

2025 January 21

## WHITESHELL LABORATORIES RESTORATION PROJECT

Dr. Nana-Owusua Kwamena, Director  
 Environmental Assessment Division  
 Canadian Nuclear Safety Commission  
 280 Slater Street  
 P.O. Box 1046, Station B  
 OTTAWA, Ontario K1P 5S9

Dear Dr. Kwamena:

### **SUBMISSION OF REVISED ENVIRONMENTAL IMPACT STATEMENT FOR THE IN SITU DECOMMISSIONING OF WR-1 AT THE WHITESHELL LABORATORIES SITE**

The purpose of this letter is to submit to Canadian Nuclear Safety Commission (CNSC) staff the revised draft Environmental Impact Statement (EIS) [1] and Canadian Nuclear Laboratories (CNL) responses [2] to the Federal and Provincial Information Request [3] received on the 2022 draft EIS [4] for the proposed In Situ Decommissioning of WR-1 at the Whiteshell Laboratories Site (WR-1 Project). This letter also provides CNL's responses [5] to the Federal, Provincial, and Indigenous Review Team (FPIRT) comments to the proponent [6] of the 2022 December submission [7].

The enclosed EIS submission package includes the following documents:

- revised EIS [1]
- responses to the Federal and Provincial Information Request [2]
- responses to the Federal, Provincial, and Indigenous Review Team (FPIRT) comments [5]
- revised EIS Executive Summary [8]
- revised Indigenous Engagement Report [9]
- revised Environmental Risk Assessment [10]
- revised Stakeholder Engagement Report [11]
- Modelling for Bedrock Geo-Pathway Sensitivity Analysis Memo [12]
- Technical Memo - Whiteshell Reactor 1 (WR-1) Groundwater Flow and Solute Transport Modelling - Additional Sensitivity Simulations [13].

The submission package also includes the following documents which were included in the previous submission (2022 December) but did not require revision for this submission:

- Decommissioning Safety Assessment Report [14]

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- Geosynthesis Report [15]
- Groundwater Flow and Solute Transport Modelling Report [16]
- Grout Formulation Testing Report [17]
- Characterization Summary Report [18]
- Building Condition Assessment [19]
- Sagkeeng Anicinabe Psychosocial Impact Assessment [20]
- Sagkeeng's Alternative Means Assessment [21]
- Analysis of Scrape Samples Report [22]
- Cone Penetration Testing Investigation Memo [23]
- Hydrogeological Study Report [24]
- Climate Change Assessment for WR-1 In Situ Decommissioning [25]
- Estimate of Residual Tritium Inventory of WR-1 [26]
- Non-Radiological Inventory of WR-1 [27]
- WR-1 Lead Estimates [28]
- Whiteshell Seismic Hazard [29]
- Environmental Assessment Follow-Up Program for Whiteshell Laboratories [30]

All documents listed above have been made available through the Secure File Transfer Protocol (SFTP) site. All other Technical Support Documents (TSDs) from the 2020 March submission [31] stand and remain valid for this submission; for ease, all TSDs are included in the 2025 January folder on the SFTP site to ensure that the correct revision is accessible for this review.

In addition, CNL has enclosed an updated document revision history [32] of the draft EIS and the draft Commitments List [33] as requested in [34].

Should you require any further information please contact me at 204-340-3044.

Yours sincerely,



Brian Wilcox

General Manager and Whiteshell Laboratories Site Licence Holder

Enclosures (34, via SFTP)

#### REFERENCES:

- [1] CNL, *Environmental Impact Statement In Situ Decommissioning of WR-1 at the Whiteshell Laboratories Site*, WLDP-26000-ENA-001, 2025 January. (Enclosed)
- [2] CNL, *WR-1 Federal and Provincial Environmental Impact Statement Information Request Responses*, WLDP-26000-055-000, 2025 January. (Enclosed)
- [3] Federal and Indigenous Review Team – Tables of Information Requests for the WR-1 Environmental Impact Statement, Version 2 (e-Doc 7031979).
- [4] CNL, *Environmental Impact Statement In Situ Decommissioning of WR-1 at the Whiteshell Laboratories Site*, WLDP-26000-ENA-001, 2022 December.

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- [5] CNL, *Responses to FPRT comments to the proponent– Review of Canadian Nuclear Laboratories’ Whiteshell Reactor 1 revised draft EIS*, Version 2, WLDP-26000-055-000, 2025 January. (Enclosed)
- [6] Federal and Indigenous Review Team - Table of Comments to the Proponent for the WR-1 Environmental Impact Statement, Version 2 (e-Doc 7033274).
- [7] Letter, K. Rod (CNL) to N. Kwamena (CNSC), *Submission of Revised Environmental Impact Statement for the WR-1 In Situ Decommissioning Project*, WLD-CNNO-22-0025-L, 2022 December 15.
- [8] CNL, *Environmental Impact Statement for the In Situ Decommissioning of WR-1 at the Whiteshell Laboratories Site – Executive Summary*, WLDP-26000-ENA-002, 2025 January. (Enclosed)
- [9] CNL, *Whiteshell Laboratories WR-1 Reactor Decommissioning Indigenous Engagement Report*, WLDP-26000-REPT-002, 2024 December. (Enclosed)
- [10] Ecometrix, *WR-1 at the Whiteshell Laboratories Site Environmental Risk Assessment*, WLDP-26000-REPT-006, 2024 November. (Enclosed)
- [11] CNL, *Environmental Assessment Stakeholder Engagement Report – WR-1 In Situ Decommissioning*, WLDP-26000-REPT-010, 2024 December. (Enclosed)
- [12] Ecometrix, *Modelling for Bedrock Geo-Pathway Sensitivity Analysis Memo*, WLDP-26000-041-000, 2024 November. (Enclosed)
- [13] WSP, *Technical Memo - Whiteshell Reactor 1 (WR-1) Groundwater Flow and Solute Transport Modelling - Additional Sensitivity Simulations*, WLDP-26000-041-000, 2024 November. (Enclosed)
- [14] Golder, *In Situ Decommissioning of Whiteshell Reactor 1 Project – Decommissioning Safety Assessment Report*, WLDP-26000-SAR-001, 2021 December 23. (Enclosed)
- [15] CNL, *Geosynthesis for WR-1 Environmental Impact Statement*, WLDP-26400-041-000, 2022 January 10. (Enclosed)
- [16] Golder, *In Situ Decommissioning of WR-1 at the Whiteshell Laboratories Site – WR-1 Groundwater Flow and Solute Transport Modelling*, WLDP-26000-REPT-005, 2021 December 23. (Enclosed)
- [17] Golder, *CNL Whiteshell Reactor 1 – Phase 1000 Grout Formulation Testing Report*, WLDP-26000-REPT-012, 2022 May 20. (Enclosed)
- [18] CNL, *WR-1 Reactor Radiological Characterization Summary and Radionuclide Inventory Estimates*, WLDP-26100-041-000, 2020 October 28. (Enclosed)
- [19] Golder, *Building Condition Assessment In-Situ Decommissioning of Whiteshell Reactor 1 (WR-1)*, WLDP-26000-REPT-011, 2022 May 26. (Enclosed)
- [20] Narratives Inc., *Sagkeeng Anicinabe Psychosocial Impact Assessment*, WLDP-26000-041-000, 2020 October 26. (Enclosed)
- [21] Sagkeeng Anicinabe and Firelight Research Inc., *Sagkeeng Anicinabe’s Alternative Means Assessment for the Environmental Assessment of Canadian Nuclear*

*Laboratories' Proposed WR-1 Reactor Decommissioning Project*, WLDP-26000-041-000, 2020 October 13. (Enclosed)

- [22] CNL, *Analysis of Scrape Samples from Selected WR-1 Fuel Channels*, WLDP-26000-041-000, 2018 November 06. (Enclosed)
- [23] KGS, *Cone Penetration Testing Investigation for Whiteshell Main Campus – Final*, WLDP-26000-041-000, 2019 December 16. (Enclosed)
- [24] Dillon Environmental, *WR-1 Hydrogeological Study Report*, WLDP-26000-REPT-004, 2018 November 16. (Enclosed)
- [25] Golder, *Climate Change Assessment for WR-1 In Situ Decommissioning*, WLDP-26000-REPT-007, 2017 August 31. (Enclosed)
- [26] CNL, *Estimate of Residual Tritium Inventory of WR-1*, WLDP-26400-036-000, 2019 March 13. (Enclosed)
- [27] CNL, *Non-Radiological Inventory of WR-1*, WLDP-26000-021-000-0005, 2017 March 14. (Enclosed)
- [28] CNL, *WR-1 Lead Estimates*, WLDP-26000-021-000-0010, 2018 October 4. (Enclosed)
- [29] CNL, *Whiteshell Seismic Hazard*, WLDP-26000-021-000-0009, 2018 June 8. (Enclosed)
- [30] CNL, *Environmental Assessment Follow-Up Program for Whiteshell Laboratories*, WL-509246-STD-001, 2018 December 18. (Enclosed)
- [31] Letter, J. Gilbert (CNL) to K. Murthy (CNSC), *Submission of Revised Environmental Impact Statement for the In Situ Disposal of the WR-1 Reactor at Whiteshell Laboratories*, WLD-CNNO-20-0008-L, 2020 March 27.
- [32] CNL, *Revision History*, WLDP-26000-041-000, 2025 January. (Enclosed)
- [33] CNL, *Mitigation Commitment List for the In Situ Decommissioning of WR-1 at the Whiteshell Laboratories Site*, WLDP-26000-041-000, 2025 January. (Enclosed)
- [34] Letter, N. Kwamena (CNSC) to K. Rod (CNL), *Revised Federal-Provincial-Indigenous Review Team (FPIRT) technical review – including findings from Sagkeeng First Nation*, WLD-NOCN-23-011-L (e-Doc 7033440), 2023 May 08.

c:

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