



**Written submission from
Nordion (Canada) Inc.**

**Mémoire de
Nordion (Canada) Inc.**

In the Matter of

À l'égard de

**Revised financial guarantee for
Nordion (Canada) Inc.**

**Garantie financière révisée pour
Nordion (Canada) Inc.**

Public Hearing - Hearing in writing based on
written submissions

Audience publique - Audience fondée sur des
mémoires

December 2022

Décembre 2022

February 23, 2022

Mr. Ismail Erdebil
Project Officer
Nuclear Processing Facilities Division
Canadian Nuclear Safety Commission
P.O. Box 1046, Station B
280 Slater St., Ottawa, Ontario, K1P 5S9

Subject: Update to Nordion Preliminary Decommissioning Plan for Class 1B Facility and Cost-Estimate for Financial Guarantee

Dear Mr. Erdebil,

Please find enclosed version 6 of SE-LIC-009 “Preliminary Decommissioning Plan for (Nordion) Class 1B Facility (KOB)” (the PDP), including the associated cost-estimate and supporting documentation.

The enclosed PDP fulfills License Condition 12.2 of Nordion’s Class 1B Nuclear Substance Processing Facility Operating Licence (NSPFOL), NSPFOL-11A.01/2025 [1]. As noted in Section 12.2 of the Nordion Licence Condition Handbook (LCH), LCH-NSPF-11A.01/2025 [2], the Nordion decommissioning plan was last revised in 2015 and Nordion was required to submit an updated plan in 2020. This was fulfilled with the December 2020 submission of the updated (version 6) PDP document [3]. Version 6 was further revised and submitted to the CNSC on January 14, 2022, to reflect the changes that resulted from BWXT Medical obtaining their own operating license, also required by Section 12.2 of the Nordion LCH [2]. A summary of the changes is provided in Appendix A, see attached.

The updated PDP follows the same general approach and methodology as the current Nordion PDP which was accepted by the CNSC in May 2015 [4]. In their communication on the PDP in May 2015, the CNSC noted that the plan met the requirements of CSA N294 “Decommissioning of Facilities Containing Nuclear Substances” and the CNSC Regulatory Guide G-219 “Decommissioning Planning for Licensed Activities”.

Nordion is requesting that the CNSC accept this revised PDP as part of the licensing basis for the Nordion Class 1B facility. Once accepted by the CNSC, Nordion will make the update PDP effective and work with CNSC staff to ensure that the required Financial Guarantee (FG) is funded in a manner acceptable to the CNSC.

At present the cost-estimate and Nordion FG associated with the 2015 revision of the PDP is \$45.1M CAD. The cost-estimate in the enclosed PDP update is now \$35.0M CAD with the reduction driven primarily by the removal of decommissioning activities and costs for which BWXT Medical is now responsible. Contingent on the CNSC’s acceptance of the enclosed PDP and associated cost-estimate, Nordion will have the FG fully funded to this updated cost-estimate value. Nordion intends to put in place a Letter of Credit for \$6,342,685 (the estimate costs of the Safe State of Shutdown Activities in the PDP) and a Surety Bond for the remaining \$28,660,361 of the PDP cost-estimate.

Sincerely,

Richard Wassenaar
Director, EHS/Regulatory
Nordion (Canada) Inc.

References:

- [1] Nordion (Canada) Inc. Class 1B Nuclear Substance Processing Facility Operating Licence, NSPFOL-11A.01/2025, e-Doc 5743436 (Word) / 5784149 (PDF)
- [2] License Condition Handbook, LCH-NSPF-11A.01/2025, Nordion (Canada) Inc. Nuclear Substance Processing Facility Operating Licence (NSPFOL), NSPFOL-11A.01/2025
- [3] Letter from Nordion (R. Wassenaar) to CNSC (M. Young), “*2020 Update of Nordion Preliminary Decommissioning Plan for Class 1B Facility and Cost-Estimate for the Financial Guarantee*”, dated December 21, 2020, e-Doc 6452132
- [4] Letter from CNSC (A. Erdman) to Nordion (J. Kavanagh), “Review of Nordion’s Revised PDP and FG for Class 1B Facility”, dated May 14, 2015, e-Doc 4761041

Attachments:

- [1] Appendix A – Summary of Changes to Nordion Preliminary Decommissioning Plan

Enclosures:

- [1] SE-LIC-009 “Preliminary Decommissioning Plan for Class 1B Facility (KOB)”, dated January 2022.

APPENDIX A – Summary of Changes to Nordion Preliminary Decommissioning Plan

The enclosed PDP has been revised to reflect changes at Nordion and actions taken by Nordion since the submission of current PDP in 2015, including;

- An overall reduction in the inventory of Depleted Uranium containers and the associated disposal costs for DU.
- An overall reduction in the inventory of hazardous chemicals and the associated disposal costs.
- A reduction in the inventory of source requiring disposal, including those owned by Best Theratronics Ltd.(BTL). Disposal costs associated with material stored at Nordion's facility but owned by BTL are now captured in the BTL decommissioning plan and have been removed from the Nordion PDP.
- The cessation at Nordion of certain manufacturing processes, the removal of portions of the related infrastructure and/or wastes that were previously considered in the PDP such as; the production of High Energy Gamma Sources using Iridium-192, radioiodines production (I-131/I-125), Xe-133 production, and Cesium-137 source production.
- The removal of decommissioning activities and associated costs for which BWXT Medical is now responsible under their CNSC operating license.
- Updated costs associated with labour, waste disposal rates and direct costs in the PDP.