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**Supplementary submission from
Canadian Nuclear Laboratories Ltd.**

**(in response to the submission filed
on September 30, 2019 by the
Manitoba Metis Federation)**

In the Matter of the

Whiteshell Laboratories

Application to renew the Nuclear Research
and Test Establishment Decommissioning
Licence for the Whiteshell Laboratories site
for a period of ten years

Commission Public Hearing

October 2-3, 2019

**Mémoire supplémentaire des
Laboratoires Nucléaires Canadiens Ltée**

**(en réponse au mémoire déposé par la
Fédération des Métis du Manitoba le
30 septembre 2019)**

À l'égard des

Laboratoires de Whiteshell

Demande pour le renouvellement, pour une
période de dix ans, du permis de déclassement
d'un établissement de recherche et d'essais
nucléaires pour les Laboratoires de Whiteshell

Audience publique de la Commission

Les 2 et 3 octobre 2019

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2019 OCTOBER 22

WLD-CNNO-19-0024-L

WHITESHELL LABORATORIES CLOSURE PROJECT
Office of the Site Head and General Manager

M. Leblanc
Commission Secretary
Secretariat
Canadian Nuclear Safety Commission (CNSC)
280 Slater Street
P.O. Box 1046, Station B
OTTAWA, Ontario K1P 5S9

Dear Mr. Leblanc:

RESPONSE TO CMD 19-H4.12C (SUPPLEMENTARY INFORMATION: WRITTEN SUBMISSION FROM MANITOBA METIS FEDERATION) FOR THE APPLICATION FOR RENEWAL OF WHITESHELL LABORATORIES' NUCLEAR RESEARCH AND TEST ESTABLISHMENT DECOMMISSIONING LICENCE

The purpose of this letter is to provide the Commission Secretariat with the requested response to CMD 19-H4.12C (*Supplementary Information: Written Submission from Manitoba Metis Federation*) [1], that was tabled but not discussed at the CNSC Hearing on 2019 October 02-03 regarding Canadian Nuclear Laboratories' (CNL) application [2] for renewal of Whiteshell Laboratories' Nuclear Research and Test Establishment Decommissioning Licence [3].

Attachment A provides a table of responses based on the comments, questions and recommendations in the Manitoba Metis Federation's submission [1].

Should you require any further information please contact Mr. Shaun Cotnam, Senior Director, Compliance and Chief Regulatory Officer at 613-584-8811, extension 48291, or myself.

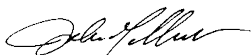
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Yours sincerely,



John Gilbert

General Manager - Whiteshell Laboratories Closure Project and Site Licence Holder

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Attachment (1)

References:

- [1] *Supplementary Information: Written Submission from Manitoba Metis Federation, CMD 19-H4.12C, 2019 October.*
- [2] D. Coyne, Letter to M. Leblanc, *Application for Renewal of the Nuclear Research and Test Establishment Decommissioning Licence for the Whiteshell Laboratories, WLD-CNNO-18-0033-L, 2018 November 15.*
- [3] Whiteshell Laboratories, *Nuclear Research and Test Establishment Decommissioning Licence, NRTEDL-W5-8.05/2019, Expiry Date: 2019 December 31.*

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ATTACHMENT A – Responses to Comments in CMD-19-H4.12C [1]

Comment #	MMF Recommendation [1]	CNL Response
1	<p>1a: CNL must clarify the location, frequency and timing at which surface water and sediment sampling will occur in the interim period during closure and institutional control phases. This data must be presented in text and in the form of a map with all proposed follow-up monitoring locations clearly marked. This must be accompanied by a description of the frequency of monitoring proposed for these stations. Moreover, CNL must consult with the MMF regarding the location, frequency and timing of monitoring and sampling so that Métis traditional knowledge can be incorporated into the proponents plans during closure and institutional control phases.</p> <p>1b: Water quality in trenches/ditches from the WMA must be monitored actively during closure and post-closure. The Proponent must provide additional details on locations and frequency of monitoring associated with the WMA. There should be clear adaptive management and contingency plans for responding to degrading water quality in these features, such as capture and additional treatment. CNL must consult with the MMF regarding these plans so that Métis traditional knowledge can be incorporated into the plans during closure and post-closure periods.</p>	<p>CNL produces three annual reports that we submit to the CNSC (Annual Compliance Monitoring Report – formerly the Annual Safety Review report, the Environmental Monitoring report, and the Environmental Assessment Follow-Up Report). These reports are also provided to the MMF, most recently in 2018 August for the 2017 calendar year, and have the information requested. The 2018 reports were issued on 2019 October 21. CNL has reached out to the MMF offering further support to discuss questions or seek clarity on the reports, as well as to discuss other items in their recommendation.</p> <p>CNL has an absolute commitment and a desire to continue to engage MMF and other Indigenous communities to seek their input and answer their questions, and has committed to ongoing discussions with MMF both individually as well as through a proposed Indigenous Advisory Committee, to understand MMF’s concerns and needs, and discuss how we can work together going forward. The proposed Indigenous Advisory Committee would give MMF and other Indigenous communities timely and meaningful updates on progress and plans, and an additional venue for input on the WL Closure Project.</p>



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Comment #	MMF Recommendation [1]	CNL Response
2	<p>CNL must share additional details on the site-specific release criteria for defined end-state. CNL should clearly state the approach for consulting with the MMC for their input on development of release-criteria and inclusion of Métis traditional knowledge and exercise of MMC's stewardship rights and responsibilities. If these release criteria have not yet been determined, CNL should provide information on how these will be developed. If these release criteria have already been determined, CNL should provide information on how it will consult with the MMF regarding them, including a process for revision in response to concerns or information shared by the MMF.</p>	<p>Subject matter experts at Canadian Nuclear Laboratories have developed a framework for the site end state that aligns to the Canadian Council of Ministers for the Environment (CCME) and Health Canada's land use categories and soil cleanup criteria. This framework will be used to facilitate CNL engagement with the MMF and others on the development of the final end state criteria for the site, which will consider the potential future uses of the land.</p>
3	<p>Due to the importance of fishing and fish consumption to the MMC, it is critical that monitoring of fish tissue occur and be designed accordingly so that the predictions of low contamination can be verified. MMC has Crown recognized s. 35 harvesting rights to fish that must be protected and preserved for future generations. Potential impacts on these rights, including contamination, must be minimized through meaningful consultation and accommodation with the MMF. The Proponent must engage in monitoring of fish tissues during the interim period before decommissioning is completed (institutional control) and have adaptive management plans in place to address unanticipated levels of contaminants in edible portions of fish in exposure areas. It is recommended that the sampling locations currently used for monitoring associated with the existing license be maintained. Monitoring should occur every year during closure and at least every 10-years during post-closure. CNL must consult the MMF about the monitoring plans and a process for modifying the plans in response to MMF's concerns about potential impacts on the rights, claims, and interests of the MMC must be outlined.</p>	<p>CNL is committed to both studying and reducing the impact of our operations on the environment.</p> <p>CNL has a rigorous Environmental Protection Program which includes the monitoring of fish tissue. Results can be obtained through the Annual Compliance Monitoring Reports sent to MMF. Results consistently show that consumption of fish from the Winnipeg River is safe.</p> <p>As indicated in response to Recommendation #1, CNL will continue to engage MMF on CNL's Environmental Monitoring both individually as well as through the proposed Indigenous Advisory Committee.</p>



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Comment #	MMF Recommendation [1]	CNL Response
4	<p>Due to the importance of fishing and fish consumption to the MMC, it is critical that monitoring of fish tissue occur and be designed accordingly so that the predictions of low contamination can be verified specifically for the Métis' increased reliance and exercise of their s. 35 rights. The Proponent must engage in monitoring of fish tissues during closure and post-closure (institutional control) and have adaptive management plans in place to address unanticipated levels of contaminants in edible portions of fish in exposure areas. We recommend that the sampling locations currently used for monitoring associated with the existing licence be maintained. Monitoring should occur every year during closure and at least every 10-years during post-closure. CNL must also consult with the MMF regarding the development of the monitoring plans so that the distinct circumstances of the MMC and Métis harvesters are appropriately being considered and Métis traditional knowledge and stewardship rights are included in the plans.</p>	<p>See response to Recommendation #3.</p>
5	<p>CNL must consult with the MMF on ways to involve the MMC in designing, implementing and evaluating the Integrated Monitoring Program. This may include hiring Manitoba Métis Citizens for collection of environmental data. Additionally, Manitoba Métis Citizens and representatives from the MMF should be involved in the management structure (i.e., committee) for implementation of the Integrated Monitoring Program. This would help ensure that the Integrated Monitoring Program includes monitoring activities that are of priority to the MMC. Moreover, it would improve transparency related to environmental oversight at the WL site.</p>	<p>CNL welcomes ongoing learning about components of value to MMF citizens and discussing how we can meet MMF's needs. As per CNL's response to Recommendation #1, this will involve direct engagement with MMF as well as through the proposed Indigenous Advisory Committee.</p>



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Comment #	MMF Recommendation [1]	CNL Response
6	<p>There is no indication in the text where this soil will be stored, or if it will be transported off-site to another facility. Other areas of contamination have also been documented, but there is no indication of when these contamination issues will be addressed. CNL must outline if, and if so how these other areas of contamination were addressed as the storage and/or transport of contaminated soils can adversely affect human health and creates risk to Métis Citizens using the site and surrounding area.</p>	<p>The contaminated soil is in a 2 km ditch system in the Waste Management Area (including the west ditch, the north ditch, and a small creek). Routine monitoring is carried out in this ditch/creek system, and results are discussed in the annual reports referred to in the response to Recommendation #1. The surface water and soil results indicate the levels of activity are below ecological effects levels, and are not of concern to human health. Sampling will be performed to determine the need for further remediation to support the end state, as will other areas of affected lands. Any remediated soil from these areas is planned to be safely transported in licensed containers to Chalk River Laboratories. CNL will follow up with MMF during future engagements to clarify this event and proposed plan forward.</p>
7	<p>CNL needs to be consistent throughout its reporting in making statements about what will and what will not remain at the end of the decommissioning process. If radioactive material remains on-site, it will restrict the use of the site by future generations of the MMC, and require monitoring well into the future as well as other measures to mitigate and accommodate impacts on the s. 35 rights, claims and interests of the MMC. CNL must revise its licence renewal application to clarify the activities that are actually at issue in this licence and remove references to future, proposed decommissioning activities that are not currently before CNSC for review and approval.</p>	<p>The licence application is clear regarding what will remain at the end of the decommissioning process. This includes some of the low level waste trenches, pending CNSC acceptance of a safety case to be developed, river sediments near the Winnipeg River outfall which was previously approved by the CNSC, and portions of the WR-1 reactor pending acceptance through the ongoing Environmental Assessment. Additionally, CNL will be engaging the MMF and others on the planned End State for the site as per response to Recommendation #2.</p>



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Comment #	MMF Recommendation [1]	CNL Response
8	<p>CNL must provide an analysis that indicates where risk to human health and the environment is reduced as decommissioning proceeds. This needs to take into account the unique circumstances of the MMC and Métis harvesters who rely on the lands and waters of the WL site to exercise their s. 35 harvesting rights and for substance purposes. Clean-up should be risk-based to show the benefits of addressing each component of decommissioning. The removal of hazardous waste and reduction of exposure to contaminant sources should reduce the chance of adverse health effects in humans and the environment. It is recommended that CNL and CNSC conduct an analysis to demonstrate these reduced risks.</p>	<p>This evaluation will be part of the site-wide Environmental Risk Assessment that CNL will be carrying out, and will be discussed with MMF and others through mechanisms discussed in response to Recommendation #13.</p>
9	<p>CNL has stated its future plan is to leave 21 or 22 Low Level Waste (LLW) trenches and the WR-1 reactor on-site at the end of the decommissioning project. CNSC must not consider and cannot give any weight to these statements regarding leaving any radioactivity on-site as it is beyond the current scope of the licence renewal. Moreover, such an approach would restrict the use of the site in the future and require indefinite institutional controls and monitoring by future generations.</p>	<p>WR-1 in situ decommissioning is out of scope of the licence application, and the proposal for this scope is undergoing an Environmental Assessment. The concept of in situ disposal of the Low Level Waste trenches was included in the Comprehensive Study Report, the Environmental Assessment approved in 2002. At the time, an ecological and health risk assessment was performed and CNSC staff determined that additional data was required (field verification of trench contents and additional sampling) to support a safety assessment for this proposed plan. CNL has an absolute commitment and a desire to continue to engage MMF and other Indigenous communities to seek their input and answer their questions, this includes work on the Low Level Waste Trenches, CNL looks forward to understanding MMF feedback in relation to the work CNL is undertaking in the waste management area.</p>



Comment #	MMF Recommendation [1]	CNL Response
10	<p>We recommend that CNL revise and clarify that it is not seeking CNSC approval for the IDS plan through this licence renewal application and moreover CNSC must give no weight to these statements in CNL's application. The MMF's position is that CNL must continue with the plan to remove reactor components and building and return the site to as close to natural conditions as possible. These are the only activities currently before the CNSC for review and consideration. The presence of the reactor in situ will impact future uses of the site, require institutional control well into the future and monitoring by future generations. CNL must consult with the MMF regarding such an ISD approach given the significant impacts on the s. 35 rights, claims and interests of the MMC that would result and that are outside the scope of the MMF's comments in this review.</p>	<p>As discussed in the CNL and CNSC Commission Members Documents and as discussed at the hearing, WR-1 in situ decommissioning is out of scope for the licence renewal. As mentioned, CNL is proposing in situ decommissioning for the WR-1 reactor, and will continue to engage MMF and others throughout the process.</p>
11	<p>CNSC and CNL will undoubtedly continue to monitor doses to workers, which should decline to the end of the 10-year licence and completion of decommissioning. CNSC and CNL should be required to provide safety reports to the MMF so that the MMF can monitor these and consider implications for MMC Citizens and harvesters who will access and use the site to exercise their harvesting and other rights following decommissioning activities. Doses that cannot be distinguished from background are one indication that the site has returned to close to natural conditions.</p>	<p>Doses to workers are described in the reports discussed in response to Recommendation #1. As noted by the MMF, the doses to workers are well below regulatory limits. While doses to workers will decline at the end of the project, they will likely increase as we perform decommissioning activities in facilities such as the Active Liquid Waste Treatment Centre, the Waste Management Area, and the Shielded Facilities.</p>



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Comment #	MMF Recommendation [1]	CNL Response
12	It is recommended that the IEMP be repeated with a larger number of samples, closer to the Whiteshell site. In addition, the MMF should be involved in the IEMP and determining monitoring activities, duration, and frequency similar to as was done with AOO. Sediments and fish should be collected downstream from the WL outfall, in deposition zones near the town of Lac Du Bonnet. An analysis should be conducted prior to the collections on the number and types of samples required to be able to detect nuclide levels above background levels (i.e., statistical power analysis). A repeated and improved IEMP is necessary to confirm exposure and dose to the public, and the MMC specifically, near the WL facility.	Not applicable for CNL.



Comment #	MMF Recommendation [1]	CNL Response
13	<p>13a) CNSC must require and ensure that CNL undertake meaningful consultation processes with the MMF. This includes that deliverables such as plans, applications, and assessments, reflect the unique collective rights held by the MMC, are developed in collaboration with the MMF, and revised to reflect the MMF's input and concerns. This should be addressed using a distinction-based approach that explicitly recognizes and accounts for the distinct rights, claims, and interests of the MMC as well as the significant history and connection to the land. The MMF must be consulted about the project, and how they would like to be engaged in these processes on an ongoing basis to ensure the rights, claims, and interests of the MMC are adequately considered and where required accommodated.</p> <p>13b) In cases where impacts to the rights, claims and interests of the MMC cannot be avoided or mitigated, accommodations must be provided. The MMF must be consulted regarding the development of accommodation measures, where required, as part of fulfilling the duty to consult and accommodate. Such impacts to rights and interests could include, but are not limited to, instances such as a reduced ability to use or access the land in restricted access areas in and around WL, timing of decommissioning activities that result in disruption to Métis harvesting practices or seasons, decisions related to remediation or reclamation that affect whether native species or plants relied on by Métis harvesters are reintroduced into the area, etc. Additionally, accommodations must be provided in the event that wildlife or plant materials are found to be contaminated, impacting the ability of the MMC to exercise their rights to harvest and consume wild and traditional foods and medicines.</p>	<p>CNL has an absolute commitment and a desire to continue to engage MMF and other Indigenous communities to seek their input and answer their questions, and has committed to ongoing discussions with MMF both individually as well as through a proposed Indigenous Advisory Committee, to understand MMF's concerns and needs, and discuss how we can work together going forward. The proposed Indigenous Advisory Committee would give MMF and other Indigenous communities timely and meaningful updates on progress and plans, and an additional venue for input on the WL Closure Project.</p>



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Comment #	MMF Recommendation [1]	CNL Response
14	CNSC must require that CNL consult with the MMF regarding these impacts and plans regarding the same. The MMF must be consult about their preferences and to determine any mitigation and accommodation requirements with respect to decommissioning underground services. It is important that the rights, claims, and interests of the MMC, and their preferences for this process, are communicated and upheld through engagement with the MMF.	See response to Recommendation #13.
15	15a) CNL must provide a more detailed rationale for the in-situ disposal of up to 22 LLW trenches on the WL site, including the identification and evaluation of possible alternative methods of LLW disposal, and any reasons why these may not be appropriate. 15b) CNL must consult with the MMF about acceptable methods of waste disposal where it is possible that any waste will be left on-site, as this poses a potential and unacceptable level of risk to the ability of MMC harvesters and land-users to access and use the site after decommissioning that requires assessment and consideration.	See responses to Recommendations #9 and #13.



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Comment #	MMF Recommendation [1]	CNL Response
16	<p>CNL must consult the MMF and collaborate on developing a Communication Strategy for the 10-year licensing period that is adequate for both parties. This Communication Strategy should include a process which will be followed to inform the MMF on an ongoing basis about project milestones, decommissioning and demolition activities, and potential adverse effects as well as a process for soliciting feedback for CNL. The Communications Strategy should also include a process for proactive communication with the MMF regarding proposed activities including shared decision making regarding the timing of such activities. It should follow a distinctions-based approach that recognizes the unique governance structure of the MMF and processes for communication with Manitoba Métis Citizens. This will allow for clearer communication and engagement between CNL and the MMF throughout the proposed 10-year licensing period.</p>	<p>CNL has reached out to MMF to seek a more formalized Communication Strategy which could be used to cover issues such as notification to the MMF in the event of an incident or planned work which may have an impact on MMF citizens.</p>
17	<p>CNL must consult with the MMF regarding the land-use categories, release and remediation criteria and the MMF's future needs related to the WL site. The MMF has undertaken Traditional Knowledge studies concerning the WL site, and provided these results to CNL. The information from this study surrounding the traditional and ongoing land-use activities of the MMC in the area is available to CNL, as demonstrated by the summary offered in section 18.2.1.8.1.1 <i>Traditional Knowledge and Land Use Studies</i> in the Commission Member documents. This information must be considered by CNL, without making specific data public, and discussed with the MMF to determine appropriate release and remediation criteria that is in alignment with traditional use of the lands in and around the WL site and account for the rights, claims, and interests of the MMC.</p>	<p>As indicated in response to Recommendation #2, CNL will be engaging the MMF and others on the framework that will achieve a final end state for the site.</p>



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Comment #	MMF Recommendation [1]	CNL Response
18	<p>18a) CNL must engage with the MMF regarding the results of the Environmental Monitoring programs throughout the 10-year licensing period. Important issues requiring consultation include, but are not limited to, the safety of consuming wild foods from the area, the safety of gathering other natural materials in the area, and any environmental impacts that may affect traditional activities and land use in the area. The MMF should also be engaged to identify any other important related issues with respect to this recommendation.</p> <p>18b) Métis Citizens should be hired as part of the Environmental Monitoring programs to ensure that their rights, claims, and interests are represented in this process. Métis environmental monitors should be identified by the MMF and given the opportunity to liaise with CNL and the MMF to ensure the results of environmental monitoring are communicated in a timely, comprehensive, and efficient manner.</p>	<p>See response to Recommendation #1.</p> <p>Additionally, CNL hears the concern over the perception that harvested foods may not be safe for Métis citizens. CNL will continue to demonstrate that the site's environmental impact can be characterized as low risk, in that the potential for human or ecological impacts is low, and CNL's environmental monitoring results show that harvested foods are safe to eat. CNL will work with MMF to develop a communication strategy to help reduce that perception of risk.</p>
19	<p>CNL must provide a detailed description of the scope and duration of access controls and restrictions to be enacted at the site, and specifically as related to the 21-22 trenches to be decommissioning in situ, during the decommissioning and demolition phases. The MMF must be consulted about the most appropriate approach to access controls of this nature.</p>	<p>See response to Recommendation #2.</p>
20	<p>The MMF must be consulted about an emergency notification and response protocol for the WL site. This could be included in any Communications Strategy or protocol reached with the MMF as recommended in Recommendation #16 above.</p>	<p>As indicated in response to Recommendation #16, CNL is interested in continuing to engage on this topic, and will seek a formalized Communication Strategy with the MMF.</p>



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Comment #	MMF Recommendation [1]	CNL Response
21	As Manitoba Métis Citizens harvest on and around the project site, as described in the Traditional Knowledge Study undertaken and delivered to CNL, the MMF must be consulted about remediation and specifically revegetation objectives for the site to ensure that conditions allow for continued harvesting practices, to the extent possible. Furthermore, CNL should incorporate site revegetation strategies into the closure of the site that are informed by this consultation with the MMF.	See responses to Recommendations #2 and #13.