



**Written submission from the
Manitoba Métis Federation**

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

**Regulatory Oversight Report for
Uranium Mines, Mills, Historic and
Decommissioned Sites in Canada: 2023**

**Rapport de surveillance réglementaire
des mines et usines de concentration
d'uranium et des sites historiques et
déclassés au Canada : 2023**

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2023 Regulatory Oversight Report for Uranium Mines and Mills

Written Intervention

Manitoba Métis Federation

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Executive Summary

The Regulatory Oversight Report (ROR) for Uranium Mines, Mills, and Decommissioned Sites in Canada evaluates compliance and regulatory performance of facilities within Canada, with a focus on the active mines and mills located in the Athabasca Basin, northern Saskatchewan. These facilities operate in the National Homeland of the Red River Métis and are assessed against 14 Safety Control Areas (SCAs) to ensure safety and environmental protection. This summary highlights key findings, concerns, and recommendations from the Manitoba Métis Federation (MMF), representing the Red River Métis.

Compliance and Non-Compliance Trends:

- A significant increase in non-compliance incidents was reported in 2022 and 2023 compared to 2019-2021.
- All SCAs were rated “Satisfactory” despite these trends, raising concerns about inconsistencies between individual incidents and overall evaluations.

Emergency Management and Fire Protection:

- Implementation delays of CSA N393-13 Fire Protection Standards at Cameco facilities highlighted operational complexities and risks in emergency response due to expired or insufficient Personal Protective Equipment (PPE).
- Increased wildfire activity and limited emergency resources in remote areas present additional risks.

Environmental Protection:

- Discrepancies in reporting environmental releases were identified across the CNSC ROR, event reporting pages, and licensee resources, leading to public mistrust and miscommunication.
- Real-time environmental data, including public dose exposure information, is lacking, impacting the ability of Red River Métis Citizens to make informed decisions regarding land use.

Waste Management and Decommissioning:

- Progressive reclamation efforts and transparency in reporting compliance with Preliminary and Detailed Decommissioning Plans (PDP/DDPs) require enhancement to ensure alignment with end-state land-use goals.

Packaging and Transport:



- Minimal information on the transport of nuclear substances, including incident reporting and emergency preparedness, remains a critical gap in the ROR process.

Psycho-Social Concerns:

- The psychological impacts of UMM operations, such as fear and behavioural changes, remain unaddressed, though they influence community wellness and perceptions of safety.

Recommendations:

Improved Compliance Evaluation:

- Conduct root cause analysis for the increase in non-compliance and provide a clearer context for SCA evaluations, ensuring consistency with observed facility-specific incidents.
- Strengthen collaboration with licensees to enhance safety culture and reverse trends of non-compliance.

Enhanced Emergency Preparedness:

- Address delays in implementing CSA N393-13, focusing on site-specific challenges and wildfire risks.
- Conduct regular evaluations of emergency response capabilities, especially in remote UMM locations.

Transparency in Environmental Reporting:

- Ensure alignment between the ROR, CNSC reporting platforms, and licensee disclosures for consistency and accuracy.
- Implement real-time or near-real-time environmental monitoring systems accessible to Red River Métis Citizens.

Strengthen Waste Management Oversight:

- Report annually on UMM progress toward decommissioning goals, PDP/DDP conformity, and end-state land-use objectives.

Address Transport Risks:

- Expand ROR content to include detailed transportation incident reporting and annual evaluations of emergency preparedness along key corridors.



Improved Consideration Psycho-Social Impacts:

- Collaborate with Indigenous and non-Indigenous groups to assess the perceived impacts of UMM operations and incorporate findings into the ROR process to improve community engagement and trust.

The MMF underscores the importance of meaningful engagement with the Red River Métis, emphasizing the need for improved transparency, communication, and collaboration to align industry activities with the rights, values, and interests of Red River Métis Citizens. These recommendations aim to enhance regulatory oversight while addressing both realized and perceived impacts of UMM operations on communities and the environment.



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1.0 Introduction

The Regulatory Oversight Report (ROR) for Uranium Mines, Mills, (UMMs) Historic and Decommissioned Sites in Canada provides information regarding the ongoing activities, compliance, and regulatory activities occurring at active and decommissioned UMM facilities in Canada. Currently, there are five operating mines and mills all located within the National Homeland of the Red River Métis, in the Athabasca basin of northern Saskatchewan. These facilities are evaluated on fourteen Safety Control Areas (SCAs), aimed to assess compliance related to safety and environmental protection. Specifically, the fourteen SCAs include:

- Management Systems
- Human Performance Management
- Operating Performance
- Safety Analysis
- Physical Design
- Fitness for Service
- Radiation Protection
- Conventional Health and Safety
- Environmental Protection
- Emergency Management and Fire Protection
- Waste Management
- Security
- Safeguards and Non-Proliferation
- Packaging and Transport

The Manitoba Métis Federation in representing the interests and concerns of the Red River Métis have been active in engaging with the CNSC regarding the ROR for Canadian Nuclear Laboratories and the ROR for the Use of Nuclear Substances in Canada, however, in considering the potential for interaction between the nuclear industry across the National Homeland of the Red River Métis, and the rights, interests, and values of Red River Métis Citizens, the MMF has identified interest in examining regulatory oversight and performance of the entire industry, throughout the entire lifecycle of nuclear materials.

Through the review of the ROR for UMMs, the MMF looks to better understand regulatory performance as it relates to the production, use and movement of nuclear substances within the National Homeland of the Red River Métis and provide comment and recommendations speaking to the interests of the Red River Métis for consideration by the CNSC.



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 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 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.

The application of the CER Rules of Practice and Procedure 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, must be followed. Federally regulated, energy projects are located within the National Homeland of the Red River Métis. The "postage stamp province" of Manitoba was the birthplace of the Red River Métis. 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

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 centered around the Red River Settlement and throughout the Northwest. As described by Louis Riel in his 1885 memoirs, Métis

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).



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, national self-government representative of the Red River Métis. On November 30, 2024 the Red River Métis and His Majesty the King signed the Red River Métis Self-Government Recognition and Implementation Treaty. The Treaty recognizes the Manitoba Métis Federation as the government of the Red River Métis.

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 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 (**Error! Reference source not found.**). There are more than three thousand Citizens who live outside of Manitoba. All MMF Citizens are

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."



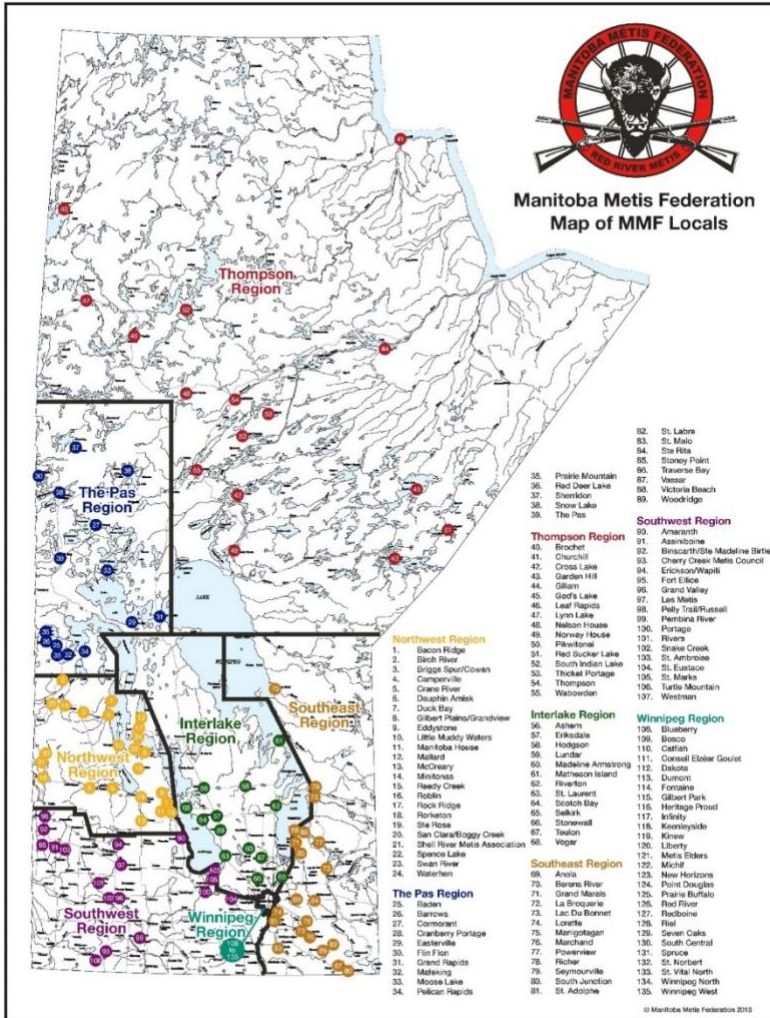


Figure 1. Manitoba Métis Federation (MMF) Regions.

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 Services 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

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.

The MMF, as the duly authorized government 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



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

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.

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): http://www.gov.mb.ca/imr/ir/major-initiatives/pubs/Metispolicy_en.pdf

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

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



[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. As noted above, that Treaty was signed on November 30, 2024.

Consistent with the direction of our Citizens, MMF removed the arbitrary provincial borders from our Constitution that separated Red River Métis who live outside of Manitoba from those within. Today, the MMF represents over 125,000 Citizens within Manitoba, and thousands more across our National Homeland, and around the world. Because of this 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 signing of the Treaty with His Majesty the King, and passage of its implementation legislation will enable the Red River Métis, acting through its National Government the MMF, to renew its partnership with Canada.

3.0 Review of the 2023 Regulatory Oversight Report for Uranium Mills and Mines

3.1 Uranium Mines and Mill Site Safety Compliance

3.1.1 Explanation for the Increase in Non-Compliance

The number of non-compliances has surged in 2022 and 2023, with 2023 having the highest instances of non-compliance reported. The MMF notes that while some of this may be attributed to the slight increase in number of inspections in 2022 and 2023 compared to 2019-2021. It is necessary to better understand whether the increase in non-compliance is a result of a change in inspection standards (i.e., inspections are conducted more rigorously and as a result are more likely to identify issues), or whether this increase in non-compliance is a result of a relaxation in compliance oversight by UMM licensees. The 2023 ROR as presented fails to speculate on or understand the root cause of this increase. The MMF is concerned that

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



this trend may be a symptom of more significant industry-wide issues, such as a lack of preparedness for evolving regulatory standards or a reduced focus on prioritizing safety culture.

The MMF recommends that the CNSC make improved effort to work with Licensees to better understand industry-wide trends in non-compliance and provide direction to licensee on programming that can be developed or implemented to reverse this trend and improve the overall commitment to safety.

3.1.2 Evaluation of SCAs

In 2023, all fourteen Safety Control Areas (SCAs) were found to be “Satisfactory”, which is the highest level of compliance a licensee can achieve within the ROR framework. However, the MMF is concerned regarding the apparent disconnect between the overall SCA evaluation and incidents of non-compliance observed at individual UMM facilities. Perhaps most notable is the significant increase in instances of non-compliance in 2022 (79 + 1 order) and 2023 (93 + 1 order) relative to previous years (average of 18 non-compliances per year from 2019-2021 and no orders issued; Figure 2).

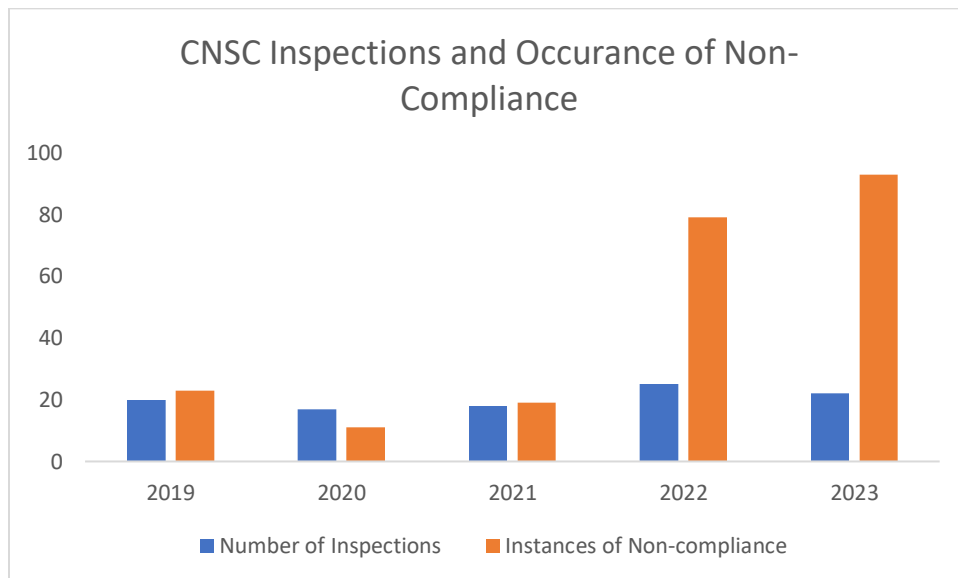


Figure 2. CSNC inspections (blue) and occurrence of non-compliance (orange) from 2019-2023.

As described throughout the ROR report, many of the non-compliances reported were identified as having a low risk to safety, however, the determination of what constitutes *low risk* is somewhat subjective. For example, as noted in Section 4.10 Emergency Management and Fire Protection, an inspection at the Rabbit Lake Operation resulted in an Inspector's Order. This was followed by the discovery that PPE used by the emergency response team had expired by between 3 and 10 years, and further, insufficient quantities of PPE were found on site.



The MMF recognizes that this issue is relatively easy to remedy, simply through the procurement of additional PPE, it appears to be a serious risk to the effectiveness of the emergency response team. The MMF questions the CNSC as to why this occurrence did not result in a downgrade of the SCA evaluation for Rabbit Lake and is further concerned that by evaluating this SCA as "satisfactory" the CNSC sends a message to licensees that seemingly minor non-compliances, even if they may have broad potential for adverse impacts is acceptable.

In providing an evaluation for SCAs in the ROR, the MMF recommends that the CNSC provide additional context for the evaluation criteria as well as facility-specific context for why the SCA was assigned the corresponding rating.

3.2 Emergency Management and Fire Protection

3.2.1 Implementation of CSA N393-13

REGDOC 2.10.2 *Fire Protection* is currently under review, however, aspects of that REGDOC, including requirements for Cameco facilities to implement standards outlined in CSA N393-13 were to occur by December 2023. The ROR notes that complexities were found in the implementation of this standard at the Cameco facilities, which have delayed implementation.

The MMF is interested in better understanding the complexities encountered with implementing CSA N393-13 at the Cameco UMM facilities. CSA N393-13 guides the development and implementation of Fire Protection measures for facilities that process, handle, or store nuclear substances. This is important for UMM in Canada given the location in which they are found, which in many instances are remote areas of northern Saskatchewan (for operating facilities), as well as other remote locations elsewhere in Canada. Access to support from municipal fire fighting services may not be available, or if available, may have limited resources to handle a complex fire emergency such as that which may occur at a UMM.

Additionally, as witnessed across Canada, wildfire activity has increased in frequency and intensity. The remote location of UMMs means that wildfires may go undetected for longer periods than locations in southern Canada, allowing fires to build uncontrolled before intervention. The threat wildfires present to UMM is one of the greatest external threats to the facilities. As a result, best practices must be employed to intervene and protect mine facilities especially those areas which interact with nuclear substances. Fire Prevention will prevent the release of radioactive contaminants to the environment.



3.3 Environmental Protection

3.3.1 Communication Regarding Reportable Release to the Environment

The MMF is concerned with apparent miscommunication between Reportable Releases to the Environment as described in the ROR, the CNSC's *Nuclear-Related Event Reports* webpage¹¹, and the Licensee's webpage¹² for reportable events. For example, Section 3.1.2 of the ROR describes seven releases to the environment at the Key Lake facility, which were reported to the CNSC. However, according to the CNSC's *Nuclear-Related Event Reports* webpage only a single incident was reported in 2023 for all UMMs. Curiously, this incident which occurred on October 8, 2023, in which industrial water was released to the environment, was not described in the seven outlined reportable incidents in the ROR. Further, the Licensee's webpage which reports incidents at McArthur River and Key Lake together, identifies 17 reportable incidents that occurred in 2023.

Recognizing that the Licensee's standard for reporting may be higher than that required by the CNSC, to reflect reporting requirements by other regulators or simply to increase public transparency. We suggest that some level of disagreement between what the Licensee reports and that which are CNSC reportable incidents may be appropriate. However, pulling from this example alone, we are concerned that both the number and substance of incidents being reported in the ROR, the CNSC's Nuclear-related events page, and Licensee's webpage do not appear to align.

The MMF believe that while the ROR is intended to provide a contextualized description of incidents and compliance from the past year, it does not provide real-time or near-real-time information on reportable incidents. As a result, the MMF and Red River Métis Citizens are unable to rely on information on the CNSC's webpage or the ROR. Further, when attempting to better understand reportable incidents as they relate to transportation or in-transport reportable events, as they are not discussed or reported within the ROR, the MMF utilized the CNSC's Events Reporting webpage to determine incidents which may have occurred in 2023. While the most recent incident reported here was in 2018, the MMF lacks confidence in the accuracy of this information.

The MMF requests that the CNSC examine how information regarding reportable events are communicated through the ROR, other CNSC resources, and Licensee resources to ensure that a)

¹¹ <https://www.cnsccsn.gc.ca/eng/acts-and-regulations/event-reports-for-major-nuclear-facilities/>

¹² <https://www.cameco.com/businesses/uranium-operations/canada/mcarthur-river-key-lake/environment-safety#environmental-monitoring>



information is accurate and, b) made available within a reasonable time period to provide real-time or near-real-time information.

3.4 Environmental Release and the Implementation of REGDOC 2.9.2

The MMF maintains a keen interest in the implementation of REGDOC 2.9.2, as it acts to improve transparency and oversight over releases to the environment by licensees. For UMMs, environmental releases are generally controlled by other provincial or federal regulations, however, those guidelines represent a patchwork of regulatory limits. If implemented correctly the substance of REGDOC 2.9.2 would require that UMMs develop a single guidance framework which outlines the measures which are in place to prevent release to the environment, and for new facilities, establish proposed release limits and action levels. For existing facilities, release limits and action levels should already exist within licensing conditions.

The MMF supports the adoption and implementation of REGDOC 2.9.2, however, feels there is an additional opportunity for improved public disclosure and communication with potentially affected Red River Métis communities and Citizens. For instance, while facilities are obligated to consider public dose exposure within their environmental monitoring and reporting, this information is only disclosed publicly following the steps outlined in REGDOC 3.1.2, requiring annual monitoring results to be posted publicly. While we do not disagree that this information is indeed available, the MMF is concerned that it is not accessible to laypersons, and further is not provided in real time. As a result, Red River Métis Citizens who may harvest from lands around a UMM may not have meaningful access to real-time environmental data including that related to environmental release and public dose exposure, information which may be used to influence decisions made by Citizens to harvest or avoid an area.

The MMF recommends that CNSC and/or Licensees work to collaborate to understand appropriate communication channels for relaying information of interest to the MMF and Red River Métis Citizens in real-time.

3.5 Waste Management

3.5.1 Decommissioning and Waste Management

Decommissioning of a UMM, similar to other Class I or II nuclear facilities is guided by REGDOC 2.11.2 - Decommissioning. UMMs are required during the development and siting phase to develop a preliminary decommissioning plan (PDP), which is submitted to the CNSC prior to the submission of a licence to possess, manage use, or store nuclear substances. The PDP, like a closure plan in mining, is progressively updated, where needed to reflect the appropriate level of detail required for the respective licensed



activities. As the UMM approaches the decommissioning stage a detailed decommissioning plan (DDP) is developed, adding detail to the PDP.

Decommissioning typically has four phases as identified by REGDOC 2.11.2:

- planning for decommissioning – begins at siting (or construction for Class II nuclear facilities, or prior to conduct of licensed nuclear substance activities) and continues through operation until the preparation for decommissioning phase
- preparation for decommissioning – begins with the decision to cease operations or the conduct of activities, and includes activities for permanent shutdown or cessation and for the transition to a stable state for decommissioning
- execution of decommissioning – begins when decommissioning activities commence, which may include decontamination, dismantling and/or clean-up, and any period of storage with surveillance, until the end state is achieved
- completion of decommissioning – involves verifying that decommissioning activities have been completed and that the end state has been achieved. Decommissioning ends with the release of the facility, location or site from CNSC regulatory control. This occurs even if the CNSC subsequently authorizes the site for any other licensed activity in the future, or if unrestricted release cannot be achieved, institutional controls are required to be in place.

Of note, for UMMs which are required to be licenced and required to hold a decommissioning strategy but due to their age no strategy has been developed, UMMs must develop a decommissioning strategy as soon as possible and can consider the following options individually or in combination:

- a) immediate (prompt) decommissioning – to decontaminate, dismantle and/or clean up without any planned delays
- b) deferred decommissioning –
 - i. to place the facility, location or site in a period of storage with surveillance (sometimes referred to as care and maintenance), followed by decontamination, dismantling and/or clean-up
 - ii. to conduct activities directed at placing certain buildings or facilities, locations or sites in a safe and secure interim end state, followed by a period of storage with surveillance, and ultimately, decontamination, dismantling and/or clean-up



- c) in situ decommissioning – to place the facility, location or site, or portions thereof, in a safe and secure condition in which some or all of the radioactive contaminants are disposed of in place, which may result in the creation of a waste disposal site

The closure strategy should always be informed by an end-state plan which outlines goals for how the lands and waters affected by a project should be left at the completion of the licencing process. Because of this deterministic approach to decommissioning, it is essential that Licensees be continually working toward efforts to realize end-state goals.

UMMs are required to perform radiological and non-radiological surveys throughout the various phases in the lifecycle to support decommissioning with among other objectives, an aim to achieve progressive and systematic reductions in radiological and non-radiological hazards.

The MMF in considering the licence requirements under REGDOC 2.11.2, as well as the ROR SCA of Waste Management, views an important opportunity for CNSC to provide transparency in evaluating efforts by UMMs to a) minimize radioactive waste and other contaminated liabilities, and b) efforts to progressively reclaim licenced facilities, with an intentional effort to continue to work towards ensuring current and future radiological stability. Through the ROR process, we see an opportunity for CNSC to better report on the conformity of UMMs to PDP/DDPs as well as end land-use objectives, based on actions taken during the evaluation year.

3.6 Packaging and Transport

The MMF remains concerned that nuclear material in Canada still does not have a cohesive cradle-to-grave overview or assessment process. The life of nuclear substances is discussed broadly within the various RORs that the CNSC is responsible for producing. In review of the ROR for UMMs as well as that for the use of nuclear substances and for Canadian Nuclear Laboratories, the MMF is concerned that the CNSC has focused on issues associated with the handling of material at the site, and as a result is focused on health and safety and radiation protection primarily. We agree that a primary effort for assessment should be placed on areas where nuclear substances represent the greatest threat to the environment and public safety such as where substances are found in high quantities (e.g., mines and refinement centres) or concentrations (e.g., power generating stations). However, the transportation of substances is also of great concern given that nuclear substances are inherently allowed to pass through areas of lower control, and therefore elevated risk to the environment and public safety.

Within the scope of the ROR for UMMs, minimal information is provided regarding the packaging and transport of nuclear substances exported from UMM sites. Transportation of nuclear substances continues to be a concern for the MMF given the amount which is transported across the National Homeland of the Red River Métis. Because of this, the MMF requests that moving forward CNSC endeavour to support the improved understanding of the following through the ROR process or other appropriate CNSC reporting:



- a) Description of the number of reportable incidents related to the transport of nuclear materials, including a breakdown of the description of the incident, location of the incident, and appropriate root cause assessment.
- b) Evaluation of emergency preparedness by first responders to an incident involving a nuclear substance along primary transportation corridor routes from the Athabasca basin to refinement centres or ports of export for material that is exported beyond Canadian borders. It is recommended that a similar exercise be conducted annually for primary transportation corridors in which radioactive waste is transported.

3.7 Psycho-Social Concerns

In considering the potential impacts of UMMs, UMM effects and subsequent impacts can broadly be considered within two categories.

- a) Impacts related to realized direct effects. These effects are derived from the direct and measurable implications activities associated with UMMs have on the biophysical, health, and social environment which surrounds the UMM. Examples of this would include detrimental impacts on fish or wildlife populations. Impacts would include the release of contaminants or shifts in behavioural patterns of nearby communities from the effects of UMM operations such as noise, vibrations, and/or other disturbances. Addressing these effects has long been the focus of CNSC's regulation, and intention behind the fourteen identified SCAs considered within the ROR.
- b) Impacts related to perceived effects. These effects while still derived from UMM activities, are a result of fear, misinformation, perceptions, and/or other beliefs about harm which could arise as a result of interaction with nuclear or radioactive substances. Perceived and psychologically based effects can be associated with any form of development project. However, is often prevalent with nuclear projects given the complicated social history of the nuclear industry including the socially engineered fear that radioactive material *is* harmful and should be avoided. The impacts of these effects, similar to direct realized effects, must be addressed, as the impacts they have on behaviour, wellness, and social fabric, can be equivalent to the impacts of physical disturbance.

While the ROR and other efforts of the CNSC endeavour to transparently report compliance; psychological effects from nuclear substances are not directly quantified, or assessed. The MMF sees great opportunity for the ROR process as it relates to UMMs and other sectors reported on through the ROR process. The CNSC has an opportunity to consider and report on the perceived and psychological effects of licensee activities. Given that the fourteen SCAs through various avenues support understanding safety and environmental compliance, CNSC is well positioned to consider compliance of both individual facilities, and the nuclear sector (defined by the ROR as a whole), relative to public perceptions, which may include fear, impacts to wellness, and behavioural modifications (e.g., avoidance of an area or activity). The CNSC



in collaboration with the MMF, other Indigenous groups and non-Indigenous groups could work to identify methods of collecting information on perceptions and using the ROR process as a mechanism to report on these findings. Further, the CNSC, proponents, and the MMF could use this information to better inform and target additional efforts to address these concerns.

4.0 Conclusions and Recommendations

The 2023 Regulatory Oversight Report (ROR) for Uranium Mines and Mills (UMMs) reveals several critical trends and gaps in compliance, communication, and transparency. The following conclusions and recommendations summarize the findings and provide actionable steps to address identified issues:

4.1 Addressing the Rise in Non-Compliance

The significant increase in non-compliance incidents in 2022 and 2023 raises concerns about systemic issues in the uranium mining and milling sector. Despite the "Satisfactory" ratings across all Safety Control Areas (SCAs), the disconnect between these ratings and actual compliance trends undermines the reliability of evaluations.

4.1.1 Recommendations:

- The Canadian Nuclear Safety Commission (CNSC) should collaborate with licensees to investigate root causes of the rise in non-compliance, considering changes in inspection rigor and industry-wide safety culture.
- Provide transparent criteria and context for SCA evaluations, particularly when significant non-compliances are present, to ensure consistency and trust in oversight ratings.
- Develop and promote targeted safety programming and initiatives to strengthen safety culture and compliance across the industry.

4.2 Enhancing Emergency Preparedness

Delays in implementing CSA N393-13 fire protection standards and instances of inadequate emergency response equipment indicate vulnerabilities in emergency preparedness. Given the remote locations of UMMs and the increasing risks of wildfires, robust measures are critical.

4.2.1 Recommendations

- Expedite the implementation of CSA N393-13 across all UMM facilities, with tailored solutions for site-specific challenges in remote areas.



- Prioritize wildfire preparedness plans, leveraging best practices to safeguard facilities and mitigate the risks of radioactive contamination during fire events.

4.3 Improving Environmental Protection and Communication

Discrepancies in reported environmental incidents between the ROR, CNSC's public resources, and licensee reporting highlight a lack of alignment and timely communication.

4.3.1 Recommendations:

- Standardize reporting frameworks across CNSC, licensees, and other stakeholders to ensure consistency and accuracy in public disclosures of reportable environmental incidents.
- Implement real-time or near-real-time data-sharing mechanisms for environmental releases, ensuring communities, particularly Indigenous groups like the Red River Métis, have timely access to information critical for decision-making.

4.4 Advancing Waste Management and Decommissioning Practices

UMMs must demonstrate continuous progress toward end-state goals in decommissioning and waste management while ensuring transparency in compliance with decommissioning plans.

4.4.1 Recommendations:

- Strengthen reporting on licensee adherence to Preliminary and Detailed Decommissioning Plans, emphasizing efforts to minimize radioactive waste and achieve progressive reclamation.
- Highlight evaluations of conformity with end land-use objectives, ensuring transparency in the lifecycle management of UMM sites.

4.5 Strengthening Oversight of Packaging and Transport

Limited information on the transport of nuclear materials leaves gaps in understanding risks and preparedness related to packaging and transit incidents.



4.5.1 Recommendations:

- Include detailed assessments of transportation-related incidents, root causes, and emergency preparedness in RORs to provide a comprehensive view of risks associated with nuclear material transit.
- Conduct annual evaluations of emergency preparedness along primary transportation corridors, with a focus on first-responder capabilities.

4.6 Addressing Psycho-Social Concerns

The psychological and perceived impacts of UMM operations remain underexplored in the ROR, despite their significant influence on community behavior and well-being.

4.6.1 Recommendations:

- Develop methods for assessing and reporting on public perceptions, fear, and psychological impacts associated with UMM operations and the nuclear industry at large.
- Collaborate with Indigenous and non-Indigenous groups to identify targeted interventions, fostering trust and addressing public concerns through transparent communication and education.

By addressing these key areas, the CNSC can strengthen regulatory oversight, build public confidence, and ensure that uranium mining and milling operations meet the highest safety, environmental, and community standards.

