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Written submission from the Manitoba Métis Federation

Exposé oral

Mémoire de la Fédération des Métis du Manitoba

Canadian Nuclear Laboratories

Regulatory Oversight Report for Canadian Nuclear Laboratories Sites: 2022

Laboratoires Nucléaires Canadiens

Rapport de surveillance réglementaire des sites des Laboratoires Nucléaires Canadiens : 2022

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Regulatory Oversight Report for Canadian Nuclear Laboratories

Review of the 2022 Report

Manitoba Métis Federation

September 13, 2023

Contents

Executive Summary

The Manitoba Métis Federation (MMF) has retained Shared Value Solutions (SVS) to undertake a review of the Canadian Nuclear Safety Commission (CNSC) 2022 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 River Métis Citizens and shared with the MMF, it is apparent that Whiteshell Laboratories is 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.

Overall, the MMF is concerned about the lack of attention to detail with respect to some Safety and Control Areas (SCA). In previous years this was represented by the Security receiving a "below expectations" rating, and in 2022 CNL received a "below expectation" rating as it relates to the Whiteshell Laboratories Fire Prevention Plan. 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.

The following is a summary of our recommendations, again noting our focus on the WL site specifically:

- 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 perform internal audits and inspections of waste management logs (and other logs as applicable) to ensure they are in compliance with prescribed formats and can be used to trace activities in the future.

- 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.

- CNSC should expand the scope of SCA assessment to include holistic systems-based approaches.

- 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.

1.0 Introduction

The Manitoba Métis Federation (MMF) has retained Shared Value Solutions (SVS) to undertake a review of the Canadian Nuclear Safety Commission's (CNSC) Regulatory Oversight Report (ROR or "the Report") for Canadian Nuclear Laboratories (CNL) to support the Manitoba Métis Federation in ongoing communications with CNSC, CNL, and Atomic Energy of Canada Limited (AECL). The differentiation between these organizations is that AECL is a federal Crown corporation that receives funding for nuclear science and technology. The AECL has a long-term contract with CNL to fulfil their mandate, which is to "enable nuclear science and technology and protect the environment by fulfilling the Government of Canada's radioactive waste and decommissioning responsibilities," (AECL, 2018). AECL owns all CNL sites and liabilities, but CNL is responsible for day-to-day operations and maintenance (CNL, 2019). CNSC is a regulatory body that oversees and compels AECL, as the owner of the liability of CNL, to "regulate the use of nuclear energy and materials to protect health, safety, security and the environment," (CNSC, 2014).

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.

As part of the review, SVS we provided analysis of the 2022 ROR, examining the activities and information described in the report and supplementary materials to understand how they intersect with and may impact the rights, claims, and interests of the Red River Métis. The review assessed the adequacy of the information provided, including mitigation, management, and monitoring plans; assessed the intersection of past, current and future regulated activities described in the ROR on the Red River Métis' rights, claims and interests; and evaluated the incorporation and consideration of Métis knowledge and land use in the Report.

Using the results of the review, the MMF provided specific recommendations to address the identified issues and concerns regarding Red River Métis' values, rights, claims and interests which stem from potential impacts from the past, present and future management of the WL site. Due to the nature of the ROR, as a high-level summary of regulated operations, our recommendations focus on opportunities for the CNSC, AECL and CNL to improve involvement, inclusion and consultation with the MMF on monitoring and oversight of the WL facilities. Where applicable, we have also provided guidance on best practice mitigations, management and monitoring as they relate to the Red River Métis' rights, claims, and interests.

1.1 Regulatory Process

All federally regulated nuclear facilities are legislated by the CNSC. The sites at which these facilities are located require licences to carry out the operations and activities of the regulated facilities. The CNSC evaluates licence applications and grants licences once the site proponent completes a licensing application and meets all regulatory requirements. CNL operates several licenced sites across central Canada focusing on research related to nuclear technologies. These include technologies and related research evaluation for nuclear power generation, waste disposal, health and safety.

Each year, the CNSC completes a ROR, which presents an assessment of performance at all CNL sites on 14 safety and control areas (SCAs). The CNSC's assessment process focuses on radiation protection, environmental protection, and conventional health and safety; however, all SCAs are assessed by the CNSC, including the following:

1. Management system
2. Human performance management
3. Operating performance
4. Safety analysis
5. Physical design
6. Fitness for service
7. Radiation protection
8. Conventional health and safety
9. Environmental protection
10. Emergency management and fire protection
11. Waste management
12. Security
13. Safeguards and non-proliferation
14. Packaging and transport

The CNSC bases its assessments on site inspections, technical assessments, reviews of reports from CNL, reviews of events/incidents, and ongoing communication with CNL. The CNSC intends the ROR to be a summary of its oversight activities to ensure that CNL meets all requirements of licences it currently holds.

1.2 Whiteshell Laboratories Background

CNL is responsible for the operations and management of the Whiteshell Laboratories site. CNL operates the site through a Government-Owned Contractor-Operated model, whereby the assets and facilities are owned by the AECL but the operations and management fall to the contractor (CNL). Under this model, AECL retains ownership of the lands, assets and liabilities associated with CNL's licenses, including environmental remediation and other liabilities at the site (CNSC, 2019a). Ultimately, as an agent of the Crown, the responsibilities/liabilities of AECL are the responsibilities/liabilities of the Crown.

Whiteshell Laboratories hosts the Whiteshell Reactor #1 (WR1), SLOWPOKE demonstration reactor (SDR) and other facilities, which AECL established in the early 1960s. WR1 operated from 1965 to 1985, at which time the site was placed into a state of permanent shutdown. SDR operated from 1967 to 1990 and is also now permanently shut down. Preliminary decommissioning of the site occurred during the 1990s, when removal of nuclear fuel, coolant and moderators occurred. Removing these materials reduced the amount of radioactive materials on site and lowered the associated risk. Since this time, the site has been inactive and radioactive materials have been undergoing natural decay. Since the site has been shut down and radioactive material is no longer being shipped to the site for operations, the majority of short half-life isotopes have decayed, leaving Sr-90 and Cs-137 as the most abundant radioisotopes on site.

CNL has indicated that it will decommission the entire WL site in accordance with the Whiteshell Laboratories Detailed Decommissioning Plan (DDP), which has been partially written (CNSC, 2019a). The decommissioning approach previously approved for WR-1 (Licence No NRTEDL-W5-8.04/2018) included the removal and remediation of all activated and contaminated components of WR-1 and associated facilities, including the reactor core, is currently being reconsidered. Instead, CNL is proposing to demolish the WR-1 building and decommission the nuclear waste in situ (ISD – In Situ Decommissioning). CNL states it will protect the on-site disposal facilities with an engineered cover to prevent intrusion of soil and groundwater and allow the radioactive contaminants to decay to safe levels. A licence for the ISD proposal has not yet been applied for by CNL or granted by CNSC.

1.3 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*).

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.

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. The 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 country 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 that have equal constitutional status and protection as Aboriginal rights held by First Nations. Our citizens, including the harvesters, rely on and use the lands, waters, and resources of our traditional territory throughout the Province of Manitoba and elsewhere, including in and around the area of the Project, to exercise their constitutionally protected rights and to maintain their distinct Red River Métis customs, traditions, and culture.

2.2 The 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 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 our community. 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 Metis, 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.

The Project of this Appeal has 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, needs to be followed. The Project is located within traditional Red River Métis territory, 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]

Unlike First Nations that have had their historic practices, customs, and traditions recognized, converted, and modified by treaties and the *Natural Resource Transfer Agreement, 1930 ("NRTA"),* the Red River Métis' pre-existing practices, customs, and traditions continue to exist and be protected as Aboriginal rights. First Nations' treaty rights in Manitoba are, for example, inherently limited by the Crown's power to take up lands.[3] Métis rights, in contrast, are not tempered by the "taking up" clauses

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[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).

[3] *Mikisew Cree First Nation v. Canada* (Minister of Canadian Heritage), 2005 SCC 69 at para 56. ("Mikisew")

found in historic treaties with First Nations. Métis rights must be respected as they are, distinct from First Nations' rights and unmodified by legislation.

2.3 The Manitoba Métis Federation as the National Government Representative 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 centered 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 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 and on July 6, 2021, it signed along with the Government of Canada, 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 provincial levels. As part of this governance structure, the MMF maintains a Registry of Red River Métis Citizens.[4] By applying for citizenship with the MMF, individuals are authorizing the MMF as their chosen and elected representative for the purposes clearly set out in

[4] 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.

its Constitution,[5] including as related to the collective rights, claims, and interests of the Red River Métis.[6]

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 River Métis` collective rights, interests, and claims. This authorization is grounded in the MMF's democratic processes that ensure 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 135 Locals throughout Manitoba (Figure 1). There are more than three thousand Citizens who live outside of Manitoba. All MMF Citizens are Citizens 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.

[5] *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."

[6] *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."

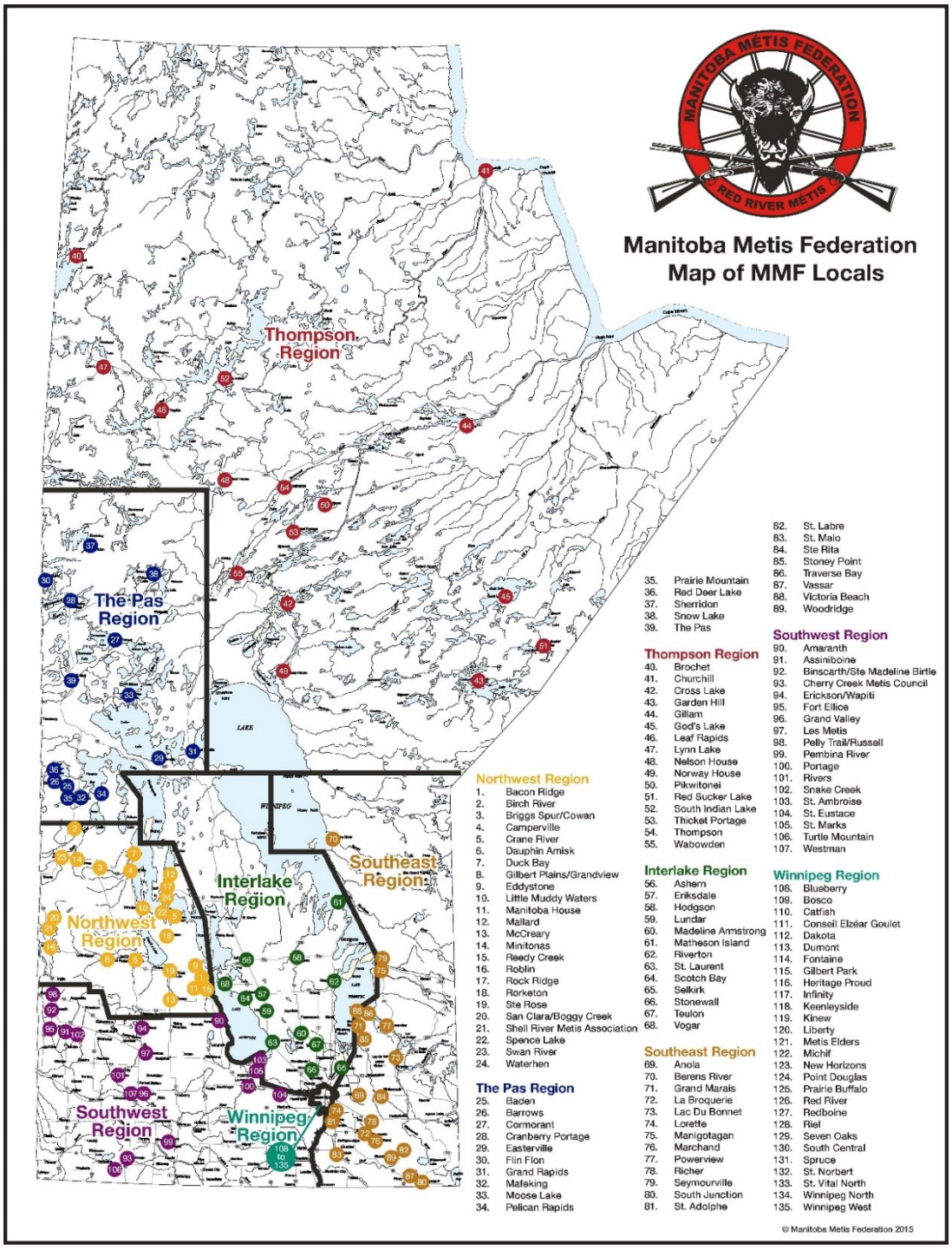

Figure 1 MMF Regions and Locals

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 child and family services to MMF 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 Authority, the directors of which is 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."[7] 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.*[8]

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 Manitoba 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.*[9]

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[7] *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. .

[8] Manitoba Métis Policy, September 2010 at 4, 12, online (PDF): http://www.gov.mb.ca/ imr/ir/major-initiatives/pubs/Metispolicy_en.pdf

[9] 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.*[10] 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.*[11]

On July 6, 2021, the MMF and Canada signed the Manitoba Métis Self-Government Recognition and Implementation Agreement which immediately recognized the MMF as the national government of the Red River Métis.

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 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. We intend to hold CNL and AECL responsible to 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

[10] *MMF Case, supra* note 6 at para 44.

[11] MMF-Canada Framework Agreement on Advancing Reconciliation, November 15, 2016, Preamble.

Laboratories, resulting in the issuance of an order to CNL to implement changes to CNL's security program at the site. CNL continued to develop and implement a revised program that were intended to address deficiencies, with full implementation being deployed as of May 1, 2020. However, in June 202, 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* is currently open for public consultation. This Bill if passed would alter 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 can maintain its Satisfactory rating.

3.2 Waste Management and Record Keeping

The MMF notes that in October 2022, Notices of Non-Compliance were issued regarding the maintenance of waste management logs as well as in review of the waste management program overall. In each case these were rectified and CNSC now considered this Notices of Non-Compliance closed. We urge CNL to implement appropriate training and programming to ensure the issues do not happen again in the future. Waste management, especially that which is considered hazardous or radioactive is essential to minimize potential risks to the environment, staff, and others who may interact with it. It is essential that CNL follow prescribed measures in ensuring that all waste material is appropriately logged, handled, and disposed of.

3.3 Radiation Dosages

The MMF would like to acknowledge CNL in its efforts to continue to reduce possible worker exposure to radiation. While we acknowledge that as Whiteshell Laboratories continues to engage in decommissioning activities the on-site risks should continue to decline, we view the continued reduction

in Maximum Effective Dose and Average Effective Dose from 2020-2022 as a reflection of CNL's efforts to minimize direct exposure on site.

3.4 Fire Protection Program

Perhaps most concerning in review of the 2022 ROR are the issues that were identified in association with CNL's Fire Protection Program. In April 2023, CNL identified deficiencies in CNL's training records, procedures for equipment inspection, testing and maintenance, as well as the use or incomplete or expired personal protective equipment. An incident report issued on May 19, 2023 noted further deficiencies including: several fire hydrants identified as unavailable (8 of 28), fixed suppression systems (sprinklers) had not been properly maintained and tested in Whiteshell Reactor-1 (WR-1), and emergency lighting in buildings had not been tested to National Fire Protection Association (NFPA) standards.

This is simply unacceptable to the MMF. The Fire Protection Program is one of the more important safety plans in place for Whiteshell Laboratories, as it is designed to ensure that Whiteshell Laboratories is able to respond effectively in the event of a fire. Fire poses a very real threat to Whiteshell Laboratories, which is compounded by the facility's relatively rural location. CNL must continually maintain a position in which is it prepared to deal with fire originating from within the Whiteshell Laboratories facility as well as externally (e.g., forest fire), until a time at which CNL's resource can be relieved. Resources from the Pinawa fire department, may similarly be exhausted in the event of a complex fire, and therefore rely on support from specialized teams in Winnipeg. It is therefore essential that CNL be self sufficient and prepared to respond.

While the poor maintenance of the Fire Protection Program is concerning from a practical perspective, it also draws into question CNL's ability to implement and maintain appropriate administrative oversight for health and safety programming at Whiteshell Laboratories. Specifically, we are concerned that as CNL continues to work towards decommissioning of the Whiteshell Laboratories facilities, including the proposed in situ decommissioning of Whiteshell Reactor 1 (WR-1), the implementation and maintenance of administrative or institutional controls and programming will become relied upon more to ensure on site safety.

CNL envisions an end state for the Whiteshell Laboratories site in which in situ decommissioning has left section of the site requiring institutional controls, as well as various other forms of physical or regulatory barriers as a method of protecting the environment and health and safety of those who use the site. This plan will rely on CNL developing, implementing, and enforcing a plan to restrict activities on site. CNL's inability to maintain oversight over the Fire Protection Program under operating conditions, leads us to question whether CNL will be responsible in maintaining appropriate oversight over institutional controls post-decommissioning where operations will be no longer led on site.

The MMF recognizes that on a surficial level, the relationship between the management of Fire Protection Program and future administrative or institution controls is fleeting. However, as the delivery and maintenance of administrative or institution controls remotely for generations to come 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 similar programming during this phase of the project.

3.5 Holistic Systems Assessment Approach

In considering how CNSC assesses the performance of CNL with respect to the various safety components for Whiteshell Laboratories, it is essential that CNSC take a holistic approach. This includes not only assessing the implementation and maintenance of respective safety plans, but also considering the entirety of systems and infrastructure that support these plans. For example, in the case of Whiteshell Laboratories' Fire Protection Program, we recognize that deficiencies were identified in training and equipment, however, what remains unknown is whether or not systems such as the water supply pumps have appropriate redundancy both in the number of pumps, but also their power sources, capacity, and reach. Considering such factors is important in the face of changing potential sources of fire at Whiteshell Laboratories, which may increasingly come from wildlife risks rather than those associated with operations.

In considering improvements for the 2023 ROR cycle, we see it as beneficial for CNL and/or CNSC to provide additional insight into how assessments are conducted, the factors considered within each assessment, and how CNSC may consider a holistic systems approach in evaluating programming.

3.6 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.

3.7 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 Process Facility, 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 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 necessarily be transported through National Homeland of the Red River Métis. It is anticipated that if the Nuclear Waste Management Organization identifies the Wabigoon Lake-Ignace area as the host for Canada's long-term deep geological repository, additional transportation or 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.

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 who are 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 an 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 as 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 perform internal audits and inspections of waste management logs (and other logs as applicable) to ensure they are in compliance with prescribed formats and can be used to trace activities in the future.

- 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.

- CNSC should expand the scope of SCA assessment to include holistic systems-based approaches.

- 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.