following completion of fuel transfer activities were accepted by CNSC staff [A-6].
	(h) the proposed measures to prevent loss or illegal use, possession or removal of the nuclear substance, prescribed equipment or prescribed information;	Compliance with SCA Security at the G1WF is ensured by the implementation of the CNL Security FSA and the Nuclear Cyber Security FSA.
	(i) a description and results of any test, analysis or calculation performed to substantiate the information included in the application;	No tests, analyses, or calculations were performed specifically to substantiate the information contained in this application. G1WF is an existing facility, subject to the terms and conditions of the existing licence and all applicable laws.

Section	Requirement	CNL Response
		Compliance with this requirement at the G1WF is demonstrated by the implementation of annual reporting requirements as defined in SCA – Operating Performance, Licence Condition 5.1: Reporting Requirements of the G1WF LCH [A-4].
	(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;	<p>The information about current stored waste and the decommissioning waste is documented in the <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1].</p> <p>Specific information on radioactive waste and hazardous waste is reported annually through the ACMR, to meet the requirements of SCA – Operating Performance, Licence Condition 5.1: Reporting Requirements of the G1WF LCH [A-4].</p> <p>Relevant requirements for managing and disposing of radioactive waste and hazardous waste at the G1WF site are defined in the CNL Waste Management FSA and implemented through the documents referenced in SCA – Waste Management, Licence Condition 13.1: Waste Management Program of the G1WF LCH [A-4].</p>
	(k) the applicant’s organizational management structure insofar as it may bear on the applicant’s compliance with the Act and the regulations made under the Act, including the internal allocation of functions, responsibility and authority;	<p>CNL’s senior management organizational structure is documented in:</p> <ul style="list-style-type: none"> • <i>Canadian Nuclear Laboratories Management System Manual</i> [A-10] (which also defines functions, responsibility, and authority).

Section	Requirement	CNL Response
		<ul style="list-style-type: none"> • <i>Executive Management Directive – Interim Organizational Structure and Assigned Functional Responsibilities [A-11].</i> • <i>Executive Management Directive – NLPCs Adoption of CNL’s Management System and CNEA to NLPC Master Terminology Replacement [A-12].</i> <p>Further relevant information regarding the internal allocation of functions, responsibilities, and authority at the G1WF is provided in <i>Designated Representatives of the Licensee, Site Licenses, Certificates & Permits [A-13].</i></p>
	(l) a description of any proposed financial guarantee relating to the activity to be licensed; and	<p>AECL owns assets and liabilities that CNL has been contracted to manage and operate, including the G1WF. AECL is a federal Crown corporation and agent of the Government of Canada. These liabilities have been officially recognized by the Minister of Natural Resources in a letter dated 2015 October 01 [A-14], and recently accepted [A-15] by CNSC staff, to comply with the SCA – Decommissioning, Licence Condition 2.2: Financial Guarantee of the G1WF LCH [A-4].</p>
	(m) any other information required by the Act, or the regulations made under the Act for the activity to be licensed and the nuclear substance, nuclear facility, prescribed equipment, or prescribed information to be encompassed by the licence.	<p>Information required to be provided at the time of the application is incorporated throughout the entirety of the application.</p>

Section	Requirement	CNL Response
6	<p>An application for the amendment, revocation or replacement of a licence shall contain the following information:</p> <p>(a) a description of the amendment, revocation or replacement and of the measures that will be taken and methods and procedures that will be used to implement it;</p>	<p>CNL is applying for this licence amendment to authorize the execution of decommissioning involving the removal of all buildings and structures from the G1WF site to meet the end state as described in <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1].</p> <p>The decommissioning work will be performed in compliance with Cleanup FSA through the documents referenced in:</p> <ul style="list-style-type: none"> • SCA – Decommissioning, Licence Conditions 2.1: Decommissioning Plans and 2.2: Financial Guarantee. • SCA– Waste Management, Licence Condition 13.2: Decommissioning Plan of the G1WF LCH [A-4].
	<p>(b) a statement identifying the changes in the information contained in the most recent application for the licence;</p>	<p>CNL’s decommissioning approach and end-state for G1WF have not changed and include the transfer of all wastes (spent fuel, radioactive wastes/components, and hazardous waste) to licensed storage/or disposal facilities, followed by the decommissioning and demolition of all buildings and structures. This decommissioning approach ensures that CNL responsibly manages legacy nuclear liabilities. The details of the decommissioning approach are documented in the <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1].</p> <p>Spent fuel stored at the G1WF site was transferred to the Chalk River Laboratories Waste Management Area in 2025. There is no longer any categorized nuclear material (as defined by the <i>Nuclear Security Regulations</i> [A-5]) at the G1WF. The G1WF high security site status was revoked [A-6] 2025 July 31.</p>

Section	Requirement	CNL Response
	(c) a description of the nuclear substances, land, areas, buildings, structures, components, equipment, and systems that will be affected by the amendment, revocation or replacement of the manner in which they will be affected; and	The current configuration and description of building removals that will take place to reach the defined end state of the G1WF is described in the <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1].
	(d) the proposed starting date and the expected completion date of any modification encompassed by the application.	The proposed start date for execution of decommissioning at the G1WF is 2026, and the proposed completion date is 2035 [A-1]. CNL is proposing that the amended licence be valid for a period of 15 years, with additional time considered for close out of the decommissioning project and submission of final regulatory documents.
15	Every applicant for a licence and every licensee shall notify the Commission of (a) the persons who have the authority to act for them in their dealings with the Commission;	Persons with authority to act on behalf of CNL in dealings with the Commission are documented in <i>Designated Representatives of the Licensee, Site Licenses, Certificates & Permits</i> [A-13].
	(b) the names and position titles of the persons who are responsible for the management and control of the licensed activity and the nuclear substance, nuclear facility, prescribed equipment or prescribed information encompassed by the licence; and	Names and position titles of responsible personnel are documented in <i>Designated Representatives of the Licensee, Site Licenses, Certificates & Permits</i> [A-13].

Section	Requirement	CNL Response
Class I Nuclear Facilities Regulations		
3	<p>An application for a licence in respect of a Class I nuclear facility, other than a licence to abandon, shall contain the following information in addition to the information required by section 3 of the General Nuclear Safety and Control Regulations:</p> <p>(a) a description of the site of the activity to be licensed, including the location of any exclusion zone and any structures within that zone;</p>	<p>The current configuration of the G1WF is described in the <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1].</p>
	<p>(b) plans showing the location, perimeter, areas, structures and systems of the nuclear facility;</p>	<p>The current configuration of the G1WF is provided in the <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1], Section 3.</p>
	<p>(c) evidence that the applicant is the owner of the site or has authority from the owner of the site to carry on the activity to be licensed;</p>	<p>AECL maintains ownership of the G1WF and has engaged CNL to manage and operate its assets including the G1WF [A-16].</p>
	<p>(d) the proposed management system for the activity to be licensed, including measures to promote and support safety culture;</p>	<p>The <i>Canadian Nuclear Laboratories Management System Manual</i> [A-10] is applicable to the G1WF and includes measures to promote and support a safety culture.</p>
	<p>(d.1) the proposed human performance program for the activity to be licensed, including measures to ensure workers' fitness for duty;</p>	<p>The G1WF implements the human performance program defined in the CNL Performance Assurance FSA. Fitness for duty measures are implemented through <i>Fitness for Duty</i> [A-17].</p>

Section	Requirement	CNL Response
	(e) the name, form, characteristics and quantity of any hazardous substances that may be on the site while the activity to be licensed is carried on;	<p>Comprehensive information on name, form, characteristics, and quantity of hazardous substances which are present at the G1WF is described in the following G1WF documents:</p> <ul style="list-style-type: none"> • <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1]. • <i>Safety Analysis Report for the Gentilly-1 Waste Facility</i> [A-18]. • <i>Preliminary Hazard Analysis for the Gentilly-1 Waste Facility</i> [A-19]. • <i>Bounding Accident Analysis for the Phase 3 Decommissioning of the Gentilly-1 Waste Facility</i> [A-20].
	(f) the proposed worker health and safety policies and procedures;	<p>Compliance with this requirement at the G1WF is demonstrated by the implementation of the CNL Occupational Safety and Health FSA through the documents referenced in SCA – Conventional Health and Safety, Licence Condition 10.1: Conventional Health and Safety Program of the G1WF LCH [A-4] and the <i>Safety and Health Policy</i> [A-21].</p>
	(g) the proposed environmental protection policies and procedures;	<p>Compliance with this requirement at the G1WF is demonstrated by the implementation of the CNL Environmental Protection FSA through the documents referenced in SCA – Environmental Protection, Licence Condition 11.1: Environmental Protection Program of the G1WF LCH [A-4] and the <i>Environment Policy</i> [A-22].</p>

Section	Requirement	CNL Response
	(h) the proposed effluent and environmental monitoring programs;	<p>Compliance with this requirement at the G1WF is demonstrated by the implementation of the CNL Environmental Protection FSA through the documents referenced in SCA – Environmental Protection, Licence Condition 11.1: Environmental Protection Program of the G1WF LCH [A-4].</p> <p>The environmental monitoring program at the G1WF is limited to effluent monitoring [A-23].</p>
	(i) if the application is in respect of a nuclear facility referred to in paragraph 2(b) of the Nuclear Security Regulations, the information required by section 3 of those Regulations;	<p>The relevant information is provided in the <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1] and the <i>Safety Analysis Report for the Gentilly-1 Waste Facility</i> [A-18].</p> <p>Following fuel transfer operations which concluded 2025 June, there are no stored Category II materials at the G1WF. The G1WF is no longer a high security site [A-6].</p>
	(j) the proposed program to inform persons living in the vicinity of the site of the general nature and characteristics of the anticipated effects on the environment and the health and safety of persons that may result from the activity to be licensed; and	<p>Compliance with this requirement at the G1WF is demonstrated by the implementation of the CNL Public Information Program through the documents referenced in Licence Condition 1.6: Public Information and Disclosure Program of the G1WF LCH [A-4]. Additionally, the following plans were implemented:</p> <ul style="list-style-type: none"> • Gentilly-1 Waste Facility Licence Amendment Indigenous Engagement Plan [A-24]. • Gentilly-1 Waste Facility Licence Amendment Public Communication Plan [A-25].

Section	Requirement	CNL Response
	(k) the proposed plan for the decommissioning of the nuclear facility or of the site.	The proposed decommissioning plan of the G1WF is provided in the <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1].
7	<p>An application for a licence to decommission a Class I nuclear facility shall contain the following information in addition to the information required by Section 3:</p> <p>(a) a description of and the proposed schedule for the decommissioning, including the proposed starting date and the expected completion date of the decommissioning and the rationale of the schedule;</p>	This information is provided in the <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1]. The proposed start date for execution of decommissioning at the G1WF is 2026, and the proposed completion date is 2035. CNL is proposing that the amended licence be valid for a period of 15 years, with additional time considered for close out of the decommissioning project and submission of final regulatory documents.
	(b) the nuclear substances, hazardous substances, land, buildings, structures, systems, and equipment that will be affected by the decommissioning.	<p>This information is provided in:</p> <ul style="list-style-type: none"> • <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1]. • <i>Safety Analysis Report for the Gentilly-1 Waste Facility</i> [A-18].
	(c) the proposed measures, methods, and procedures for carrying on the decommissioning;	The measures, methods, and procedures for decommissioning activities are defined by the CNL Cleanup FSA and implemented through the documents listed in SCA – Decommissioning, Licence Condition 2.1: Decommissioning Plans and SCA – Waste Management, Licence Condition 13.2: Decommissioning Plan of the G1WF LCH [A-4].

Section	Requirement	CNL Response
	(d) the proposed measures to facilitate Canada's compliance with any applicable safeguard agreement;	Compliance with this requirement at the G1WF is demonstrated by the implementation of the CNL Nuclear Materials and Safeguards Management FSA through the documents referenced in SCA – Safeguards and Non-Proliferation, Licence Condition 15.1: Safeguards Program of the G1WF LCH [A-4].
	(e) the nature and extent of any radioactive contamination at the nuclear facility;	This information is provided in the <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1].
	(f) the effects on the environment and the health and safety of persons that may result from the decommissioning, and the measures that will be taken to prevent or mitigate those effects;	<p>This information is provided in:</p> <ul style="list-style-type: none"> • <i>Gentilly-1 Waste Facility Licence Amendment Application Environmental Protection Measures for Decommissioning and Demolition</i> [A-26]. • <i>Environmental Risk Assessment for Gentilly-1 Waste Facility</i> [A-27]. • <i>Safety Analysis Report for the Gentilly-1 Waste Facility</i> [A-18]. • <i>Preliminary Hazard Analysis for the Gentilly-1 Waste Facility</i> [A-19]. • <i>Bounding Accident Analysis for the Phase 3 Decommissioning of the Gentilly-1 Waste Facility</i> [A-20]. <p>Compliance with this requirement at the G1WF is demonstrated by the implementation of the following CNL FSAs:</p>

Section	Requirement	CNL Response
		<ul style="list-style-type: none"> • Environmental Protection, through the documents referenced in SCA – Environmental Protection, Licence Condition 11.1: Environmental Protection Program of the G1WF LCH [A-4]. • Occupational Safety and Health, through the documents referenced in SCA – Conventional Health and Safety, Licence Condition 10.1: Conventional Health and Safety of the G1WF LCH [A-4]. • Radiation Protection, through the documents referenced in SCA – Radiation Protection, Licence Conditions 9.1: Radiation Protection Program and 9.2: Radiation Protection Action Level Reporting, of the G1WF LCH [A-4].
	(g) the proposed location of points of release, the proposed maximum quantities and concentrations, and the anticipated volume and flow rate of releases of nuclear substances and hazardous substances into the environment, including their physical, chemical, and radiological characteristics;	This information is provided in the <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1] and reported annually through the ACMR.

Section	Requirement	CNL Response
	(h) the proposed measures to control the release of nuclear substances and hazardous substances into the environment;	<p>This information is provided in:</p> <ul style="list-style-type: none"> • <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1]. • <i>Gentilly-1 Waste Facility Licence Amendment Application Environmental Protection Measurements for Decommissioning and Demolition</i> [A-26]. • <i>Environmental Risk Assessment for Gentilly-1 Waste Facility</i> [A-27]. • <i>Safety Analysis Report for the Gentilly-1 Waste Facility</i> [A-18].
	(i) the proposed measures to prevent or mitigate the effects of accidental releases of nuclear substances and hazardous substances on the environment, the health and safety of persons and the maintenance of national security, including an emergency response plan;	<p>Compliance with this requirement at the G1WF is demonstrated by the implementation of the following CNL FSAs:</p> <ul style="list-style-type: none"> • Environmental Protection, through the documents referenced in SCA – Environmental Protection, Licence Condition 11.1: Environmental Protection Program of the G1WF LCH [A-4]. • Occupational Safety and Health, through the documents referenced in SCA – Conventional Health and Safety, Licence Condition 10.1: Conventional Health and Safety Program of the G1WF LCH [A-4]. • Radiation Protection, through documents referenced in SCA – Radiation Protection, Licence Conditions 9.1: Radiation Protection Program and 9.2: Radiation Protection Action Level Reporting of the G1WF LCH [A-4].

Section	Requirement	CNL Response
		<ul style="list-style-type: none"> • Nuclear Materials and Safeguards Management, through the documents referenced in SCA – Safeguards and Non-Proliferation, Licence Condition 15.1: Safeguards Program of the G1WF LCH [A-4]. • Emergency Preparedness, through the documents referenced in SCA – Emergency Management and Fire Protection, Licence Conditions 12.1: Emergency Preparedness Program and 12.2: Fire Protection Program of the G1WF LCH [A-4]. • Safety Analysis, through the documents referenced in SCA – Safety Analysis, Licence Condition 6.1: Safety Analysis Program of the G1WF LCH [A-4]. • Security, through documents referenced in SCA – Security, Licence Condition 14.1: Security Program and Licence Condition 14.2: Security Arrangements for Decommissioning of the G1WF LCH [A-4]. <p>Additionally, <i>Gentilly-1 Waste Facility Licence Amendment Application: Environmental Protection Measurements for Decommissioning and Demolition</i> [A-26] provides proposed measures to prevent or mitigate the effects of accidental releases of nuclear substances and hazardous substances on the environment.</p>
	(j) the proposed qualification requirements and training program for workers; and	This information is provided in the <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1].
	(k) a description of the planned state of the site on completion of the decommissioning.	This information is provided in the <i>Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview</i> [A-1].

Section	Requirement	CNL Response
Nuclear Security Regulations		
The G1WF is no longer a high security site therefore the Nuclear Security Regulations no longer apply. CNL provided confidential correspondence to CNSC staff following completion of the fuel transfer operations 2025 July [A-8]. CNSC staff accepted CNL's proposed security arrangements and the high security site status was revoked [A-6].		

Attachment A References:

- [A-1] *Gentilly-1 Waste Facility Detailed Decommissioning Plan Volume 1 – Program Overview*, 61-508310-DDP-001817, Revision 1, 2024 August. (Enclosed)
- [A-2] *Waste Facility Decommissioning Licence, Gentilly-1 Waste Facility*, WFDL-W4-331.00/2034, Expiry date: 2034 December 31.
- [A-3] *Radiation Protection Regulations*, SOR/2000-203.
- [A-4] *Licence Conditions Handbook, WFDL-LCH-W4-331.00/2034 Prototype Waste Facilities – Waste Facility Decommissioning Licence, Gentilly-1 Waste Facility*, 61-00580-HBK-001, Revision 1, 2019 July 15.
- [A-5] *Nuclear Security Regulations*, SOR/2000-209.
- [A-6] *Letter, L. Sigouin (CNSC) to J. Therrien (CNL), CNL’s Submission of Gentilly-1 Waste Facility Security Documentation Supporting Future Operations*, 119-NOCN-25-0016-L, 2025 July 31.
- [A-7] *Packaging and Transport of Nuclear Substances Regulations*, SOR/2015-145.
- [A-8] *Radiation Protection Action Levels*, 900-508740-LST-002, Revision 3.0, 2025 September.
- [A-9] *Letter, W. Graydon (CNL) to M. McLaughlin (CNSC), Submission of Gentilly-1 Waste Facility Security Documentation Supporting Future Operations*, 119-CNNO-25-0028-L, 2025 July 03
- [A-10] *Canadian Nuclear Laboratories Management System Manual*, 900-514100-MAN-001, Revision 3.2, 2025 September.
- [A-11] *Executive Management Directive – Interim Organizational Structure and Assigned Functional Responsibilities*, 900-514100-EMD-010745, 2025 December 15.
- [A-12] *Executive Management Directive – NLPCs Adoption of CNL’s Management System and CNEA to NLPC Master Terminology Replacement*, 900-514100-EMD-010761, 2025 December 11.
- [A-13] *Designated Representatives of the Licensee, Site Licenses, Certificates & Permits*, 900-514300-LST-001, Revision 14.0, 2025 August.
- [A-14] *Letter, S.B. Kenny (CNL) to H. D’Arcy (CNSC), Financial Guarantee for NPD, Douglas Point and Gentilly-1 Waste Facilities*, 3640-CNNO-15-0012-L, 2015 October 01.
- [A-15] *Letter, N. Greencorn (CNSC) and S. Watt (CNSC) to A. Tisler (CNL), CNL-CRL-CNSC Staff Review of Canadian Nuclear Laboratories’ Submission of the Information Regarding Financial Guarantees for all Atomic Energy of Canada Limited Sites Operated by Canadian Nuclear Laboratories*, 145-NOCN-25-0038-L, 2025 October 02.
- [A-16] *Letter, R.S. Walker to M. Leblanc, Atomic Energy of Canada Limited Transfer of Commission Licences to the Canadian Nuclear Laboratories Limited, and Associated Applications for Exemption from Regulations*, 145-ACNO-14-0021-L, 2014 July 29.
- [A-17] *Fitness for Duty*, 900-510000-STD-013, Revision 1.2, 2026 February 02.
- [A-18] *Safety Analysis Report for the Gentilly-1 Waste Facility*, 61-03610-SAR-001, Revision 3.1, 2025 August. (Enclosed)
- [A-19] *Preliminary Hazard Analysis for the Gentilly-1 Waste Facility*, 61-01320-HA-001, Revision 0, 2019 December. (Enclosed)

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- [A-20] *Bounding Accident Analysis for the Phase 3 Decommissioning of the Gentilly-1 Waste Facility*, 61-01320-ASD-001, Revision 0, 2020 February. (Enclosed)
- [A-21] *Safety and Health*, 900-510400-POL-001, Revision 4.3, 2025 November.
- [A-22] *Environment*, 900-509200-POL-001, Revision 3.3, 2025 November.
- [A-23] *Gentilly-1 Waste Facility Effluent Monitoring Plan*, 61-509200-PLA-001, Revision 1.1, 2024 December.
- [A-24] *Gentilly-1 Waste Facility Licence Amendment Indigenous Engagement Plan*, 61-508600-PLA-008744, Revision 0, 2025 April 29.
- [A-25] *Gentilly-1 Waste Facility Licence Amendment Public Communication Plan*, 61-513400-PLA-008743, Revision 0, 2025 April 24.
- [A-26] *Gentilly-1 Waste Facility Licence Amendment Application Environmental Protection Measures for Decommissioning and Demolition*, 61-03710-ENA-005514, Revision 1, 2026 April 08. (Enclosed)
- [A-27] *Environmental Risk Assessment for Gentilly-1 Waste Facility*, 61-505210-ASD-001, Revision 2.0, 2025 May 26. (Enclosed)

Attachment B

CNL's Request for CNSC to Accept the 2015 Expressed Commitment by the Minister of Natural Resources as an Enduring Financial Guarantee for the G1WF

Background

REGDOC-3.3.1, *Financial Guarantees for Decommissioning of Nuclear Facilities and Termination of Licensed Activities* [B-1] requires licensees to maintain a financial guarantee that meets the criteria of liquidity, certainty of value, adequacy, and continuity, and that the instrument is reaffirmed every five years or upon licence renewal.

In 2015, the Minister of Natural Resources issued a letter providing an expressed Commitment from the Government of Canada to ensure sufficient financial resources are available for the decommissioning of the G1WF [B-2] (and CNL submitted applicability to Gentilly-1 in [B-3]). The Commitment represents a direct obligation from the federal government and is recognized under REGDOC-3.3.1 as an acceptable financial guarantee instrument. CNSC staff accepted the Commitment for purposes of the Nuclear Safety and Control Act and its regulations, most recently in [B-4].

Request

Canadian Nuclear Laboratories Ltd., requests that the Commission accept the Commitment as the financial guarantee for the G1WF for the entire term of the proposed licence period. The Commitment satisfies all the requirements set forth in [B-1].

Impact

This approach improves regulatory efficiency by eliminating repeat submission of the Minister of Natural Resources letter, thereby reducing administrative burden. It ensures sustained regulatory certainty and supports streamlined compliance for both the CNSC and CNL.

Attachment B References:

- [B-1] Canadian Nuclear Safety Commission, *Financial Guarantees for Decommissioning of Nuclear Facilities and Termination of Licensed Activities*, REGDOC-3.3.1.
- [B-2] Letter, G. Rickford (NRCAN) to M. Binder (CNSC), untitled, relating to provision of financial guarantees for CNL sites in Canada, 145-NRCANNO-15-0001-L, Revision 0, 2015 July.
- [B-3] Letter, S.B. Kenny (CNL) to H. D'Arcy (CNSC), *Financial Guarantee for NPD, Douglas Point and Gentilly-1 Waste Facilities*, 3640-CNNO-15-0012-L, 2015 October 01.
- [B-4] Letter, N. Greencorn (CNSC) and S. Watt (CNSC) to A. Tisler (CNL), *CNL-CRL – CNSC Staff Review of Canadian Nuclear Laboratories' Submission of the Information Regarding Financial Guarantees for all Atomic Energy of Canada Limited Sites Operated by Canadian Nuclear Laboratories*, 145-NOCN-25-0038-L, 2015 October 02.