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**Written submission from the
Manitoba Métis Federation**

**Mémoire de la Fédération des
Métis du Manitoba**

Canadian Nuclear Laboratories

Regulatory Oversight Report for
Canadian Nuclear Laboratories Sites:
2023

Laboratoires Nucléaires Canadiens

Rapport de surveillance réglementaire
des sites des Laboratoires Nucléaires
Canadiens : 2023

Commission Meeting

Réunion de la Commission

November 7, 2024

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Regulatory Oversight Report for Canadian Nuclear Laboratories Sites: 2023

Technical Review

Manitoba Métis Federation

September 23, 2024



Executive Summary

The Manitoba Métis Federation (MMF) has undertaken a review of the Canadian Nuclear Safety Commission (CNSC) 2023 Regulatory Oversight Report (ROR, “the Report”) to support us in ongoing communications with the CNSC, Canadian Nuclear Laboratories (CNL), and Atomic Energy of Canada Limited (AECL). The scope of the review was limited to the ROR components related to the Whiteshell Laboratories (WL) site in Pinawa, Manitoba, however, we provided an overview and comments on our outstanding concerns raised in previous ROR review submissions. The objectives of the review were to:

- identify where the Red River Métis’ rights, claims and interests overlap with and may be impacted by the information and findings in the Report;
- identify environmental, technical, or regulatory issues with the ROR, and provide recommendations on where and how Red River Métis’ rights and interests may need to be better accommodated through revisions and additions to the Report;
- identify issues and challenges with the Report that will require ongoing engagement and consultation with the MMF on behalf of the Red River Métis; and
- identify outstanding concerns which have not yet been resolved through the Regulatory Oversight process.

Based on Métis knowledge data collected from Red River Métis Citizens and shared with the MMF, it is apparent that Whiteshell Laboratories (WL) is located within a region where the Red River Métis have a longstanding and well-established record of historic use and occupancy, as well as ongoing current use.

Using the results of the ROR review, the MMF has provided recommendations that focus on opportunities for the CNSC to improve involvement, inclusion and consultation with the Red River Métis on monitoring/oversight for the WL facilities. Where applicable, we have also provided guidance on best practice mitigations, management and monitoring.

In 2018, security concerns at WL led the CNL to implement corrective actions. While improvements were made by 2020, changes in Canadian firearm regulations caused delays in finalizing the security program. Further deficiencies were identified in 2021, resulting in a "below expectations" rating for several years. The MMF acknowledges progress but expects CNL to fully comply with new regulatory changes to maintain a "satisfactory" rating.

WL has maintained high standards for radiation protection with no contamination incidents reported in 2023. Although radiation doses are well below regulatory limits, the MMF is concerned that the 2023 dose was the highest since 2019, contrary to expectations as decommissioning continues.



Two non-compliance notices were issued in 2023 due to outdated environmental monitoring schedules and staff training records. While these posed no health or environmental risks, corrective actions resulted in a satisfactory rating. However, the MMF is concerned about the gradual increase in radiation doses despite ongoing decommissioning.

In 2023, four non-compliance notices (NNCs) were issued related to outdated training documentation, inaccurate records, and staffing issues, leading to a "below expectations" rating.

The fire protection program was rated below expectations in 2023, leading to shutdowns due to inadequate firefighter medical assessments, improper equipment maintenance, and poor storage practices. CNL is taking corrective actions, but MMF remains concerned about CNL's ability to maintain proper fire protection during the decommissioning phase.

The MMF expresses concerns over gaps in the reporting and management of nuclear materials throughout their lifecycle, particularly in terms of transportation of radioactive waste across the National Homeland of the Red River Métis. We continue to call for a comprehensive, lifecycle-based reporting system to ensure the safety and security of impacted communities.

In general, while the MMF acknowledges improvements at WL, concerns remain over security, fire protection, human performance management, and the comprehensive oversight of nuclear materials and waste management.



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1.0 Introduction

The Canadian Nuclear Safety Commission (CNSC) is responsible for the oversight of the nuclear industry in Canada. As part of CNSC's efforts to report out on the regulatory performance of industry in meeting the CNSC's expectations, CNSC publishes a series of regulatory oversight reports (RORs). These reports provide information on the safety performance of licensees who are authorized to produce, refine, use, and dispose of nuclear substances. CNSC produces separate RORs for the following sectors:

- Nuclear Power Plants
- Uranium Mines and Mills
- Use of Nuclear Substances
- Uranium and Nuclear Substance Processing Facilities
- Research Reactors and Particle Accelerator Facilities
- Canadian Nuclear Laboratories

Within each ROR, licensees are evaluated based on 14 Safety and Control Areas (SCAs) grouped into three functional areas Management (management system, human performance management, operating performance) Facilities and Equipment (safety analysis, physical design, fitness for service) and Core Controls and Processes (radiation protection, conventional health and safety, environmental protection, emergency management and fire protection, waste management, security, safeguards and non-proliferation, and packaging and transport).

The Manitoba Métis Federation (MMF) in representing the interests and concerns of the Red River Métis has been active in engaging with the CNSC regarding a wide range matters related to the Whiteshell Laboratories Facility and ongoing decommissioning. In considering the potential for interaction between activities associated with Whiteshell Laboratories and the rights, interests, and values of Red River Métis Citizens, the MMF maintains significant interest in continuing to engage with CNSC, Canadian Nuclear Laboratories (CNL), and Atomic Energy Canada Limited (AECL), in defining activities related to Whiteshell Laboratories decommissioning to achieve a mutually supported end state for the facility.

The scope of the review was limited to the ROR components related to the Whiteshell Laboratories (WL) site in Pinawa, Manitoba, however, we provided an overview and comments on outstanding concerns raised in previous submissions of ROR reviews. The objectives of the current review were to:

- identify where the Red River Métis' rights, claims and interests overlap with and may be impacted by the information and findings in the Report;



- identify environmental, technical, or regulatory issues with the ROR, and provide recommendations on where and how Red River Métis' rights and interests may need to be better accommodated through revisions and additions to the Report;
- identify issues and challenges with the Report that will require ongoing engagement and consultation with MMF on behalf of the Red River Métis; and
- identify outstanding concerns which have not yet been resolved through the Regulatory Oversight Report process.

1.1 Environmental Setting

The WL site slopes toward the Winnipeg River. Groundwater on the site flows toward the river, of which a portion is discharged through an underground seep to the west of the site. Surface water runoff is also directed toward the Winnipeg River. CNL manages surface water in the vicinity of the WL site through a series of swales and ditches that direct it to the Winnipeg River. During operation of the WR-1 Reactor, CNL treated effluent and stormwater from the Whiteshell Laboratories site at the Active Liquid Waste Treatment Centre and then released the treated effluent and stormwater into the Winnipeg River through an outfall pipe located 8 m offshore. Each of these CNL treatment processes represents potential vectors for the movement of contaminants into the aquatic environment (the Winnipeg River).

At least 61 species of fish inhabit the Winnipeg River (Stewart and Watkinson, 2004). These include many fishes from the minnow (Cyprinidae) and darter (Percidae) families; important game fish, such as northern pike (*Esox lucius*), walleye (*Sander vitreus*), several suckers (e.g., white sucker, redhorse), smallmouth bass (*Micropterus dolomieu*), and lake whitefish (*Coregonus clupeaformis*); and two species at risk (SAR), the carmine shiner (*Notropis percobromus*) and lake sturgeon (*Acipenser fulvescens*). Other aquatic species, identified under the *Species at Risk Act* found in the Winnipeg River includes the snapping turtle (*Chelydra serpentina*) and endangered maple leaf mussel (*Quadrula quadrula*).

The terrestrial ecosystem surrounding the Whiteshell Laboratories site is within the larger Boreal Shield Ecozone, Lake of the Woods Ecoregion, and Stead Ecodistrict. In general, this ecoregion has a large number of forest types characterized by tall, closed stands of jack pine (*Pinus banksiana*), trembling aspen (*Populus tremuloides*), paper birch (*Betula papyrifera*), white spruce (*Picea glauca*), eastern white cedar (*Thuja occidentalis*), black ash (*Fraxinus nigra*), and American elm (*Ulmus americana*) (Smith et al. 2001). Wildlife is diverse and characteristic of the region, and include gray wolf (*Canis lupus*), American black bear (*Ursus americanus*), moose (*Alces americanus*), white-tailed deer (*Odocoileus virginianus*), snowshoe hare (*Lepus americanus*), hooded merganser (*Lophodytes cuculata*), turkey vulture (*Cathartes aura*), and ruffed grouse (*Bonasa umbellus*) (Smith et al. 2001). The surrounding area consists of cleared lands with areas of peat bog. Whiteshell Provincial Park, the largest provincial park in Manitoba, is located southeast of WL; Pinawa and Whitemouth Falls Provincial Parks are immediately south of the WL site. Other species



at risk including the the little brown bat (*Myotis lucifungus*) and chimney swift (*Chateura pelagica*) are known to be found around the WL campus and may nest in or on WL infrastructure.

Historically and in the present day, the Red River Métis have exercised their distinct and inherent Métis rights around and downstream of Whiteshell Laboratories without limitation, while maintaining concern for potential risks associated with Whiteshell Laboratories. Red River Métis values access to areas used for harvesting or other traditional land uses, as well as the quality, safety, and availability of medicinal plants and traditionally harvested foods for consumption, as part of their traditional culture and diet. Adverse impacts on the land or the ability of the Red River Métis to access the land for traditional land use in this territory have the potential to negatively impact the rights, claims, and interests of the Red River Métis.

2.0 Background—The Red River Métis and the MMF

2.1 The Red River Métis

The Red River Métis is an Indigenous collectivity and Aboriginal People within the meaning of section 35 of the *Constitution Act, 1982*. Based on our emergence as a distinct Indigenous People in the Northwest prior to effective control by Canada and the creation of the province of Manitoba, the Red River Métis holds rights, interests, and claims throughout and beyond the Province of Manitoba.

Since 1982, Métis Rights have been recognized and affirmed by section 35 and protected by section 25 of the *Constitution Act, 1982*. These rights were further confirmed and explained by the Supreme Court of Canada (SCC) in *R. v. Powley*, 2003 SCC 43. Manitoba Courts also have recognized Red River Métis Rights in *R. v. Goodon*, 2008 MBPC 59. These decisions have affirmed that the Métis hold existing Aboriginal Rights throughout their Traditional Territories. Our Citizens and harvesters rely on and use the lands, waters, and resources of our Traditional Territory throughout the Province of Manitoba and elsewhere within the historic Northwest to exercise their constitutionally protected rights and to maintain their distinct Red River Métis customs, traditions, and culture.

2.2 Red River Métis' Rights, Claims, and Interests

Based on its emergence as a distinct Indigenous People in the Northwest prior to effective control by Canada and the creation of the province of Manitoba, the Red River Métis holds rights, claims, and interests throughout and beyond the Province of Manitoba consistent with the United Nations Declaration on the Rights of Indigenous Peoples, including the right to self-determination.

The MMF, as the National Government of the Red River Métis is mandated to promote, protect, and advance the collectively held Aboriginal Rights of the Red River Métis. Through this mandate, the MMF



engages with governments, industry, and others about potential impacts of projects and activities on the exercise of these rights. In 2007, the MMF Annual General Assembly adopted Resolution No. 8, which provides the framework for engagement, consultation, and accommodation with the Red River Métis. Designed by Métis, for Métis, Resolution No. 8 sets out the process that is to be followed by governments, industry, and other proponents when developing plans or projects that have the potential to impact the section 35 rights, claims, and interests of the Red River Métis. It was unanimously passed by MMF Citizens and mandates a "single-window" approach to consultation and engagement with the Red River Métis through the MMF Home Office.¹

In engaging the MMF, on behalf of the Red River Métis, the Resolution No. 8 Framework calls for the implementation of five phases:

- Phase I: Notice and Response;
- Phase II: Research and Capacity;
- Phase III: Engagement and Consultation;
- Phase IV: Partnership and Accommodation; and
- Phase V: Implementation.

Future activities associated with Whiteshell Laboratories have the potential to impact Red River Métis Rights, claims, and interests and as such, engagement and consultation with the MMF, through the process set out above, must be followed. The Project is located within the Traditional Territory of the Red River Métis, and in the heart of our Homeland. At one time, this was the "postage stamp province" of Manitoba. This is the birthplace of the Red River Métis and where we currently have an outstanding claim flowing from the Federal Crown's failure to diligently implement the land grant provision of 1.4 million acres of land promised to the Red River Métis as a condition for bringing Manitoba into Confederation and set out in section 31 of the *Manitoba Act, 1870* in accordance with the honour of the Crown.²

¹ More information about Resolution No. 8 is available online at: <http://www.mmfmb.ca/docs/2013-Resolution%208%20Booklet-VFinal.pdf>

² *Manitoba Metis Federation Inc. v. Canada (Attorney General)*, 2013 SCC 14, [2013] 1 SCR 623 ("MMF Case"). The Supreme Court of Canada recognized that this outstanding promise represents "a constitutional grievance going back almost a century and a half. So long as the issue remains outstanding, the goal of reconciliation and constitutional harmony, recognized in s. 35 of the *Constitution Act, 1982* and underlying s. 31 of the *Manitoba Act*, remains unachieved. The ongoing rift in the national fabric that s. 31 was adopted to cure remains unremedied. The unfinished business of reconciliation of the Metis people with Canadian sovereignty is a matter of national and constitutional import" (para. 140).



Red River Métis section 35 rights are distinct from First Nation's rights and must be respected. The Manitoba Métis Federation is the National Government of the Red River Métis.

Prior to the creation of Manitoba, the Red River Métis had always exercised its inherent right of self-determination to develop its own self-government structures and institutions centred around the Red River Settlement and throughout the Northwest. As described by Louis Riel in his 1885 memoirs, Métis self-government was well-established and functioning when Canada came to the Red River Métis in the late 1800s:

When the Government of Canada presented itself at our doors it found us at peace. It found that the Métis people of the North-West could not only live well without it... but that it had a government of its own, free, peaceful, well-functioning, contributing to the work of civilization in a way that the Company from England could never have done without thousands of soldiers. It was a government with an organized constitution whose junction was more legitimate and worthy of respect, because it was exercised over a country that belonged to it.

Métis self-government has evolved and changed over time to better meet the needs of the Red River Métis. Today, the MMF is the recognized, democratically elected, self-government representative of the Red River Métis. On July 6, 2021, The MMF and the Government of Canada signed the Manitoba Metis Self-Government Recognition and Implementation Agreement.

Since 1967, the MMF has been authorized by the Red River Métis through a democratic governance structure at the Local, Regional, and national levels. As part of this governance structure, the MMF maintains a Registry of Red River Métis Citizens.³ By applying for Red River Métis Citizenship, individuals are confirming the MMF is their chosen and elected representative for the purposes clearly set out in its Constitution,⁴ including as related to the collective rights, claims, and interests of the Red River Métis.⁵

The MMF Constitution confirms that the MMF has been created to promote the political, social, cultural, and economic rights and interests of the Red River Métis. The MMF is authorized to represent the Red

³ MMF Constitution, Article III outlines the citizenship definition and application process. This definition ("Metis" is defined to mean "a person who self-identifies as Métis, is of historic Métis Nation Ancestry, is distinct from other Aboriginal Peoples and is accepted by the Métis Nation ") aligns with the definition of what constitutes a section 35 rights-bearing Metis community as outlined by the Supreme Court of Canada in *Powley* at para. 30.

⁴ *Newfoundland and Labrador v. Labrador Metis Nation*, 2007 NLCA 75 at para 47: "Anyone becoming a member of the [Labrador Metis Nation] should be deemed to know they were authorizing the LMN to deal on their behalf to pursue the objects of the LMN, including those set out in the preamble to its articles of association. This is sufficient authorization to entitle the LMN to bring the suit to enforce the duty to consult in the present case."

⁵ *Behn v. Moulton Contracting Ltd.*, 2013 SCC 26 at para 30: "[A]n Aboriginal group can authorize an individual or an organization to represent it for the purpose of asserting its s.35 rights."



River Métis' collective rights, interests, and claims. This authorization is grounded in the MMF's democratic processes that ensures the MMF is responsible and accountable to the Red River Métis.

The MMF governance structure includes a centralized MMF President, Cabinet, Regions, and Locals. There are seven (7) Regions and approximately 135 Locals throughout Manitoba (Figure 1). There are more than three thousand Citizens who live outside of Manitoba. All MMF Citizens are Members of a Local. Locals and Regions work together to authorize and support the MMF Cabinet, and the MMF's various departments and offices. Through elections held every four years, Citizens choose and elect the MMF Cabinet consisting of the MMF President, who is the leader and spokesperson for the MMF, a Vice-President of each Region, and two Regional Executive Officers from each Region. The MMF Cabinet also includes the spokeswoman from the Infinity Women Secretariat.



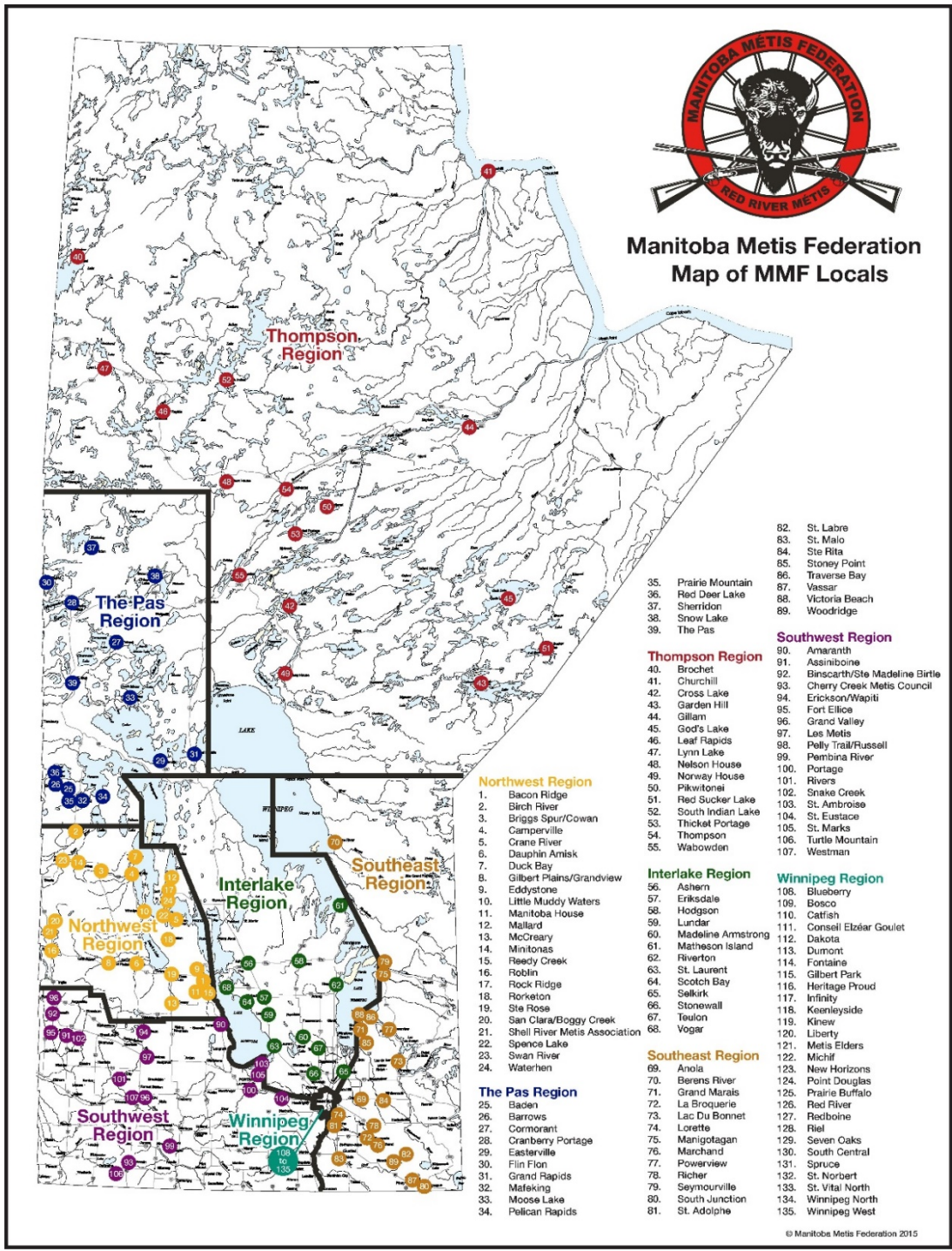


Figure 1 MMF Regions and Locals



The MMF, as the duly authorized representative of the Red River Métis, has been recognized by both the federal and provincial governments in agreements, policies, and legislation. For example, in 2002, *The Child and Family Services Authorities Act* recognized the MMF for the devolution of Manitoba child and family services to a MMF controlled entity institutions. This Act establishes a series of Child and Family Services Authorities to administer and provide the delivery of services to various distinct Indigenous communities in Manitoba. It creates a Métis Child and Family Serviced Authority, the directors of which are appointed by the MMF.

In 2008, the courts in Manitoba further recognized that "[t]he Métis community today in Manitoba is a well organized and vibrant community. Evidence was presented that the governing body of Métis people in Manitoba, the Manitoba Métis Federation, has a membership of approximately 40,000, most of which reside in southwestern Manitoba."⁶ In 2010, the Manitoba Government adopted a Manitoba Métis Policy, and stated that:

*The Manitoba Metis Federation is a political representative of Métis people in Manitoba and represents in Manitoba the Métis who collectively refer to themselves as the Métis Nation... Recognition of the Manitoba Métis Federation as the primary representative of the Métis people is an important part of formalizing relationships.*⁷

In 2012, the *MMF-Manitoba Harvesting Agreement (2012)* negotiated between the MMF, and the Manitoba Government recognized some of the collective section 35 harvesting rights of the Red River Métis and relied on the Citizenship processes of the MMF as proof of belonging to a rights-holding Aboriginal community:

*For the purposes of these Points of Agreement, Manitoba will recognize as Métis Rights-Holders, individuals who are residents in Manitoba and who hold a valid MMF Harvesters Card, issued according to the MMF's Laws of the Hunt. [... and will] consult with the MMF prior to implementing any changes to the current regulatory regime that may infringe Métis Harvesting Rights.*⁸

⁶ *R. v. Goodon*, 2008 MBPC 59 para 52. Note that the number of MMF Citizens (40,000) identified by the Court was as of 2007..

⁷ Manitoba Métis Policy, September 2010 at 4, 12, online (PDF): <https://www.gov.mb.ca/inr/mbmetispolicy.html>

⁸ MMF-Manitoba Harvesting Points of Agreement (September 29, 2012), ss. 3, 6-7.



In 2013, the SCC recognized the “collective claim for declaratory relief for the purposes of reconciliation between the descendants of the Métis people of the Red River Valley and Canada.” It went on to grant the MMF standing as the “body representing the collective Métis interest” in the *MMF Case*.⁹ Additionally, in 2016, the *MMF-Canada Framework Agreement* stated:

the Supreme Court of Canada recognized that the claim of the Manitoba Métis Community was "not a series of claims for individual relief" but a "collective claim for declaratory relief for the purposes of reconciliation between the descendants of the Métis people of the Red River Valley and Canada" and went on to grant the MMF standing by concluding "[t]his collective claim merits allowing the body representing the collective Métis interest to come before the court.

*[and that] Canada is committed to working, on a nation-to-nation, government-to-government basis, with the Métis Nation, through bilateral negotiations with the MMF.*¹⁰

The MMF signed the *Manitoba Métis Self-Government Recognition and Implementation Agreement* (MMSGRIA) on July 6, 2021. This marked a major step forward in reconciliation between the Red River Métis and Canada. The MMSGRIA, among other things, immediately recognized the MMF as the National Government of the Red River Métis and sets out a path forward towards the completion of a modern Treaty. Consistent with the direction of our Citizens, MMF removed the arbitrary provincial borders that separated Red River Métis who live outside of Manitoba from those within. Today, thousands of Citizens who reside beyond the borders of Manitoba, inside and outside of Canada have chosen to take their Citizenship with the Red River Métis. The MMF has a regional, provincial, national, and international mandate.

Our modern Treaty was ratified by thousands of Red River Métis Citizens in June 2023 and builds upon the important work of the MMSGRIA. The finalization of the Treaty with Canada, and its implementation legislation will enable the Red River Métis to renew its partnership with Canada through its democratically elected representative, the MMF Government.

3.0 Assessment of Safety at Whiteshell Laboratories

The MMF holds great interest in ensuring Whiteshell Laboratories maintains the highest level of safety performance possible. It is our expectation that CNL will proactively work to adapt procedures and

⁹ *MMF Case*, *supra* note 6 at para 44.

¹⁰ MMF-Canada Framework Agreement on Advancing Reconciliation, November 15, 2016, Preamble.



programming to ensure that it is not only maintaining compliance with the conditions of its licence and applicable regulations but is minimizing the risk posed to human and environmental health. Based on that expectation, it is our position that any SCA evaluated as part of the ROR program that is not considered “satisfactory”, is unacceptable. In such cases we will hold CNL and AECL responsible for implementing timely remedies, and CNSC accountable for enforcing these remedies as appropriate.

3.1 Whiteshell Laboratories Safety Program

Stemming from the review of the 2018 ROR review, the MMF raised concerns both about ongoing safety concerns at Whiteshell Laboratories, as well as CNL and CNSC’s commitment to address these concerns. Specifically, in 2018, CNSC staff raised concern regarding CNL’s security program at Whiteshell Laboratories, resulting in the issuance of an Order-in-Council to CNL to implement changes to CNL’s security program at the site. CNL continued to develop and implement a revised program that was intended to address deficiencies, with full implementation being deployed as of May 1, 2020. However, in June 2020, Whiteshell Laboratories had to revert back to compensatory measures as a result of the May 2020 Order in Council that amended the *Regulations Prescribing Certain Firearms and Other Weapons, Components and Parts of Weapons, Accessories, Cartridge Magazines, Ammunition and Projectiles as Prohibited or Restricted* under the *Criminal Code of Canada*. This required CNL to conduct additional training and procurement of equipment to meeting the new requirements imposed by the Order in Council. Final implementation of the program was conducted in late 2020. However, in 2021, CNSC staff identified areas of improvement in the implementation of the security program once again related to the equipment and training used by the Tactical Response Force. Although at no point was radioactive material considered at risk, it resulted in CNL’s Security program to be considered “below expectations” in 2018, 2019, and 2021.

The MMF is pleased to see that CNL has made significant progress as it relates to the implementation and maintenance of its Security program for Whiteshell Laboratories. We recognize that Bill C-21 outlining changes to the *Nuclear Safety and Control Act* has been adopted as of December 2023. This Bill alters provisions and requirements for facilities such as Whiteshell Laboratories to acquire, possess, transfer and dispose of firearms, prohibited weapons and prohibited devices. It is our expectation that CNL will adapt the Security Program for Whiteshell Laboratories as appropriate to maintain compliance with the provisions of *Nuclear Safety and Control Act* and ensure Whiteshell Laboratories maintains its Satisfactory rating.

3.2 Radiation Protection

The MMF is pleased that WL continues to maintain a high standard for radiation protection for its workers with no action levels reported in 2023. We acknowledge that as Whiteshell Laboratories continues to engage in decommissioning activities the on-site risks should continue to decline but this maintained



regulatory standard and zero contamination incidents helps to alleviate the concerns of the MMF related to radiation risk to Red River Metis Citizens.

3.3 Environmental Protection

In 2023 WL had two notices of noncompliance (NCCs) related to

- schedules for environmental monitoring, effluent verification monitoring, and groundwater monitoring schedules not being up to date
- Environmental Protection staff training records not being up to date

The ROR reports that these did not pose a risk to the health and safety of the public or the environment and the immediate corrective actions by CNL yielded a rating of Satisfactory.

In section 2.2.3.5 of the Report a table shows the Dose Data for WL between 2019 and 2023. While every year WL achieves maximum effect doses far below the regulatory limit of 1 mSv/year (0.00006 mSv in 2023) the MMF is concerned that the 2023 dose is the highest it has been since 2019 while risk to radiation dosages were expected to decrease over time and decommissioning.

3.1 Human Performance Management

In 2023 WL was issued 4 NNCs during an inspection that was in response to 2022 and 2023 Safety Standdowns. The NNCs were related to

- outdated training documentation and requirements
- inaccurate training records
- limited access to training records by supervisors
- inconsistent training program evaluations.

In addition, issues in Emergency Management and Fire Protection resulted in WL falling below minimum staffing that requires the presence of sufficient qualified workers to carry on activities safely. These deficiencies led to WL's performance yielding a rating of Below Expectations.

3.2 Emergency Management and Fire Protection

In the 2023 ROR CNL's Emergency Management and Fire Protection Program continued to rate below expectations. Specifically in the April 2023 assessment CL found deficiencies in training records for on-site fire brigade members and incomplete equipment procedures. They reported the findings to CNSC which



led to a necessary shut down of non-essential activities. CNL's corrective actions were assessed and accepted, and WL was allowed to begin its Multi-Phase Restart plan to return to normal operations. However, in August of 2023 EMFP conducted a reactive inspection resulting in 10 NNCs pertaining to:

- deficiencies in firefighter medical assessments
- inappropriate storage of combustibles
- incorrect color-coding of a fire hydrant
- improper maintenance and identification of fire separations
- out-of-date pre-fire plans

On October 13, 2023, a CNSC Designated Officer issued a charge to CNL for failing to comply with their Nuclear Research and Test Establishment Decommissioning Licence condition for implementing and maintaining a fire protection program.

This continued lack of due diligence is unacceptable to the MMF. The Fire Protection Program is one of the most important safety plans in place for Whiteshell Laboratories.

While the poor maintenance of the Fire Protection Program is concerning from a practical perspective relating to the risk to human health and safety and potential forest fires originating from WL while the site is operational, it is especially concerning that CNL continues to propose in situ decommissioning of Whiteshell Reactor 1 (WR-1) despite their lack of the implementation and maintenance of administrative or institutional controls during the lab's operating phase.

The MMF emphasizes that the delivery and maintenance of administrative or institution controls for Fire Protection must be rectified and maintained in the highest order for the protection of generations to come. This program is an essential component of preserving human and environmental health under a scenario in which in situ decommissioning is conducted. It is necessary that CNL demonstrate an ability to reliably maintain a satisfactory rating for their Fire Protection Program during this phase of the project.

3.3 Continued Role of AECL in Whiteshell Laboratories Oversight

The relationship between AECL and CNL is a relatively unique one within the Canadian regulatory environment. AECL is the owner of Whiteshell Laboratories, as well as any waste products generated, and the liabilities that exist on site. CNL though a creation of AECL is operated by a private consortium known as the Canadian National Energy Alliance and is responsible for day-to-day operations as they relate to the management of Whiteshell Laboratories. It is expected that at a point yet undefined following the decommissioning of Whiteshell Laboratories, CNL will relinquish responsibilities for the site back to AECL.



As a result, in planning for the future, it is essential that AECL remain actively involved in the high-level oversight for Whiteshell Laboratories, and further as both AECL and CNL are effectively creatures of the Crown, act honourably in discharging duties to the Red River Métis, as they relate to operation, decommissioning, and post-decommissioning.

As Whiteshell Laboratories continues along its process to decommissioning and ultimate end state, it is necessary to consider the function of the ROR in evaluating and reporting on safety performance. While many of the SCAs will remain applicable for the foreseeable future, the ROR process may not appropriately capture safety performance beyond the period of active decommissioning. We request that CNSC, CNL, and AECL as applicable, actively engage with the MMF in identifying a meaningful process for safety performance evaluation post-decommissioning, such that all parties can remain assured of the safety and security for Whiteshell Laboratories into the future.

3.4 Lifecycle Reporting of Nuclear and Radioactive Material

The ROR for five of six of CNSC's licence sectors, includes Nuclear Power Plants, Uranium Mines and Mills, Uranium and Nuclear Substance Processing Facilities, Research Reactors and Particle Accelerator Facilities, and Canadian Nuclear Laboratories report on Packaging and Transportation as a Safety and Control Area. The one exception is the category Use of Nuclear Substances, which includes facilities such as hospitals and medical clinics that use radioactive material, typically in very low amounts. This category does however report on environmental protection.

The Packaging and Transportation Safety and Control Area evaluates programs that cover the safe packaging and transport of nuclear substances to and from the licensed facility. With respect to Whiteshell Laboratories, no new nuclear material is being brought onto site, so this Safety and Control Area focuses primarily on the packaging and transport of radioactive waste offsite. However, the MMF is concerned about the potential gaps that exist when considering how the safe management, handling, and control of nuclear and radioactive materials takes place throughout the lifecycle.

Nearly all of the uranium used in Canada is mined in the Athabasca basin of northern Saskatchewan, a resource area that is being considered for significant expansion in the near future. Once refined and milled, uranium concentrate is transported to facilities in southern Ontario (as well as in the United States and elsewhere globally) for processing and refinement. Refined products are then transported out to locations of use domestically or abroad. As a result, virtually all nuclear material used in the production of nuclear substances in Canada passes through the National Homeland of the Red River Métis.

Radioactive waste, including spent nuclear fuel and material, as well as materials that have become radiated as a result of use in nuclear activities or proximity to radioactive materials, must be disposed of in an approved radioactive waste management facility. One approved site is located at Whiteshell Laboratories, with the remainder located in Ontario, Quebec, and New Brunswick. As waste material must



be transported to one of these facilities for disposal, radioactive waste generated west of Ontario would be transported through the National Homeland of the Red River Métis. It is anticipated that if the Nuclear Waste Management Organization (NWMO) identifies the Wabigoon Lake-Ignace area as the host for Canada's long-term deep geological repository, additional transportation of radioactive material through the National Homeland of the Red River Métis will occur as well as the potential direct impacts on the lands and waters of Nation Homeland itself. Additionally, as Small Modular Reactors become established in Canada, the amount of nuclear material and radioactive waste being transported through the National Homeland of the Red River Métis is expected to continue to increase. This is expected in association with the proposed Small Modular Reactor located at Estevan Saskatchewan, which will have impacts on Red River Métis Citizens who live and harvest near Estevan, as well as potentially those located throughout the downstream reaches of the Souris and Assiniboine River watershed in Saskatchewan, North Dakota, and Manitoba.

In evaluating the Packaging and Transportation Safety and Control Area CNSC considers point-to-point transfer of nuclear material and radioactive waste but does not do so in a comprehensive life-cycle manner tracing materials from source to disposal. This presents a concern for the MMF which is interested in understanding not only the impacts of activities occurring at Whiteshell Laboratories, but also any extraction, production or transportation of radioactive material throughout the National Homeland of the Red River Métis. Subsection 1.1 of the new *Policy for Radioactive Waste Management and Decommissioning*, outlines the federal government's role in protecting the health, safety and security of people and the environment as "ensuring radioactive waste management and decommissioning activities, including transportation and disposal, are carried out in a comprehensive and integrated manner that prioritizes the health, safety and security of people and the environment, and ensures nuclear non-proliferation". Further, subsection 1.5 echoes this by outlining the role of waste generators and owners to "ensure protection of human health, safety, security and the environment, and ensure nuclear non-proliferation, for present and future generations in their radioactive waste management and decommissioning activities, including transportation and disposal, and in the development and operation of their radioactive waste management facilities, locations, and sites". The MMF interprets these two subsections as a call to action to ensure that all communities affected along the route from source to disposal are being appropriately prepared. We see a need for CNSC as well as licensees to provide an evaluation of systems responsible for safeguarding radioactive material throughout its life cycle, and reporting on community engagement, communication, and preparedness near appropriate nuclear facilities as well as along transportation corridors.

4.0 Conclusions and Recommendations

It is the MMF's expectation that all SCAs for Whiteshell Laboratories receive a "satisfactory" rating and that CNL take proactive measures to anticipate regulatory change and evolving needs as it related to safety performance programming. We recognize that Canada is in the process of re-evaluating many of its policies and legislation as it relates to the handling and disposal of radioactive waste and



management of facilities. As a result, there is a critical need for CNL to work with CNSC, Natural Resources Canada, and other regulatory bodies, in addition to the MMF and others to ensure that Whiteshell Laboratories is managed and decommissioned following the highest standards for environmental and human health protection. Further, as CNL continues along a path to decommissioning Whiteshell Laboratories, it is necessary that CNL, AECL, and CNSC uphold their duties as creatures of the Crown in committing to the *United Nations Declaration of the Rights of Indigenous Peoples Act*, in carrying out their respective duties.

The MMF offers the following recommendations with respect to Whiteshell Laboratories:

- CNL must commit to a standard for achieving a “satisfactory” rating for all SCA, which involves implementing appropriate internal safety performance oversight to ensure programming is not overlooked.
- CNL must continue to work proactively with applicable regulatory bodies to ensure that programming maintains in compliance with evolving regulations and policies.
- CNSC increase the number of on-site assessments, requiring an audit of training and equipment logs for all critical emergency response procedures on a bi-annual basis.
- The MMF’s input should be an integral part of land use planning and the definition and condition of the WL site in its final state. The CNSC should ensure that MMF input is facilitated and integrated into all planning phases of decommissioning for the WL site.
- Future RORs and supporting reports should consider community engagement, communication, and preparedness near appropriate nuclear facilities as well as along transportation corridors for nuclear material and radioactive waste.

