Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire

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Written submission from Orano Canada Inc.

Mémoire d’ Orano Canada Inc.

In the Matter of the

À l’égard de

Orano Canada Inc., Cluff Lake Project

Orano Canada Inc., Projet de Cluff Lake

Request to Revoke the Current Licence and Release the Cluff Lake Project to the Institutional Control Program

Demande visant à révoquer le permis pour le projet de Cluff Lake et à transférer la propriété au Programme de contrôle institutionnel

Commission Public Hearing

Audience publique de la Commission

March 1-2, 2023

1-2 mars 2023

Canada

Orano Canada Inc.

Cluff Lake Project

CNSC Commission Member Document

Date Submitted: November 2022

One Day Public Hearing Scheduled for March 2023

Request for a Licensing Decision: Revocation and exemption

UMDL-MINEMILL-CLUFF.00/2024

November 2022

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Executive Summary

The Cluff Lake Project, located in northwestern Saskatchewan on Treaty 8 territory and the traditional homeland of the Metis, commenced mining and milling operations in 1980. Over a 22-year operating life five ore bodies were mined producing 28 million kilograms of uranium concentrate (U_3O_8) and 8,000 troy ounces of gold. Following a comprehensive environmental assessment and licensing process, including extensive public engagement, regulatory approval for decommissioning was granted in 2004 with approved end-state decommissioning objectives. Physical decommissioning works to achieve long-term decommissioning objectives were completed by 2006.

Continuous site occupancy ended in 2013 when a program to remove infrastructure that had remained in support of on-site monitoring and maintenance and prepare the site for open public access was completed. In the summers of 2017 and 2018, final earthworks were conducted to ready the site for eventual transfer to the Province of Saskatchewan under the Institutional Control Program (IC Program). Decommissioning of remaining monitoring stations not required for long term monitoring was completed in 2020 and 2021.

In 2019, both the Canadian Nuclear Safety Commission (CNSC) and Saskatchewan Ministry of Environment (SMOE) acknowledged that decommissioning objectives had been met and approved a portion of the Cluff Lake surface lease to be surrendered, releasing parcels of the property not requiring long-term oversight.

With the remaining parcels decommissioned, and administrative requirements ready to be taken over by the Province of Saskatchewan, Orano has requested that the CNSC revoke the Cluff Lake Uranium Mine Decommissioning Licence and exempt the Government of Saskatchewan from requiring a CNSC licence to manage the remaining parcels, allowing for their transfer into the Institutional Control Program.

Orano has a strong record of public engagement extending to the pre-mining period. Throughout the decommissioning and post-decommissioning periods, Orano has engaged with Indigenous and non-Indigenous stakeholders to understand their needs and is proud to achieve mutually beneficial outcomes with key land users. In preparation for transfer of responsibilities to the Province, Orano has engaged key Indigenous groups to provide feedback on the Long-term Monitoring and Maintenance Plan to be overseen by the Province of Saskatchewan when the property is transferred into the Institutional Control Program.

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Acronyms and Abbreviations

Term	Definition
ACFN	Athabasca Chipewyan First Nation
AECB	Atomic Energy Control Board
CEAA	Canadian Environmental Assessment Act
CMD	Commission Member Document
CNSC	Canadian Nuclear Safety Commission
COPCs	Constituents Of Potential Concern
CRDN	Clearwater River Dene Nation
CSD	Comprehensive Study For Decommissioning
CSR	Comprehensive Study Report (CNSC)
CWRP	Claude Waste Rock Pile
DDP	Detailed Decommissioning Plan
DPDP	Detailed Post Decommissioning Plan
DJN	Dominique-Janine North
DJX	Dominique-Janine Extension
DP	Dominique-Peter
DPDP	Detailed Post-Decommissioning Plan
DSWQO	Decommissioning Surface Water Quality Objectives
EA	Environmental Assessment
EARPGO	Environmental Assessment Review Process Guidelines Order
EMP	Environmental Monitoring Program
EQC	Environmental Quality Committees
HHRA	Human Health Risk Assessment
IC	Institutional Control
IC Program	Institutional Control Program
IMS	Integrated Management Systems
LLRD	Long Lived Radioactive Dust
LTMMP	Long Term Monitoring and Maintenance Plan
MNS	Métis Nation of Saskatchewan
NAD	Northern Administrative District
NGO	Non-Governmental Organization
NSCA	Nuclear Safety And Control Act
NSEQC	Northern Saskatchewan Environmental Quality Committee
ORANO	Orano Canada Inc.
PIDP	Public Information and Disclosure Program
PIP	Public Involvement Plan

Term	Definition
PMP	Probable Maximum Precipitation
ROR	Regulatory Oversight Report
SCAs	Safety And Control Areas
SEQG	Saskatchewan Environmental Quality Guidelines
SES	Saskatchewan Environment Society
SMER	Saskatchewan Ministry of Energy and Resources
SMOE	Saskatchewan Ministry of Environment
STS	Secondary Treatment System
TMA	Tailings Management Area

1 Introduction

1.1 Purpose

Orano Canada Inc. (Orano) holds Uranium Mine Licence (UML-MINEMILL-CLUFF.00/2024 expiring July 31, 2024) authorizing Orano to: possess, manage and store nuclear substances that are associated with the Cluff Lake Project.

With the achievement of decommissioning objectives having been demonstrated, and so acknowledged as achieved by the regulators, the current licence term (2019 to current) focused on monitoring, optimizing the environmental monitoring plan, and conducting final minor works (decommissioning of monitoring equipment no longer required). The site has been readied for transfer to the Province of Saskatchewan under the provincial Institutional Control Program (IC Program).

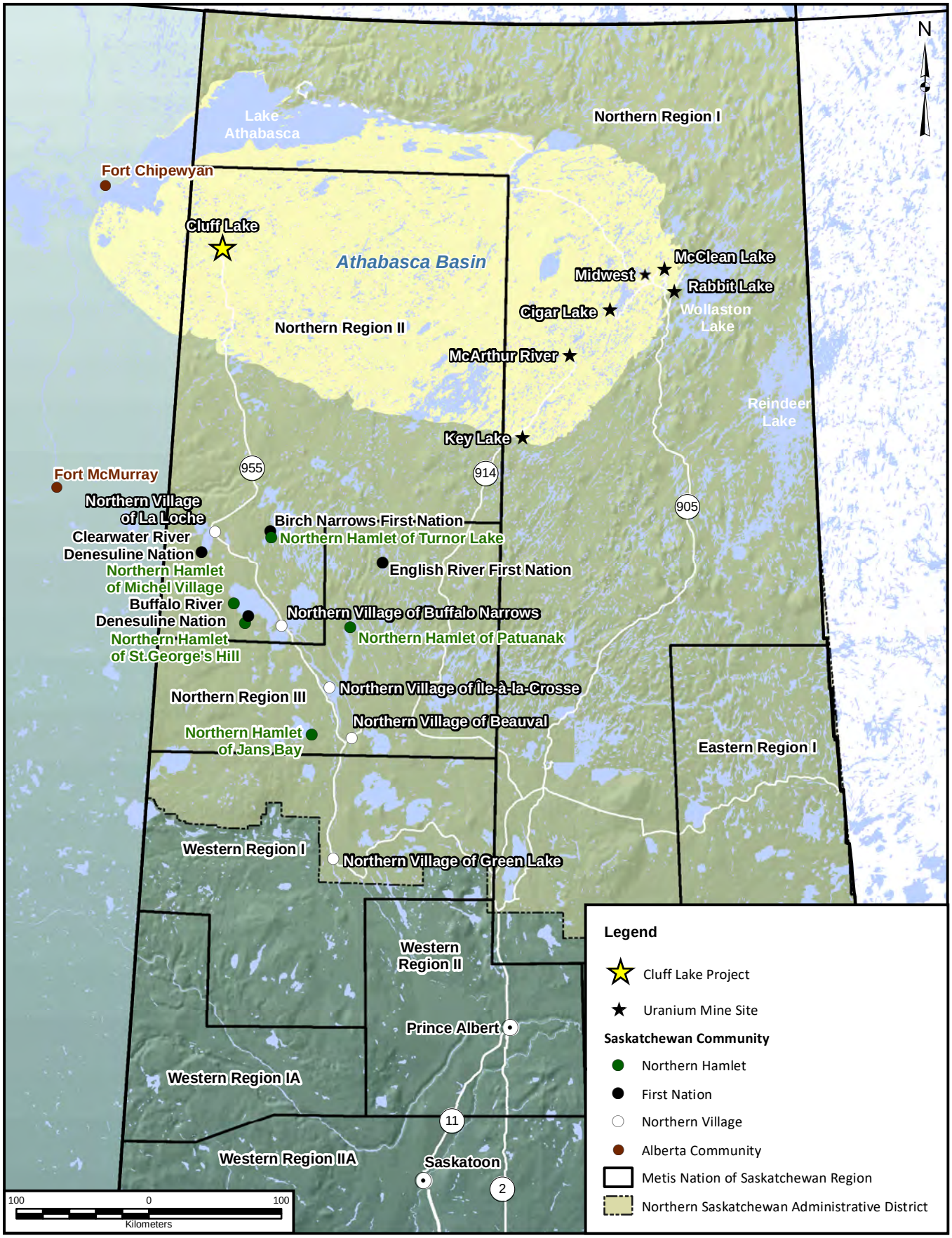
On February 20, 2020, in accordance with Section 7 and 24 of the *Nuclear Safety and Control Act* and Sections 11 and 13 of the General Nuclear Safety and Control Regulations, Orano applied to the Canadian Nuclear Safety Commission (CNSC) to revoke the Cluff Lake Uranium Mine licence and to exempt the province from a licence requirement, allowing for the Cluff Lake property to be accepted into the Saskatchewan IC Program; which transfers oversight to the province.

The Commission determined in accordance with CNSC Rules of Procedure that this application would be heard in a one-part public hearing process on March 1 or 2, 2023.

In accordance with Section 18(1)(b) of the CNSC Rules of Procedure, this Commission Member Document (CMD) provides documentary information that Orano will present to the Commission at the public hearing. With the status of the Cluff Lake site previously identified as meeting decommissioning objectives, the focus of the CMD will be an overview of the current licensing term (2019 to present) and preparedness to transfer oversight to the Province of Saskatchewan.

1.2 Decommissioned Cluff Lake Project Overview

The Cluff Lake Project is a former uranium mine and mill site located in the Athabasca Basin of northern Saskatchewan on Treaty 8 territory and the traditional Homeland of the Métis. The mine site is located approximately 900 km north of Saskatoon, SK, approximately 75 km south of Lake Athabasca, 100 km (via air) from the nearest community (Fort Chipewyan, Alberta) and approximately 250 km by road from the communities of La Loche and Clearwater River Dene Nation (CRDN) (Figure 1.1).



Projection: NAD 1983 UTM Zone 13N
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Date: 2022-11-18 Scale: 1:4,000,000
Data Sources: Natural Resources Canada, Geobase®, Nation Topographic Database, ORANO Canada Inc.

CLUFF LAKE PROJECT

FIGURE 1-1
PROJECT LOCATION

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File: Q:\SHEQ\GIS\CLUFF_LAKE\2022\CMD\Figure 1-1 Project Location_V2.mxd

The Cluff Lake Project commenced mining and milling operations in 1980. Over the 22-year operating life of the mine, five ore bodies were extracted using either underground or open pit techniques. The Cluff Lake Project produced 28 million kilograms of uranium concentrate (U_3O_8) and 8,000 troy ounces of gold over its operational period and produced its final barrel of yellowcake in December 2002. Operational facilities at the Cluff Lake Project included open pit and underground mines, a mill, a Tailings Management Area (TMA) with a two-stage liquid effluent treatment system, a residential camp area, and various other support and site infrastructure facilities.

The Cluff Lake Project is the first decommissioned uranium mine site of its era in Saskatchewan. With the end of successful operations in 2002, the decommissioning of the site underwent an environmental assessment (Comprehensive Study for Decommissioning (CSD), (COGEMA 2000) and Comprehensive Study Report (CSR), (CNSC 2003). The decommissioning objectives, and timeframes for accomplishing them, were established in consultation with federal and provincial authorities and through the public engagement process.

After receiving federal and provincial environmental assessment, licensing, and permitting approvals, decommissioning of the Cluff Lake Project commenced in 2004. The majority of physical decommissioning was completed by 2006. The Cluff Lake site has been in *post-decommissioning* monitoring since 2006. Full-time, on-site presence ended in 2013 with some accompanying earthworks providing unrestricted access to the site for traditional activities, since then.

In 2019, both the CNSC and SMOE acknowledged that decommissioning objectives had been met and approved a portion of the Cluff Lake surface lease to be surrendered, releasing the following parcels that would not require long-term oversight:

- Undeveloped/undisturbed areas – 508.11 hectares
- Surface water bodies (Cluff Lake and Island Lake as they do not require long-term controls or maintenance) – 527.21 hectares
- Remediated areas of previous surface disturbance – 260.76 hectares

With the establishment of the IC Program under the Saskatchewan *Reclaimed Industrial Sites Act*, parcels of land that, in consequence of development and use, require long-term monitoring and, in certain circumstances, maintenance, can be transferred to the Government of Saskatchewan if the site achieves an end state of long-term safety and stability and the proponent provides funds necessary for the government administration of the decommissioned site.

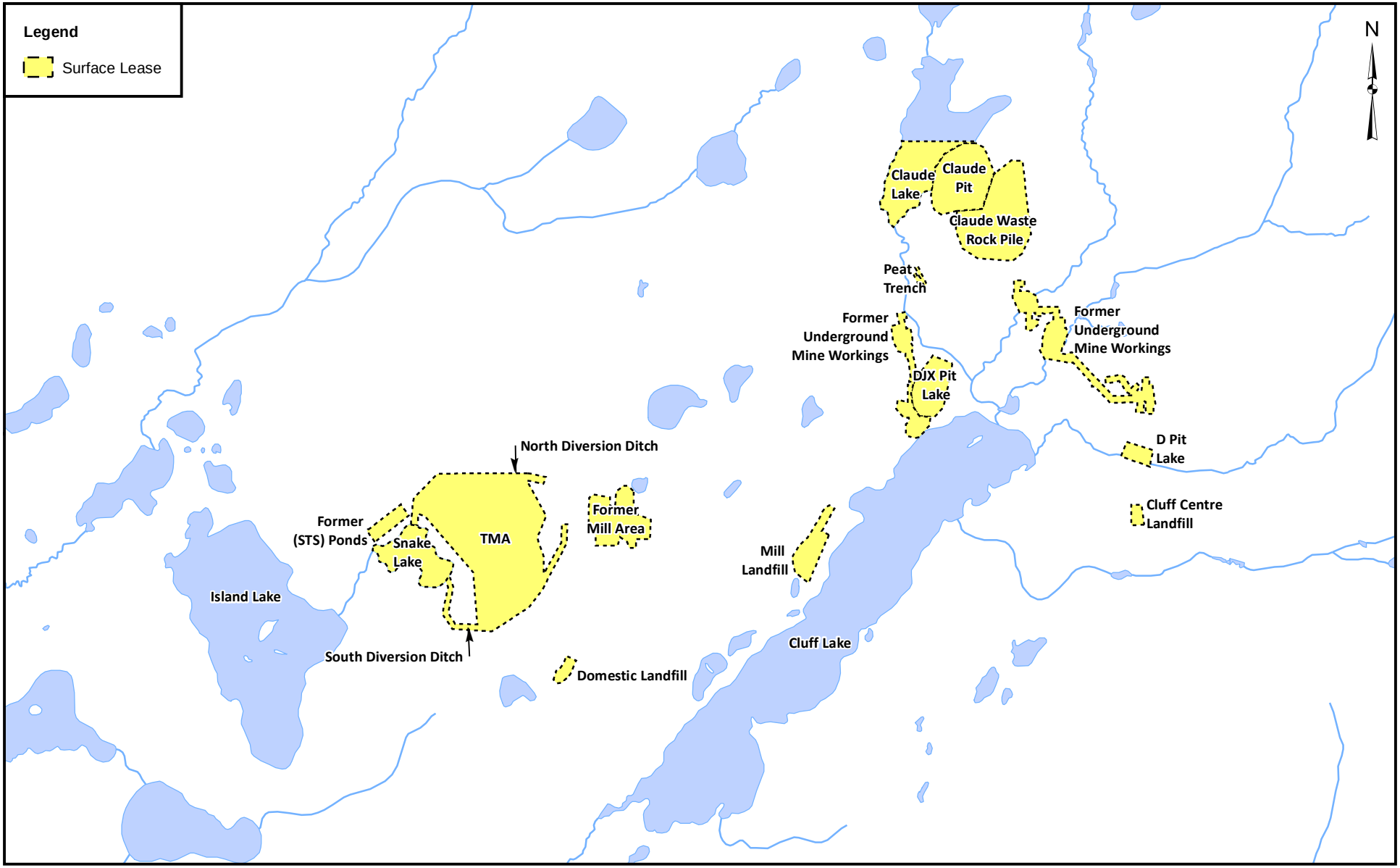
The parcels that require long-term administrative oversight, currently remain in the Cluff Lake surface lease and will be transferred to the provincial IC Program include:

- D Mining Area: D-pit;
- Claude Mining Area: Claude pit, Claude waste rock pile, Claude peat trenches;

- DJ Mining Area: DJN/DJX pit, DJ underground mine;
- OP-DP Mining Area: OP/DP underground mine;
- Mill Complex Area;
- Tailings Management Area;
- Landfills: domestic, industrial, Secondary Treatment System Ponds, mill landfill and Cluff centre landfill;
- Lakes: Snake Lake and the portion of Claude Lake that is within the surface lease boundaries.

With buffers for underground mine workings and pits (25 meters) and other parcels (10 meters), as recommended by the Saskatchewan Ministry of Energy and Resources (SMER), the total leased area, to be transferred into the provincial IC Program is 336.39 hectares (Figure 1-2).

With these parcels decommissioned, and administrative requirements ready to be taken over by the Province of Saskatchewan, Orano requested that the CNSC issue a revocation of the Cluff Lake licence and accept the Government of Saskatchewan be exempt from requiring a licence to manage the remaining parcels, allowing for their transfer into the IC Program.



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CLUFF LAKE PROJECT

FIGURE 1-2
EXISTING SURFACE LEASE - PARCELS TO BE TRANSFERRED TO IC PROGRAM

COMMISSION MEMBER DOCUMENT

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1.2.1 Milestones during current Licence period

Over the period of the current CNSC licence (August 1, 2019 to current) the following milestones have been achieved:

- Closure of the detailed post-decommissioning plan and creation of the End-State Report;
- Continuous optimization of the environmental monitoring plan – establishing the monitoring plan to be carried out through the Long-term Monitoring and Maintenance Plan to be administered by the Province of Saskatchewan;
- Removal of groundwater monitoring wells;
- Removal and decommissioning of monitoring equipment no longer required under the long-term monitoring plan for the property;
- Engagement with indigenous stakeholder groups to solicit feedback on the Long-term Monitoring and Maintenance Plan; and,
- Presentation of the performance during the 2020 operating year to the Commission by the CNSC staff through the Regulatory Oversight Report at a public meeting in December 2021.

1.3 Licence History

Following the delineation of D-Pit (the first ore body to be mined at Cluff Lake) and at the request of the Department of Environment Saskatchewan, an initial Environmental Assessment and Safety Report (AMOK 1976) for the development of a uranium mine and mill (Phase I) was submitted that met the requirements of the *Atomic Energy and Control Regulations* (1974). The Minister of Environment asked the Lieutenant-Governor-in-Council for a public inquiry to review the Environmental Assessment and Safety Report, and to "contemporaneously study what have been termed the "broader implications" and "global implications" of expanding the uranium mining industry in Saskatchewan" (Bayda 1978). The Cluff Lake Board of Inquiry, commonly referred to as the Bayda Commission, reviewed the expansion of uranium mining in northern Saskatchewan and recommended that development of the Cluff Lake Project proceed and that the uranium industry be allowed to expand in northern Saskatchewan (Bayda 1978). The Atomic Energy Control Board (AECB) used the inquiry findings and recommendations to proceed through the AECB licensing process.

Throughout the mine life, additional reserves were discovered and delineated including Claude, N, N40, OP, and Dominique-Peter (DP) ore bodies (Cluff Mining 1982). These developments were assessed under the Saskatchewan Environmental Assessment Policy (1978) with AECB review. Mining of the Dominique-Janine (DJ) ore body subsequently underwent similar review (AMOK 1992).

The proposed extension of the DJ mining operation occurred at the same time as numerous other proposed uranium projects in northern Saskatchewan at Midwest, McArthur River, Cigar Lake, and McClean Lake. In response to these development proposals, the governments of Canada and Saskatchewan, under their

respective legislation, appointed a Joint Federal-Provincial Environmental Assessment Review Panel (Joint Panel) to study uranium mine developments in northern Saskatchewan. The Joint Panel, based on its terms of reference to review the environmental, health, safety, and socio-economic impacts including the benefits of the proposals, recommended to the governments of Saskatchewan and Canada that these projects should be allowed to proceed (Joint Panel 1993 and 1997). The preliminary decommissioning plans arising from the DJ extension (DJX) environmental assessment and subsequent licensing requirements formed the basis of what would become the Detailed Decommissioning Plan for the Cluff Lake Project. The first Decommissioning Plan was submitted in June 1999 in fulfilment of a commitment under the Cluff Lake Project AECB Licence. Some aspects of decommissioning remained conceptual within the 1999 submission as investigations and environmental impact modelling were still on-going.

In parallel with the Joint Panel review from 1992 to 1997 under Environmental Assessment Review Process Guidelines Order (EARPGO), the federal government moved to strengthen the environmental assessment process in Canada, replacing the federal EARPGO with the *Canadian Environmental Assessment Act* (CEAA 1992). *The Atomic Energy Control Act* and it's regulations were replaced by the *Nuclear Safety Control Act*, when the former Act received royal assent in 1997. The AECB was replaced by the Canadian Nuclear Safety Commission in May 2000.

In April 1999, a project description for the Cluff Lake Decommissioning Project was submitted to regulators and in May 1999, the AECB/CNSC advised COGEMA that they had determined a comprehensive study level environmental assessment (EA) was required under CEAA, 1992, with the CNSC as the Responsible Authority. The SMOE required approval of the Cluff Lake Detailed Decommissioning Plan prior to its implementation but did not require a decommissioning environmental assessment under the *Saskatchewan Environmental Assessment Act*. The SMOE agreed to participate as technical reviewers in the federally-led EA process.

The Cluff Lake Project Comprehensive Study for Decommissioning (CSD, COGEMA 2000) was prepared to meet the requirements of the Canadian Environmental Assessment Act (CEAA 1992). The CSD was submitted to regulatory agencies, including the CNSC, Environment Canada, Health Canada, Natural Resources Canada, SMOE, and Saskatchewan Labour in 2000. The CSD and subsequent regulatory comments and company responses provided much of the basis of the CNSC-authored Comprehensive Study Report (CSR; CNSC 2003) that was submitted to the federal Minister of Environment and Canadian Environmental Assessment Agency in January 2004. The Minister of Environment approved the decommissioning environmental assessment on April 15, 2004. The CNSC held a hearing with Day 1 in Ottawa on April 29, 2004 followed by Day 2 on June 9, 2004 in La Ronge, Saskatchewan and subsequently issued the Uranium Mine Decommissioning Licence UMDL-MINEMILL-CLUFF.00/2009, effective July 23, 2004 and expiring July 31, 2009, revoking the Uranium Mine and Mill Operating Licence UMLOL-MINEMILLCLUFF.05/2004. The Cluff Lake Decommissioning Licence was renewed in 2009 with a one-day public hearing for a 10-year term effective August 1, 2009 to July 31, 2019. A midterm report, as requested by the Commission with the Record of Decision, was provided in conjunction with the annual Regulatory Oversight Report for Uranium Mines and Mills in December 2016.

In May 2019, a public hearing with the Commission was held to consider a number of requests related to the Cluff Lake Project. The Commission issued a Record of Decision accepting Orano's requests, renewing the

licence until July 31, 2024, accepting that decommissioning objectives had been met the licence was issued as a mine licence verse a decommissioning licence; modifying the surface lease by releasing parcels that would not require long-term oversight; replacing the Detailed Decommissioning Plan with the Detailed Post-Decommissioning Plan and reducing the financial assurance amount to reflect the completion of the decommissioning activities.

1.4 Licence Documentation

1.4.1 Licensee

Orano Canada Inc., with headquarters in Saskatoon, is the sole owner and operator of the Cluff Lake Project. Orano Canada Inc. is a wholly owned subsidiary of Orano Group, a world leader in nuclear energy and components.

The business address is:

Orano Canada Inc.
100-833 45th Street West
Saskatoon, SK S7L 5X2

1.4.2 Current Licence and Approval

The Cluff Lake Project operates under an approval issued by the SMOE and a mine licence issued by the CNSC:

- Approval to Operate Pollutant Control Facilities; PO18-025 (February 28, 2018 – February 28, 2023)
- UMDL-MINEMILL-CLUFF.00/2024 (August 1, 2019 – July 31, 2024), pursuant to Section 24 of the *Nuclear Safety and Control Act*

2 Licence Request

On February 28, 2020, Orano applied to the CNSC to revoke the Cluff Lake Mine Licence UMDL-MINEMILL-CLUFF.00/2024, transferring oversight to the Province of Saskatchewan, while exempting the province from requiring a licence, allowing for the property to enter into the Province of Saskatchewan IC Program.

2.1 Revoke, Transfer and Exempt Licence

In accordance with Sections 7 and 24 of the *Nuclear Safety and Control Act* (*NSCA*) and Sections 11 and 13 of the *General Nuclear Safety and Control Regulations* (*GNSCR*), Orano has requested the CNSC to revoke Orano's Cluff Lake Mine Licence, allowing transfer of responsibility for the currently licensed activity to possess, manage, store radioactive waste at the decommissioned Cluff Lake Project (i.e. in-situ decommissioned waste rock and tailings), and to exempt the Province of Saskatchewan from licensing. A CNSC exemption granted to the Government of Saskatchewan from the obligation to hold a licence under the *NSCA* is a prescribed condition for acceptance of the decommissioned Cluff Lake property into the Saskatchewan IC Program.

Orano requests the transfer of the remaining Cluff Lake Project responsibilities, i.e. long-term monitoring and maintenance, licensed under Uranium Mine Licence UMDL-MINEMILL-CLUFF.00/2024, to accompany the return of property to the Government of Saskatchewan control. The transfer is requested according to Subsection 24(4) of the *NSCA* and Section 13 of the *GNSCR* given the competence of the Province of Saskatchewan and contingent on the acceptance of the decommissioned Cluff Lake property by SMER according to Section 5 of the *Reclaimed Industrial Sites Act*. The Government of Saskatchewan is qualified to possess, manage, store radioactive waste and, in doing so, will make adequate provision for the protection of the environment, health and safety of persons, and maintenance of national and international obligations.

Orano requests an exemption to be granted to the Government of Saskatchewan for the activities of possessing, managing, and storing radioactive waste on the Cluff Lake property according to Section 7 of the *NSCA* and Section 11 of the *GNSCR*. A licence exemption is appropriate because the IC Program (i.e. registry and monitoring) was designed in collaboration with the CNSC to meet provincial, national, and international obligations for the oversight of decommissioned radioactive waste. The requested exemption will not I) pose unreasonable risk to the environment or health and safety of persons, II) pose unreasonable risk to national security, or III) result in a failure to achieve conformity with measures of control and international obligations to which Canada was agreed.

The remaining activities (i.e. to possess, manage, and store radioactive waste) will be managed by the Province once the CNSC Licence UMDL-MINEMILL-CLUFF.00/2024 is revoked. Orano views this transaction as a transfer of responsibility for managing radioactive materials (i.e. decommissioned waste rock and tailings) at the decommissioned Cluff Lake Project from one responsible party to another. IC monitoring and maintenance will be administered by the Government of Saskatchewan with adequate funds

provided by Orano and site knowledge well documented. Pursuant to Section 45(b) of the *NSCA,* the CNSC will be notified of any unforeseen event that is likely to result in exposure of people or the environment in excess of the prescribed limits and, pursuant to Subsection 43(3) of the *NSCA,* the CNSC has the authority to re-determine its decision(s) and require that the Cluff Lake Project again be licensed under the *NSCA* should that oversight be required.

2.2 Institutional Control Program

In 2007, the Province of Saskatchewan enacted the *Reclaimed Industrial Sites Act* and the *Reclaimed Industrial Sites Regulations* to establish an IC Program. The IC Program legislation allows for the transfer of responsibility for a decommissioned site, or portions of the site, to the Province of Saskatchewan and details the funding requirements to be provided by the owner/operator to the Province, to maintain a long-term monitoring and maintenance program, and to provide contingency funds for unforeseen events. The intention of the Act was to set out conditions by which the Government of Saskatchewan would accept responsibility for the lands that; as a consequence of development and use, require long-term monitoring and, in certain circumstances, maintenance.

The IC Program addresses all aspects of conventional closed mines as well as the uranium-specific issues of radioactive waste management, including those defined in the articles of the International Atomic Energy Agency's Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, all applicable provincial acts and regulations, and the federal *Nuclear Safety and Control Act*.

The IC Program was developed to ensure the health, safety, and wellbeing of future generations, to provide greater certainty and closure for the mining industry broadly, and, specific to uranium mining, meet provincial, national, and international obligations for the storage of radioactive materials.

Orano has demonstrated that the Cluff Lake property has been readied for transfer into the provincial IC Program given thatI) post-closure monitoring and risk assessments have demonstrated that the Cluff Lake property:

a) has sustainably achieved the agreed end-state,

b) is expected to remain safe and stable under passive care, and

c) residual risk is well understood and appropriate for IC.

2.2.1 Long-term Monitoring and Maintenance Plan

Following successful transfer into the IC Program administrative responsibility for the Cluff Lake site will be with the Province of Saskatchewan. In consideration of administrative controls, Orano has prepared a Long-term Monitoring and Maintenance Plan (LTMMP) and has made recommendations for future land use.

The SMOE have reviewed and accepted the LTMMP; and recommendations made by the CNSC have been incorporated into the LTMMP.

The LTMMP has been reviewed by key stakeholders, including primary land users: Athabasca Chipewyan First Nation, Clearwater River Dene Nation and Métis Nation of Saskatchewan.

2.2.2 Funds

The amount deposited into the funds by the former owner of each site accepted into the IC Program is determined by the Ministry of Energy and Resources based on a site-specific risk assessment detailed by a long-term monitoring and maintenance schedule.

Orano has demonstrated to the Ministry of Energy and Resources satisfaction that the closed Cluff Lake site meets the prescribed conditions for IC, and has reached an agreement on funding amounts:

1. for deposit into the IC Monitoring and Maintenance Fund and the IC Unforeseen Events Fund;
2. of a financial assurance amount; and
3. payment of the IC registration fee.

2.2.3 Parcels of Land Remaining

Following the 2019 licensing activity, the decommissioned Cluff Lake surface lease was reduced to parcels of land that, in consequence of development and use, require long-term administrative controls, and in certain circumstances, maintenance. The parcels to be transferred to the provincial IC Program include (Figure 1-2):

- D Mining Area: D-pit;
- Claude Mining Area: Claude pit, Claude waste rock pile, Claude peat trenches;
- DJ Mining Area: DJN/DJX pit, DJ underground mine;
- OP-DP Mining Area: OP/DP underground mine;
- Mill Complex Area;
- Tailings Management Area;
- Landfills: domestic, industrial, Secondary Treatment System Ponds, mill landfill and Cluff centre landfill;
- Lakes: Snake Lake and the portion of Claude Lake that is within the surface lease boundaries.

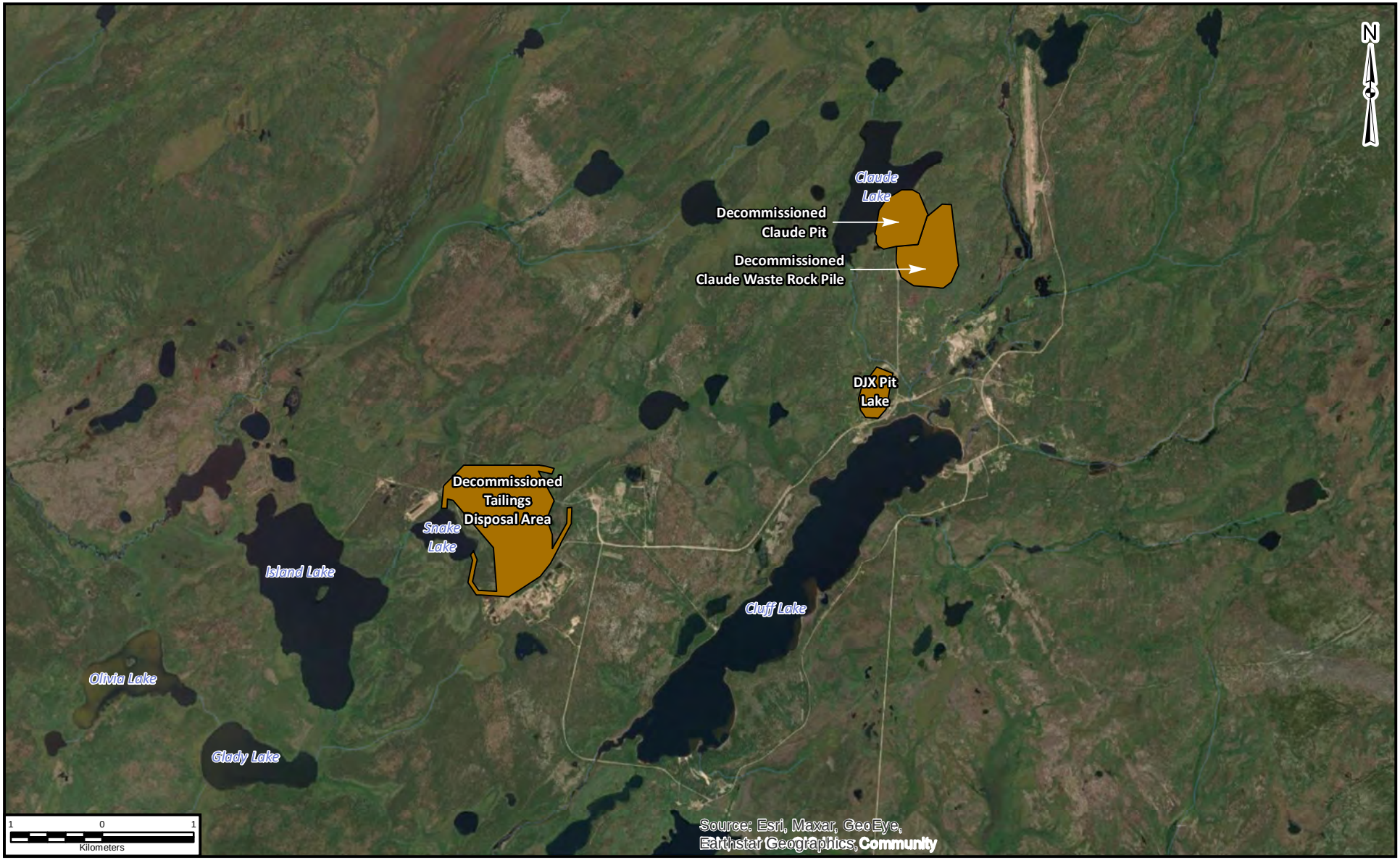
The total area is 336.39 hectares.

2.2.3.1 Remaining Nuclear Waste

The remaining parcels include subsets of land parcels that may be defined as decommissioned nuclear facilities containing mine and mill wastes (i.e., disposed nuclear substances including decommissioned waste rock and tailings) with a radioactive inventory of 10^{15} Bq or more (*NSCA* S.2 and *NSCR* S.19(a)). These sub set parcels are listed below (Figure 2-1):

- Claude Waste Rock Pile;
- Claude Pit;
- DJX Pit; and
- Tailings Management Area.

Continuity of responsibility for these parcels containing radioactive waste will be maintained; the responsibility is being transferred from one responsible authority (Orano) to another (Province of Saskatchewan) through the transition into the IC Program.



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Data Sources: Natural Resources Canada, Geobase®, Nation Topographic Database, ORANO Canada Inc.

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FIGURE 2-1
DECOMMISSIONED NUCLEAR FACILITIES WITH RADIOACTIVE INVENTORY >10^{15} Bq

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File: Q:\SHEQ\GIS\CLUFF_LAKE\2022\CMD\Figure 2-1 Cluff Lake Decommissioned Mine and Mill Site.mxd

2.2.3.2 Parcel Summary

The following table summarizes the remaining parcels at the decommissioned Cluff Lake site.

Planning Envelope	Parcel	Current Status	Radioactivity Inventory of 10^{15} Bq or more
D-Mining Area	D-Pit	Decommissioning complete To Transfer to IC Program	x
Claude Mining Area	Claude Pit	Decommissioning complete To Transfer to IC Program	√
	Claude Waste Rock Pile	Decommissioning complete To Transfer to IC Program	√
	Peat Trench Area	Decommissioning complete To Transfer to IC Program	**X**
DJ Mining Area	DJN/DJX Pit	Decommissioning complete To Transfer to IC Program	√
	DJ Underground	Decommissioning complete To Transfer to IC Program	x
OP/DP Mining Area	OP/DP Underground	Decommissioning complete To Transfer to IC Program	x
Mill Complex Area	Mill Complex Area	Decommissioning complete To Transfer to IC Program	x
Tailings Management Area	Cover and Main Dam	Decommissioning is complete To Transfer to IC Program	√
Landfills	domestic, industrial, Secondary Treatment System Ponds, mill landfill and Cluff Centre landfill	Decommissioning is complete To Transfer to IC Program	x
Lakes	Snake Lake and portion of Claude Lake	To Transfer to IC Program	x

D Pit

D Pit was the first ore body mined at the Cluff Lake Project, beginning in 1979 and completed in 1981. The pit became flooded in 1983 when ice formation during the spring thaw caused Boulder Creek to overflow its banks. The pit has remained flooded since that time. There is no surficial outflow from the pit; water either discharges as groundwater or is lost to evaporation.

Routine monitoring has been conducted since 1987. The water column is stable, has an established chemocline with very little seasonal depth fluctuation. The shoreline has naturally revegetated with native emergent and submergent aquatic macrophytes.

The likelihood and consequence of a potential disturbance to the chemoclines is very low and, should a disturbance of the chemocline occur, the chemocline would re-establish without intervention.

This area is revegetated, and decommissioning complete. The decommissioning objective of surface water quality in flooded pits is considered sustainably achieved over the long term.

Claude Pit:

The Claude Pit was mined from 1982 to 1989 and backfilled between 2005 and 2006, with trees planted in 2006.

The area is decommissioned.

Claude Waste Rock Pile:

The Claude Waste Rock Pile (CWRP) was constructed between 1982 and 1989 and contains all waste rock from the Claude pit. The pile contains roughly 5.2 million cubic meters of waste, is approximately 30 m high and covers an area of approximately 29.5 hectares to the south-east of Claude pit.

The CWRP was recontoured, compacted, covered with 1 m thick glacial till cover and revegetated with grasses and forbes. Vegetation surveys conclude the vegetation is stable and self-sustaining.

Infiltration rates have been reduced to levels that adequately restrict contaminant movement to groundwater and are suitably protective of downstream surface water receptors.

The following figure (Figure 2-2) provides a time series of the decommissioning of the CWRP and the Claude Pit.

Figure 2-2: Time Series of Claude Waste Rock Pile and Claude Pit

DJN/DJX Pit

The DJX and DJN open pits are located south of the Claude deposit and adjacent to the north end of Cluff Lake. The DJN pit came into production in 1989 and continued through to 1991. Mining of the DJX pit occurred from 1994 through to 1997.

The DJN pit was allowed to fill with water prior to mining of the DJX ore body. The DJN pit was drained and later filled with clean waste rock from the DJX pit.

Decommissioning the DJN/DJX pit complex (now collectively referred to as DJ pit) involved relocating a portion of the existing waste rock in DJN pit, flooding of the pits, re-grading the area, stormwater management, and revegetation. DJ has a stable chemocline and is sustainably meeting decommissioning surface water quality objectives. The area is decommissioned.

DJ Underground

The DJ underground (DJU) mine was developed in 1994 and operated until mine closure in 2002.

During site cleanup operations in 2002, DJU raises and the DJU decline were backfilled with till material. DJU raises were entirely backfilled from the bottom of the raise to the raise collar elevation. The DJU decline was backfilled from approximately 181 m down the ramp to the portal opening. Reinforced concrete caps were placed above all backfilled raises and a concrete plug was poured at the DJU portal opening. The mine was partially flooded in 2002 using mine water from the adjacent DJ pit. The mine continues to flood under natural water flow conditions.

Post-decommissioning geotechnical inspections have shown that the underground mining areas are performing well, with no settlement or concerns noted. The potential that the backfilled decline or vent raise caps could fail is low. These areas are included in the geotechnical inspection component of the LTMMP, where any required repairs would be identified.

Mill Complex Area

Decommissioning the mill area was completed in 2004 and 2005. Demolition material was disposed of in the Claude Pit during backfilling. Following demolition, the former Mill area was covered with clean glacial till, graded, cleared for surface gamma radiation, and then re-vegetated with tree seedlings.

In 2013, the camp and remaining warehouses and fuel farm that were left to support environmental monitoring were decommissioned. Refer to Figure 2-3 for a time series of the decommissioning of the Mill Complex Area.

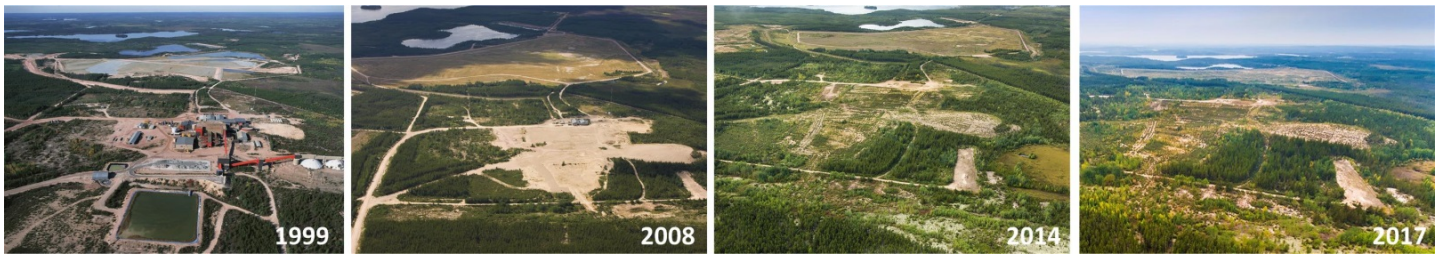


Figure 2-3: Time Series of the Mill Complex Area

Tailings Management Area

The Tailings Management Area (TMA) was the disposal location for all tailings produced during the operating life of the Cluff Lake Project. The TMA is an aboveground facility located in a topographic low with tailings solids (and liquids previously) retained behind a clay-core dam. The TMA has also been used as a receptor for contaminated mine water and site runoff requiring treatment.

The TMA engineered cover was designed to minimize surface ponding but not necessarily eliminate the presence of ephemeral ponds. Ephemeral ponds have been observed primarily on the former liquids pond where the thickest amount of till was placed during decommissioning (up to 5 m) and adjacent to the internal TMA berm at the boundary of the lower solids areas where approximately 2 m of till was placed. The presence of ponded water does not undermine design. Positive drainage is maintained across the TMA towards the spillway contributing to the overall capacity to route higher precipitation events, including a Probable Maximum Precipitation (PMP) event.

A risk assessment of TMA ponded water was completed to evaluate potential impacts and to alleviate community concern. Ponded water, sediment, and vegetation samples were collected on the TMA and the associated ecological risk was evaluated. From an ecological perspective, should ephemeral ponds on the TMA persist, I) no adverse effects are expected for terrestrial wildlife or species-at-risk that may use the TMA and II) other than a small potential for nickel concentrations to be an issue for individual toads, no adverse effects are expected from an aquatic perspective.

With the design and construction of storm water management structures including: an engineered cover, a spillway to passively release water, grading for positive drainage towards spillway, installation of a toe drain and diversion ditches, and vegetation of slopes; acheivement of a passive state, that does not require regulator surveillance, has been achieved at the TMA.

The TMA is considered physically, chemically, ecogically and socially stable (i.e. a landform).

Figure 2-4 provides a times series of the decommissioning of the TMA.

Figure 2-4: Time Series of the Tailings Management Area

Landfills

As receiver of waste generated during decommissioning, the parcels containing the decommissioned domestic and industrial landfills, and the Secondary Treatment System Ponds were covered and re-vegetated and are performing well. These parcels will transfer into the IC Program to monitor stability.

Lakes

As a receiver of groundwater flow from the TMA, Snake Lake will continue to receive oversight through the IC Program. As the only waterbody that is a direct downstream receptor of groundwater from the TMF, monitoring of Snake Lake provides an indication of TMA performance and potential changes to the receiving environment.

As the receiver of groundwater flow from the Claude Pit and Claude Waste Rock Pile, Claude Lake remains in the IC Program to monitor and validate their performance.

2.2.3.3 Summary

The former mine site is stable, self-sustaining, and reclaimed. Decommissioning works are complete. Periodic geotechnical inspections will continue following successful transfer of the property into provincial IC; geotechnical inspections will continue to be part of the long-term monitoring program conducted by the Province of Saskatchewan. Though landforms are expected to be stable over the long-term, funding for future minor works has been considered in the maintenance costs of the site, appropriately addressed under the IC Program.

The cover systems are performing predictably and consistently since 2011; they are expected to continue to be stable. The covers are self-sustaining and effective in controlling erosion. Engineered cover objectives have been achieved. Long-term monitoring for erosion and potential minor repair to covers is appropriate under the IC Program.

The sufficiency of the TMA engineered cover is an important aspect of the successful decommissioning of the site and has been a topic of sustained interest by community members. Consequently, Orano contracted a review of the studies and evaluations used to both select the TMA cover design and assess the current and anticipated long-term performance of the facility. The review supported Orano's 2019 application for licence renewal.

RnP and LLRD levels were reduced through removal of source material or by covering with clean soil material. Sufficient cover materials were applied to eliminate LLRD, and to reduce radon progeny levels to near background conditions, where source terms existed. Post-decommissioning LLRD and RnP levels are near background and did not require specific decommissioning objectives. Levels of gamma, radon, and long-lived radioactive dust pose no unacceptable risk to traditional land use and are consistent with application of the ALARA principle. Radiological levels achieved protect public health by maintaining doses to future users that are well within regulatory limits for members of the public.

A comprehensive ecological and human health risk assessment for the Island Creek and Cluff Creek watersheds was submitted in the 2019 Environmental Performance Technical Information Document.

In the Cluff Creek Watershed there are no significant effects on the health of the aquatic communities present and there are no predicted effects on terrestrial species. The results are comparable to those predicted in the CSR stating recovery of the Island Creek watershed over time and potential effects on biota considered not significant as effects are restricted locally with full recovery expected.

The results of the human health risk assessment indicated that a casual visitor to the site who hunts, fishes, and traps over a lifetime as well as his/her family who would consume the food harvested at the Cluff Lake Project will not experience adverse effects..

There is no unreasonable residual risk at the Cluff Lake site. The site has unrestricted access and public health and safety does not rely on controlling human behaviours (e.g. fences, signs, fish advisories). Ecological integrity is maintained. Aquatic and terrestrial systems are recovering and they are expected to continue to do so in the future. Aesthetic and risk objectives have been achieved.

3 Performance during Licence Period

This section discusses the performance of the Cluff Lake site relevant Safety and Control Areas (SCAs) for a decommissioned site consistent with SCAs presented for decommissioned sites in the CNSC Regulatory Oversight Report and licence conditions presented in the Cluff Lake Licence Conditions Handbook.

3.1 Management System

Orano has maintained a Cluff Lake Integrated Management System (IMS). The IMS for the Cluff Lake Project follows the CNSC quality assurance elements, requirements, and principles and the internal requirements of Orano.

With the reduced project activities, the Cluff Lake Project IMS has been revised to include monitoring activities, as well as environmental, health and safety, and emergency preparedness and response requirements.

The IMS specifies the requirements applicable to personnel who manage and perform work affecting the post-closure environmental monitoring phase of the Cluff Lake Project. It focuses on activities or processes that could have an effect on the health and safety of people at/or around the site and potential effects on the surrounding environment. The activities associated with monitoring and inspection campaigns, generally conducted by third-party consultants, are guided by the application of the IMS to ensure the continued adherence to company standards.

In accordance with Licence Condition 1.1 of the Cluff Lake Licence Conditions Handbook, Orano provides annual compliance reports each year, covering the project performance for the 12-month period from January 1 to December 31 of the previous year.

3.2 Safety and Control Areas

The availability and presence of workers and licensee staff onsite determines the degree of applicability of each SCA. Consistent with the CNSC Regulatory Oversight Reporting (ROR) most SCAs are not applicable to decommissioning activities leaving three relevant SCAs: Radiation Protection, Conventional Health and Safety, and Environmental Protection. In the last two ROR's that included decommissioned mine sites (CNSC 2018 and 2020), Cluff Lake received satisfactory ratings for each SCA evaluated. The 2020 ROR evaluated performance over the period of 2018 to 2020.

3.2.1 Radiation Protection

The Radiation Protection Program in place for the Cluff Lake Project is reflective of the low risk of radiation exposure.

Radiation sources that once existed on site have either been removed or managed as part of the decommissioning activities, leaving the site at background levels of radiation exposure. Worker exposure to radiation had been at background levels for several years. Radon and Long Lived Radioactive Dust (LLRD) personnel monitoring ceased in 2006, and gamma dosimetry ceased in 2013.

There are no full-time workers at the Cluff Lake site and monitoring and maintenance is completed by contractors. Estimated radiation doses to workers are well below the regulatory public dose limit of 1 mSv/year; therefore Orano has no longer ascertained individual worker dose.

The overall radiation risks for workers and the public accessing the decommissioned site are low.

3.2.2 Conventional Health and Safety

The conventional health and safety program maintained for the Cluff Lake Project is reflective of the low risk and unique challenges of the remote and isolated location of the site. A program is in place to protect the health and safety of workers/typically contractors that visit site to carry out campaign monitoring.

Prior to the initiation of campaigns, training verification is performed for campaign crew members in relation to the activities that are being performed.

Injuries reported and occupational lost-time injuries at the Cluff Lake Project over the licence period are presented in Tables 3.2 and 3.3 below.

Table 3.2: Total Injuries Reported

Injuries	2021	2020	2019
Orano	0	0	0
Contractor	0	1	1
Total	0	1	1

Table 3.3: Occupational Lost Time Injuries

	2021	2020	2019
Number of Injuries	0	0	0
Hours Lost	0	0	0

3.2.3 Environmental Protection

The environmental protection program currently in place for the Cluff Lake Project is reflective of the decommissioned status of the site and acknowledgement that decommissioning objectives have been met. During the licensing period environmental monitoring largely consisted of surface and groundwater monitoring to ensure Decommissioning Surface Water Quality Objectives (DSWQO) continued to be met and to support the sites readiness to be transitioned into the provincial IC Program.

The environmental monitoring program was continuously optimized during the licensing period, and now reflects the LTMMP that will accompany the transition of the site into the IC Program.

Surface water monitoring continues to confirm that aquatic life in nearby lakes is protected. Water quality in Island Lake watershed, including Island Lake, which received treated effluent from the tailings management area during operations, is achieving DSWQOs and are expected to continue to be achieved in the future. The Cluff Creek watershed was not influenced by effluent releases but is influenced by groundwater contaminant transport through the waste rock piles is achieving DSWQOs, with predicted peak concentrations expected to remain below DSWQOs.

A reportable environmental discharge is defined by the Saskatchewan Environmental Code Chapter B1.1 Discharge and Discovery Reporting. Other events such as accidental releases of contaminated materials from primary containment areas into secondary containment areas, or releases of volumes less than those defined in the Saskatchewan Environmental Code, are deemed “incidents” and are non-reportable. Table 3-4 presents the number of reportable and non-reportable environmental incidents that occurred during the licence term.

Table 3.4: Reportable and Non-Reportable Environmental Incidents

Year	Reportable Discharges	Non Reportable Environmental Incidents
		Number
2019	0	0
2020	0	0
2021	0	0

4 Other Matters of Regulatory Interest

4.1 Environmental Assessment

With the end of successful operations in 2002, the decommissioning of the site underwent a decommissioning environmental assessment (Comprehensive Study for Decommissioning (CSD), (COGEMA 2000) and Comprehensive Study Report (CSR), (CNSC 2003). The decommissioning objectives, and timeframes for accomplishing them, were established in consultation with federal and provincial authorities and through the public engagement process. The CNSC and the SMOE have determined that the established decommissioning objectives have been met, the site is considered decommissioned.

4.2 Indigenous and Public Engagement

Orano is committed to conducting activities in a socially responsible and environmentally sustainable, manner. In keeping with our commitments, Orano's overarching communication program considers the exchange of information with Indigenous communities, the general public, and key interest groups who express interest in our operations. The methods of communication vary in an effort to match purpose and to optimize effectiveness. Communication methods may be oral, written, or video based, and disseminated using a variety of media including online channels.

Communication and engagement is undertaken with the following overall objectives:

- provide opportunity for sharing of information on the Cluff Lake Project;
- engage with local Indigenous people in a manner that recognizes their interest in the Project and with the intent to understand concerns and respond to questions related to the Cluff Lake Project;
- communicate key Orano business decisions as it relates to the Cluff Lake Project; and
- provide feedback from Orano's Program to regulators to assist their assessment of public interest or concern.

In 1999, as part of decommissioning planning, Orano designed a decommissioning-specific Public Involvement Plan (PIP) that involved the following primary interest groups:

- Indigenous groups (First Nation, Métis, leadership and elders);
- Municipalities (leadership and local residents);
- Northern Saskatchewan Environmental Quality Committee (NSEQC);
- Business sector (outfitters); and
- Community groups (youth, trappers associations)

Over time, with the evolution of best engagement practices and the current status of the site, the Indigenous and other key interest groups for this regulatory request have become more refined.

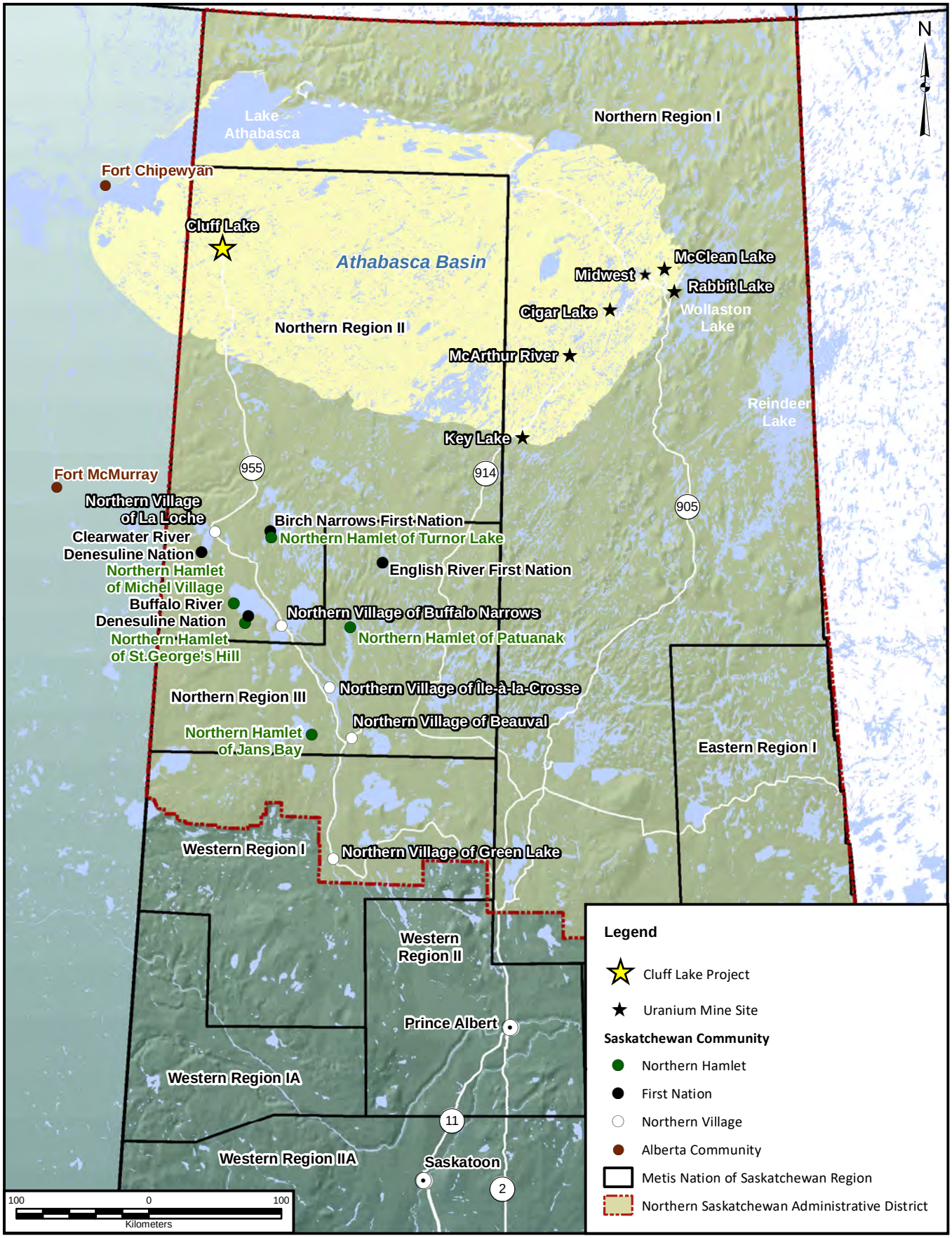
As the majority of northern Saskatchewan residents are of Indigenous origin, including First Nations and Métis, Orano's public engagement activities relating to the decommissioned Cluff Lake project provide opportunities for the CNSC and Orano to effectively consult with Indigenous groups with an interest in the Cluff Lake Project.

4.2.1 Geographical Context

The Cluff Lake Project is located in northwestern Saskatchewan on Treaty 8 Territory, and within the Homeland of the Métis. Orano respects and honors Treaty 8 and our relationship with Métis people.

The closest community to the Cluff Lake project is Fort Chipewyan, Alberta, located approximately 100 km (via air) to the northwest, while the closest communities by all-season road are Clearwater River Dene Nation and La Loche, Saskatchewan, located approximately 250 km to the south (refer to Figure 4-1). From a Saskatchewan Provincial Government administrative perspective it is considered within the Northern Administrative District (NAD), an administrative area defined by the Saskatchewan Provincial Government. The NAD is comprised of approximately half of Saskatchewan's land area but less than four percent of the province's population or roughly 37,000 people.

When Cluff Lake first commenced operations, it was one of the only mining operations in the NAD, and as such, much of the NAD was interested in the activities occurring at the site. As time progressed, a number of other mining and milling operations have started in other regions within the NAD. Far field communities generally have an interest and actively participate in their neighbouring economic opportunities. Engagement efforts during decommissioning reflected an increased focus on the western side of the NAD, which reflects a reasonable narrowing of geographical focus to address current interest in the Cluff Lake Project.



Projection: NAD 1983 UTM Zone 13N
Compiled: T.Lohman Drawn: T.Lohman
Date: 2022-11-14 Scale: 1:4,000,000
Data Sources: Natural Resources Canada, Geobase®, Nation Topographic Database, ORANO Canada Inc.

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FIGURE 4-1
PROJECT LOCATION IN RELATION TO INDIGENOUS COMMUNITIES

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File: Q:\SHEQ\GIS\CLUFF_LAKE\2022\CMD\Figure 4-1 Project Location (NAD) and Metis Nation.mxd

4.2.2 Identification of Indigenous Groups, Communities or People(s)

Orano has developed long-standing relationships with many Indigenous residents and organizations in northern Saskatchewan over the course of the Cluff Lake Project. Proximity to the Cluff Lake site, treaty areas and/or traditional territory of the Dene, Cree or Métis, land use or expressed interest have generally informed the following key Indigenous groups, communities or people(s) identified as primary target audiences for this regulatory process:

- Athabasca Chipewyan First Nation (ACFN);
- Clearwater River Dene First Nation (CRDN);
- Métis Nation of Saskatchewan (MNS);
- Communities and Regional Directors within Metis Nation Region #2;
- Northern Saskatchewan Environmental Quality Committee (EQC);
- Ya'thi Néné Lands and Resource Office (YNLR);
- Birch Narrows Dene Nation (BNDN); and
- Buffalo River Dene Nation (BRDN).

4.2.2.1 Traditional Land Users and Treaty Right Holders

Orano has maintained communication with historical and current traditional and treaty right holders and land users. They primarily include ACFN; CRDN; three co-owners of a Traditional Resource User cabin on Cluff Lake (ACFN members and who also hold trapping licence under Fur Block N-22); and two individuals with Fur Block N-22 trapping licences (both are Métis). Most communication is through letters, phone calls, and opportunistic meetings.

Flett Family: Orano has a long history of working collaboratively with the Flett family. In the late 1970s, the late Mr. Alex Flett was trapping in the exploration area for Cluff Lake. As the Cluff Lake mine was constructed, Mr. A. Flett maintained his trapping residence on the surface lease, and he continued traditional land use activities (hunting, fishing, trapping) throughout the mine life. He and his sons were employed at Cluff Lake and, in the mid-2000s, the company built him a permanent cabin on the shores of Cluff Lake where he spent significant time until he passed away in 2012.

Three members of the extended family remain active trappers within the N22 region and are therefore entitled to own and use a cabin within N22 for trapping purposes. The cabin on the shore of Cluff Lake was given to A. Flett in the mid-2000's but the cabin remained on the company provincial surface lease. Orano and A. Flett could not hold surface rights for the same location at the same time so, throughout the mine life, we worked collaboratively while the area was included in a comprehensive surface lease held by Orano. In 2018 to 2019, Orano concluded a process with the Province of Saskatchewan whereby about 0.1 hectares of the Cluff Lake surface lease was surrendered to enable the establishment of a Traditional Resource User cabin lease for the Flett family cabin to provide the family with greater ownership and control.

It has been a pleasure being neighbors throughout the years and we hope that members of the Flett family continue to view their cabin, with a backdrop of a decommissioned mine, as Shangri La (Flett 2006).

4.2.2.2 First Nations

Orano has developed long-standing relationships with many Indigenous residents and organizations in northern Saskatchewan over the course of the Cluff Lake Project. Knowledge of continued interest, proximity to the site, and land use have generally informed the identification of Indigenous group and communities.

Over the course of the Cluff Lake Project the primary Indigenous communities and representatives that Orano engaged with are the CRDN First Nation at 250 km from the Cluff Lake site, and the ACFN located in Alberta approximately 100 km (via air) from the Cluff Lake site.

Although located quite far from the site, based on traditional land use, ACFN and CRDN are the primary Indigenous communities for the Cluff Lake Project.

Engagement with CRDN is typically conducted with the Chief and counsel, and their representing Engagement consultants, whereas the ACFN is represented by the Dene Lands & Resource Management (DLRM). The DLRM was established to create capacity in the community in order to work with Industry and government to assess environmental impacts of industry development on the ACFN territory.

Land use maps shared by ACFN and CRDN are provided in Figures 4-2 and 4-3.

4.2.2.3 Métis Nation of Saskatchewan

The Cluff Lake Project is within the Homeland of the Métis, specifically Northern Region 2 (NR 2) (Figure 4-1). Orano has directly engaged with Métis Locals, within NR2 regarding the Cluff Lake Project (primarily La Loche and Buffalo Narrows; 264 km and 351 km from the Cluff Lake site, respectively). Engagement has historically been conducted between Orano and Métis Local representatives, Métis Northwest Council Representatives or through their representation on the Northern Saskatchewan Environmental Quality Committee (NSEQC). Orano acknowledges the Métis Nation of Saskatchewan (MN-S) provincial body has recently reorganized and created a point of contact to represent their local organizations for project discussions, when designated by local parties. Orano has been directly engaging with MN-S for this regulatory process.

4.2.2.4 Northern Saskatchewan Environmental Quality Committee

Although not identified as an Indigenous group, the NSEQC was created in 1995 by the Saskatchewan provincial government to assist northern Saskatchewan residents in understanding the various facets of uranium mining and milling. The west side sub-committee has played an important role in the decommissioning of Cluff Lake, as the sub-committee consists of representatives from the communities in

the general region of Cluff Lake, including representatives of nearby First Nation communities and Métis Locals, who were the primary contacts for Métis until the re-organization of the Métis Nation of Saskatchewan occurred.

- Northern Village of Beauval, including:
  - Métis Local #37
- Northern Hamlet of Turnor Lake, including:
  - Métis Local #40
- Northern Village of Buffalo Narrows, including:
  - Métis Local #62
- Northern Village of La Loche, including:
  - Métis Local #39
- Clearwater River Dene Nation (Treaty 8)
- Canoe Lake Cree Nation (Treaty 10)
- Northern Hamlet of Jans Bay including:
  - Métis Local #38 and
  - Sapawgamik #176
- English River First Nation (Treaty 10)
- Northern Village of Green Lake, including:
  - Métis Local #5, and
  - Dore Lake/Sled Lake (Métis Local #67)
- Northern Village of Ile a la Crosse, including:
  - Métis Local #21, and
  - Canoe River Métis Local #174
- Northern Hamlet of Michel Village, including:
  - Métis Local #65
- Northern Hamlet of Patuanak, including:
  - Métis Local #82
- Northern Village of Pinehouse, including:
  - Métis Local #9

4.2.2.5 Ya'thi Néné Lands and Resource Office

Established through the Collaboration Agreement with the Athabasca Basin communities for the McClean Lake Project, the Ya'thi Néné Lands and Resource Office (YNLRO) provides capacity for environmental management and monitoring for projects in the Athabasca Basin.

Although the Athabasca Communities represented by the YNLRO have not historically expressed interest in the Cluff Lake Project, following the YTN's intervention in the 2019 public hearing for the renewal of the Cluff Lake decommissioning licence, Orano identified the YTN as group with potential interest in future proceedings.

4.2.2.6 Record of Engagement with Indigenous Groups

Although engagement for this licence request was restricted due to the COVID-19 pandemic, Orano was able to meet virtually and in person with leadership, their counsel and their consultants numerous times. Due to the inability to visit communities, Orano utilized other methods of communication and information sharing, including mailing out fact sheets and information regarding the project, the creation of a YouTube video to share the Cluff Lake story, radio interviews and ads for play on northern radio and providing funding for key Indigenous groups to review the LTMMP, including a community survey (to CRDN) to ascertain concerns and gauge the perception of risk related to the Cluff Lake Project.

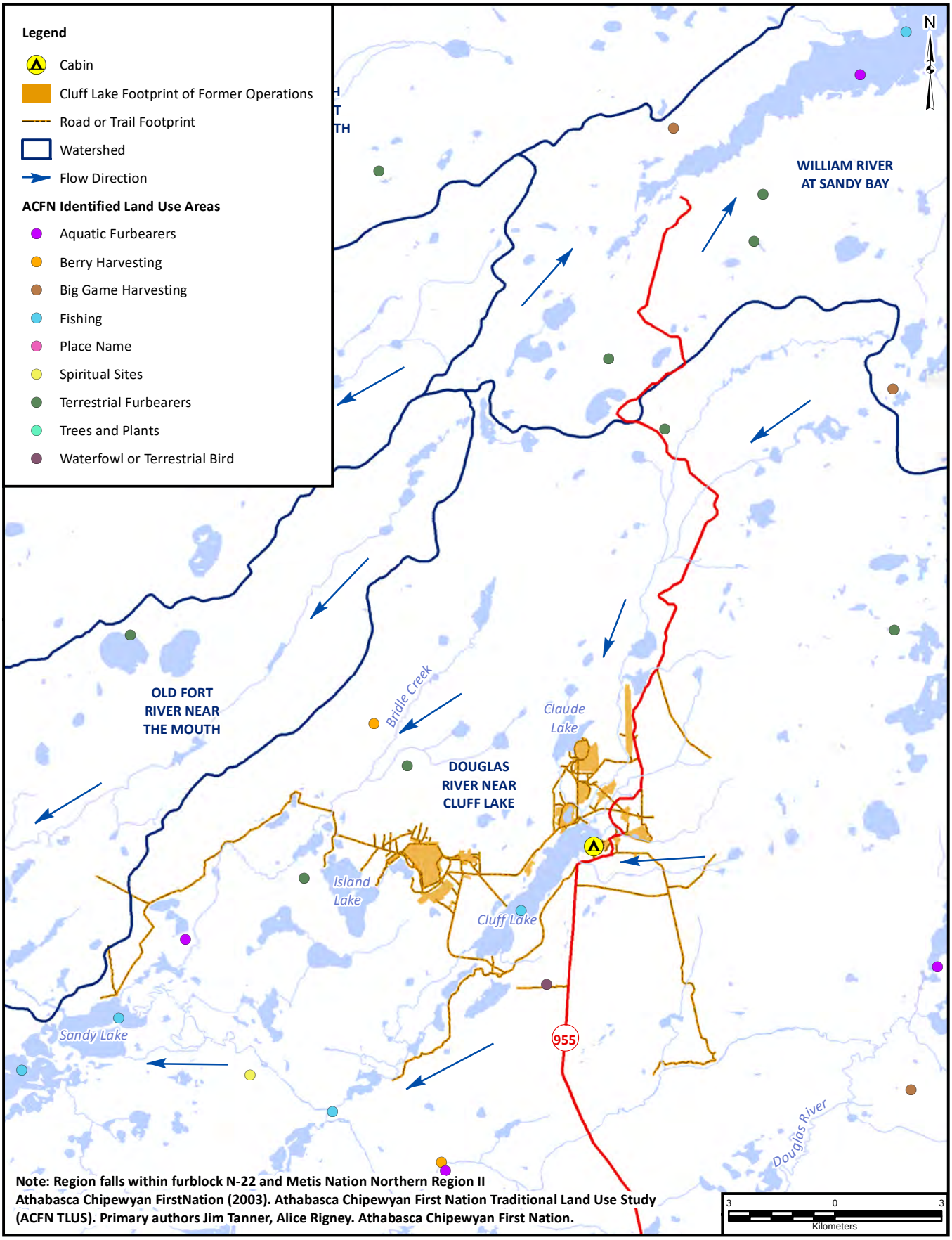
Refer to Appendix A: Table A-1 for a record of Indigenous engagement.

4.2.2.7 Issues and Concerns Raised by Indigenous Group and Communities

Throughout this phase of engagement, it has been communicated to Orano that some members of Indigenous communities feel that the Cluff Lake site is not safe for engaging in traditional practices. Orano continues to engage with community leadership to identify best methods for communicating to community members that the site has been appropriately remediated and poses no unreasonable risk to persons or the environment and will continue to be monitored by the Province of Saskatchewan. Orano acknowledges that long-term outreach and communication with community leaders and members regarding the results of the Long-term Monitoring and Maintenance is necessary.

Orano has respected Indigenous community requests to review and suggest changes to the LTMMP to be implemented by the Province of Saskatchewan through the IC Program, providing the document for Indigenous review and organizing meetings, since its initial inception.

Core storage has been a common concern raised to Orano by Indigenous leadership. Orano has endeavored to provide information on the regulatory requirements and safe storage of core in northern Saskatchewan, including the publication of an information sheet mailed to all residents of Saskatchewan's northwest region. The information is also available on the Orano Canada website and was promoted via social media.



Note: Region falls within furblock N-22 and Metis Nation Northern Region II Athabasca Chipewyan FirstNation (2003). Athabasca Chipewyan First Nation Traditional Land Use Study (ACFN TLUS). Primary authors Jim Tanner, Alice Rigney. Athabasca Chipewyan First Nation.

Projection: NAD 1983 UTM Zone 12N
Compiled: T.Lohman Drawn: T.Lohman
Date: 2022-11-03 Scale: 1:150,000
Data Sources: Natural Resources Canada, Geobase®, Nation Topographic Database, ORANO Canada Inc.

CLUFF LAKE PROJECT

FIGURE 4-2

LOCAL ACFN LAND USE NEAR THE DECOMMISSIONED CLUFF LAKE PROJECT

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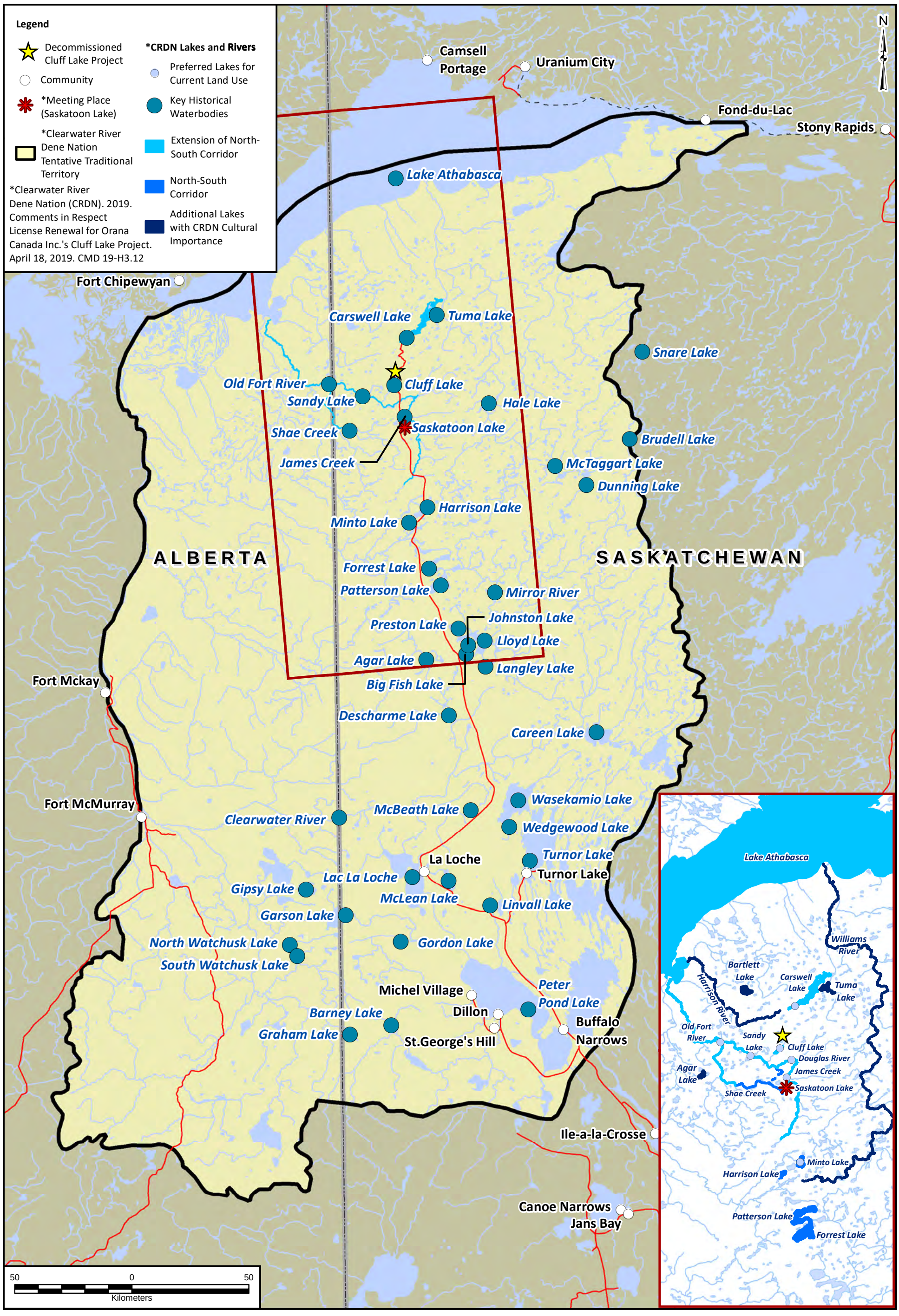
File: Q:\SHEQ\GIS\CLUFF_LAKE\2022\CMD\Figure 4-2 Local ACFN Land Use.mxd



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Date: 2022-11-03 Scale: 1:1,500,000
Data Sources: Natural Resources Canada, Geobase®, Nation Topographic Database, ORANO Canada Inc.

CLUFF LAKE PROJECT

FIGURE 4-3
LOCAL CRDN LAND USE NEAR THE DECOMMISSIONED CLUFF LAKE PROJECT

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4.2.3 Public Stakeholder Engagement

In accordance with regulatory document REGDOC-3.2.1, *Public Information and Disclosure* (PIDP), Orano maintains a PIDP for the Cluff Lake Project, ensuring information regarding the health, safety and security of persons and the environment and other issues related to the lifecycle of the Project is effectively communicated to the public.

The PIDP identifies interested public stakeholders, the methods for communicating and providing information related to the Cluff Lake Project, as well as how inquiries are tracked through a dedicated database.

Refer to Appendix A: Table A-2 for a record of public engagement.

4.2.3.1 Municipal Communities

The next closest communities with all-season road access to the Cluff Lake Project are Buffalo Narrows at 351 km, Ile a la Crosse at 414 km, and Beauval at 463 km away.

Although the main communities, both Indigenous and municipal, are located quite far from the site (Figure 4--1), these communities and their leadership have a long-standing history with the Cluff Lake Project as it served as the largest employer on the northwest side of the Province during its lifetime. As representatives of the community members, Orano considers leadership of the various communities as a key interest group.

Community members (or local residents) within these communities also comprise an interest group for Orano because it is important for potential land users to have a general understanding of the site, anticipated environmental effects, and continuing recovery.

4.2.3.2 Community Groups

The non-governmental organization (NGO) community can be active participants in the historical regulatory process. The Saskatchewan Environmental Society (SES), in particular, has an interest in the Cluff Lake Project.

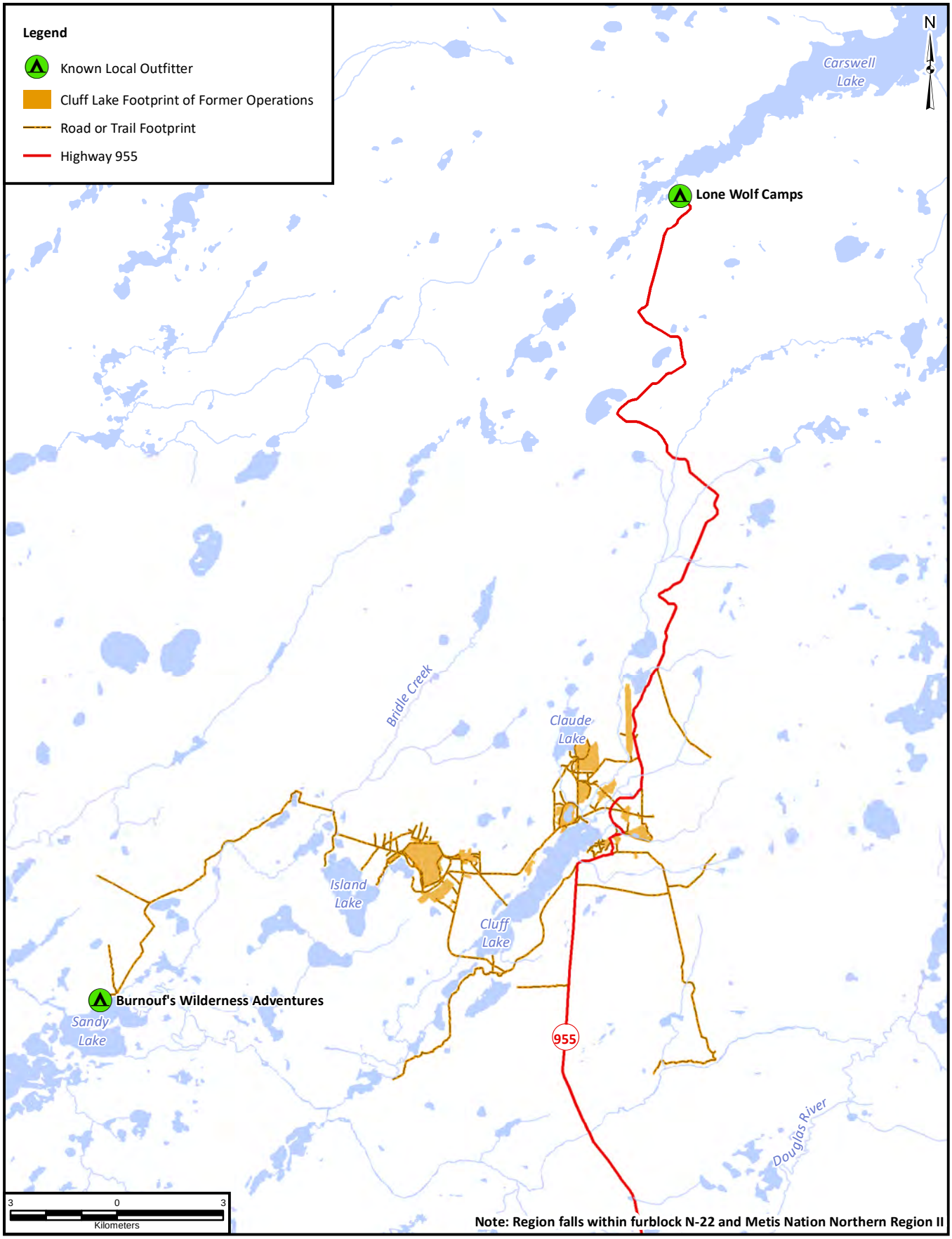
In 2020, SES published a report providing the results of their review of the decommissioning of the Cluff Lake Tailings Management Area. Orano supported the study, with the objective to identify differences of opinion between SES and Orano about the adequacy of the decommissioning, and, where differences where found, to define the basis of the disagreement.

SES reviewed much of the documentation produced by Orano to support the claim that the site is ready to be released to the Government of Saskatchewan's Institutional Control Program and has commented on

Orano's responses to a number of issues and concerns about the condition of the TMA that have been raised by the public.

4.2.3.3 Outfitters Located the Near Cluff Lake Project

Orano has historically and continues to engage with a Carswell Lake lodge owner, a Sandy Lake cabin owner. Carswell Lake is located in a different watershed than the Cluff Lake Project but is accessed by the road extending from Highway 955 by Cluff Lake. Figure 4-4 displays the locations of outfitters near the decommissioned Cluff Lake Project.



Projection: NAD 1983 UTM Zone 12N
Compiled: T.Lohman Drawn: T.Lohman
Date: 2022-11-03 Scale: 1:150,000
Data Sources: Natural Resources Canada, Geobase®, Nation Topographic Database, ORANO Canada Inc.

CLUFF LAKE PROJECT

FIGURE 4-4
OUTFITTERS: NEAR THE DECOMMISSIONED CLUFF LAKE PROJECT

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4.3 Land Use

4.3.1 Traditional Land Use Scenario

Traditional land use at the Cluff Lake site consists of seasonal access by Indigenous trappers, both for commercial and personal consumption. There is no evidence of other site activities by Indigenous or non-Indigenous peoples prior to site development. While some fishing has occurred on Cluff Lake, most fishing is concentrated on the nearby Sandy and Carswell Lakes. Gathering and consumption of locally available low bush cranberries, blueberries, and mushrooms has also been conducted throughout the Project history.

Orano acknowledges and appreciates land use information shared from the representatives from the Environmental Quality Committee (EQC) and west side EQC representatives in particular, the ACFN, the CRDN, registered trappers in the N22 Fur Block, outfitters, interested interveners in regulatory proceedings, and west side community members.

On February 21 and 22, 2005, Orano held a workshop on the decommissioning of the Cluff Lake Project with members of the west side EQC and the ACFN to gain insights into the historic, current, and expected future traditional use of the land. The participants included a trapper from the ACFN, and members of his family, who have seasonally accessed the Cluff Lake area and maintained a trap line in the local study area prior to mine construction and throughout operations. Members of the extended family have maintained cabins on both Cluff Lake and Sandy Lake.

During the workshop, attendees were asked to envision having a cabin on Cluff Lake available for year-round use when advising of land use activities, locations, and time frames. Expected and potential land use was identified as, but not limited to fishing, hunting, berry picking, firewood collection, trapping, wild rice production, herbs and medicine harvesting, gardening, tourism, hiking, swimming, and camping. Attendees then described the amount of time they would spend conducting these activities throughout the year and identified the probable locations for the various activities. The participants agreed that under a scenario with year-round cabin availability at Cluff Lake, approximately 91 days would be spent in the Cluff Lake area, with 25% of the time spent in the immediate Cluff Lake area (~23 days) and 75% of the time would be spent at other lakes including Sandy, Carswell, and Two-Mile lakes.

The family of owners of the traditional resource use cabin on Cluff Lake also own a near-by cabin on Sandy Lake and spend time in northern Alberta and the Northwest Territories. ACFN has identified land use throughout the area. The Cluff Lake area is part of the south-north corridor identified by the CRDN consistent with Orano's understanding of the area as part of a travel route. CRDN has identified areas of cultural significance. Orano is aware of hunters throughout the region that travel Highway 955 north towards, to, and past the Cluff Lake site. The two closest outfitters are located on Sandy and Carswell lakes.

The following are major outcomes of the discussion:

- Traditional land use, while sometimes utilizing land and resources in a small and preferred area, generally involves travelling over a wide area. The decommissioned Cluff Lake footprint is generally considered small relative to areas used for traditional purposes.

- Traditional land users would be unlikely to set up a cabin at Cluff Lake given that there are better fishing lakes in the region. The location could and would more likely be used as a base with most activities conducted away from this area. Fishing on Cluff Lake would be expected but limited as the lake is not preferred.

- The mining areas were viewed as unattractive areas for most activities, with the exception of gathering blueberries. With the exception of berry picking, activities were unlikely to be conducted in the small, localized areas affected by mining.

- The vicinity of pit lakes was viewed as unlikely areas for setting up camp. The pits are isolated from the aquatic system and, although remediated for aesthetics and safe surface water quality, traditional users are unlikely to drink water from, or fish on, pit lakes because they are obviously human-made lakes in a region of abundant and known good fishing.

- It is unlikely that a cabin in the area, away from home communities, would be occupied year-round. This feedback is consistent with current cabin use by the family owning a traditional resource user cabin on the shore of Cluff Lake who use the cabin periodically.

The participants agreed upon a base case scenario to assess potential risk in the Human Health Risk Assessments (HHRA) conducted by Orano: under a scenario with year-round cabin availability at Cluff Lake, approximately 91 days would be spent in the Cluff Lake area, with 25% of the time spent in the immediate Cluff Lake area (~23 days) and 75% of the time would be spent at other lakes including Sandy, Carswell, and Two-Mile lakes.

Additionally – full time residency was considered in the HHRA - The full time receptor is assumed to obtain 70% of drinking water from Cluff Lake and 30% from a background lake, such as Carswell Lake, which is a known popular fishing lake.

4.3.2 Country Food Safety

The Human Health Risk Assessment concluded that both casual traditional land use, and full time residency at the decommissioned Cluff Lake site is safe for people who may hunt, fish, drink water and gather from the site and that the food from and near the site is safe to share with extended families, including children.

4.3.3 Evidence of current land use

Evidence of current land use (human and wildlife) has been observed during visits, tours and inspections of the Cluff Lake Project site, including evidence of hunting across site, principally on the Claude Waste Rock Pile (rifle shell casings, spent shotgun shells); animal tracks (deer and wolf), scat (bear, moose and canine);

observations of wildlife (moose cow and calf); observed wood piles used for the purpose of camp fires; and evidence of vehicle tracks along stream crossings and around site.

4.3.4 Recommended Land Use

The human health risk assessment demonstrated that the Cluff Lake Project site is safe for traditional land use by adults, children and toddlers, both in the near-term and over the long-term. The risk assessment demonstrates that the site is safe for people who may hunt, fish, drink water, and gather (e.g. tea, berries) from the site. Food from and near the decommissioned mine site is safe to share with extended families including children. As such no restrictions are required.

Following successful transfer into the IC Program, administrative responsibility for the Cluff Lake site will be with the Province of Saskatchewan. Under the IC Program, acceptable land uses are defined and administrative controls put into place. Sections 10 and 17 and of the *Reclaimed Industrial Sites Act* describes the ability of the Province to restrict or control access.

Additionally, proposed Crown land use (e.g. recreational – cottages; commercial – outfitting; traditional resource use – commercial trapping or fishing) requires application and approval for the applicable lease, permit, easement, or licence to allow authorized use (Government of Saskatchewan 2019). The Ministry of Environment reviews applications to ensure that environmental and resource impacts are considered (including proximity to other land users, buffers from sensitive area(s), and designations that prohibit certain types of development) before issuing a decision.

In consideration of administrative controls, Orano recommends that:

- The decommissioned mine footprint remain with unrestricted access for travel and on-going casual land use. Traditional Resource User cabins and associated casual land use activities of hunting, trapping, fishing, drinking water from Cluff Lake, and gathering berries and tea should remain unrestricted.
- Although the risk assessment presents low risk for full time residency at the decommissioned Cluff Lake site, as a prudent measure it is recommended that full-time residency be restricted.

    - The portions of the Cluff Lake site entering the institutional control program are limited to those areas where full-time land use restrictions are needed to protect features of decommissioning. For example, the tailings management area and Claude waste rock piles are covered with glacial till and vegetated to reduce surface water infiltration. Orano has recommended residency restrictions to protect these areas from disturbance.

4.4 Financial Assurance

With the revocation of the Cluff Lake licence and the acceptance of the property by the Province into the IC Program, the existing financial guarantees will no longer be required.

The Province of Saskatchewan's *Reclaimed Industrial Sites Act* and its Regulations require provision of a fund sufficient to pay for the long-term monitoring and maintenance of the site. In addition, depending on whether or not any engineered structures or tailings remain on the site, an additional contribution of between 20% of the monitoring and maintenance amount is made to an Unforeseen Events Fund. The IC Program also requires that a financial assurance in the amount of the maximum potential failure event be carried until such time as the Unforeseen Events Fund builds to a level that the Province of Saskatchewan is comfortable that there is sufficient money in the fund to cover any future unforeseen event.

As properties are transferred to the IC program, Orano will provide the required funds to the Province of Saskatchewan to meet the Monitoring and Maintenance requirements as well as the Unforeseen Events Fund.

4.5 Other Regulatory Approvals

The successful transfer to the IC Program requires simultaneous and contingent approvals from the SMER, the SMOE (both the Environmental Protection Division and the Lands Branch of the Resource Management and Compliance Division).

1. Saskatchewan Ministry of Energy and Resources: has provided a notice of intent for the acceptance of the Cluff Lake property into the IC Program (D. Zmetana (Ministry of Energy and Resources to R. Stenson (CNSC), October 24, 2022). Orano understands that in order to proceed, Orano must provide the agreed upon funding into the IC Monitoring and Maintenance Fund and the IC Unforeseen Events Fund, along with the provision of a financial assurance, the IC registry and payment of the IC registration fee.

2. Saskatchewan Ministry of Environment – Environmental Protection Division Uranium & Northern Operations: has provided a notice of intent to release the Cluff Lake Project from Decommissioning and Reclamation requirements (Moulding (MOE) to Huffman; November 10, 2022).

3. Saskatchewan Ministry of Environment – Lands Branch and Government Relations: The October 24, 2022 letter of intent from the Ministry of Energy and Resources to the CNSC indicates that the Surface Lease Agreement, Property No 20085, will be surrendered for acceptance into the IC Program.

It is the expectation that all parties will act on their obligations, following the March 2023 hearing, and the CNSC's acceptance to transfer the property to the Province of Saskatchewan, accompanied by a licence exemption.

5 Conclusions

Regulators have acknowledged that the Cluff Lake Project site meet the established end-state decommissioning objectives and criteria. Orano has been conducting environmental monitoring and periodic minor maintenance while readying the properties remaining parcels for transfer into the Province of Saskatchewan's IC Program.

The Province of Saskatchewan is a responsible authority to oversee the long-term performance of the remaining parcels and to possess, manage, and store radioactive waste on the property. The IC Program, through which the properties will be managed was designed in collaboration with the CNSC to meet provincial, national and international obligations for the oversight of decommissioned radioactive waste. The request to exempt the Province from a requirement for a CNSC licence will not I) pose unreasonable risk to the environment or health and safety of persons, II) pose unreasonable risk to national security, or III) result in a failure to achieve conformity with measures of control and international obligations to which Canada was agreed.

The remaining activities (i.e. to possess, manage, and store radioactive waste) will be managed by the Province once the CNSC Licence UMDL-MINEMILL-CLUFF.00/2024 is revoked. Orano views this transaction as a transfer of responsibility for managing radioactive materials (i.e. decommissioned waste rock and tailings) at the decommissioned Cluff Lake from one responsible party to another. IC monitoring and maintenance will be administered by the Government of Saskatchewan with adequate funds provided by Orano and site knowledge well documented. Pursuant to Section 45(b) of the *NSCA,* the CNSC will be notified of any unforeseen event that is likely to result in exposure of people or the environment in excess of the prescribed limits and, pursuant to Subsection 43(3) of the *NSCA,* the CNSC has the authority to redetermine its decision(s) and require that the Cluff Lake Project again be licensed under the *NSCA* should that oversight be required.

6 References

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Appendix A Record of Stakeholder Engagement

Table A-1 Record of Indigenous Engagement

Community/Interest Group	Date of Meeting	Comment
Athabasca Chipewyan First Nation (ACFN) Engagement		
ACFN	03/11/2020	Orano attempt to organize a meeting regarding Cluff Lake decommissioning
ACFN	03/24/2020	Presented key details and information
ACFN (Joy Flett)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
ACFN (Tim Flett)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
ACFN (Ed Flett)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
ACFN (Manager Dalrymple)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
ACFN	02/18/2021	Orano provided the LTMMP and key information
ACFN	03/01/2021	Orano followed up to funding request
ACFN	03/01/2021	Orano followed up regarding the LTMMP and key information previously provided with an offer to meet
ACFN	03/18/2021	Orano followed up regarding the LTMMP and key information previously provided with an offer to meet
ACFN	04/09/2021	Provided LTMMP with request for input, particularly that monitoring locations reflect traditional land use areas.
ACFN	04/09/2021	ACFN response to LTMMP feedback request; request capacity funding for the LTMMP review.
ACFN	03/16/2022	Orano provided additional information regarding LTMMP.
ACFN	03/18/2022	Orano agreed to fund the proposed scope and budget for ACFN to perform a technical review of the LTMMP
ACFN	05/25/2022	Orano committed to responding to the ACFN technical review.
ACFN	08/24/2022	Orano emailed Stakeholders information on Participant Funding for the Cluff Lake CNSC hearing and attached Cluff Lake fact sheet
ACFN	10/05/22	Orano responded to ACFN technical review
ACFN	10/19/22	Orano discussed a meeting date as requested by ACFN

Community/Interest Group	Date of Meeting	Comment
Clearwater River Dene Nation (CRDN) Engagement		
CRDN	01/09/2020	Orano discussed with CRDN how TLU was integrated into Cluff Lake assessments
CRDN	02/26/2020	Orano received a notification that CRDN will be requesting a meeting to hear information from Orano on Cluff Lake project
CRDN	03/04/2020	Followed up with CRDN regarding meeting date for Cluff Lake project.
CRDN	05/26/2020	Indication from CRDN that a formal response from the review of project information was forthcoming
CRDN	05/28/2020	Orano proposed a meeting to discuss key information and engagement
CRDN (Chief Clark)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
CRDN	09/16/2020	Provided requested technical information
CRDN	09/16/2020	Orano requested to arrange a meeting regarding Cluff Lake; to follow up on previous meeting. CRDN committed to issuing a formal letter with CRDN requests (not received)
CRDN	10/01/2020	Orano shared key information in advance of planned Oct 6, 2020 meeting
CRDN	10/06/2020	Orano provided key project information and discussed areas of further interest
CRDN	12/14/2020	Orano requested to arrange a meeting regarding Cluff Lake; to follow up on previous meeting conclusions and action plans
CRDN	01/21/2021	Orano followed up to arrange an engagement meeting
CRDN	01/21/2021	CRDN informed Orano of new engagement contact and process
CRDN	01/25/2021	Orano proposed Feb 4, 2021 meeting to discuss LTMMP and monitoring locations
CRDN	01/29/2021	Orano proposed meeting- follow up
CRDN	01/29/2021	Orano confirmed Feb 5, 2021 meeting and agenda
CRDN	02/05/2021	Orano provided key information and details; particularly regarding the LTMMP
CRDN	03/19/2021	Orano proposed a call to discuss Engagement plan and key information
CRDN	03/19/2021	Orano provided Cluff Lake CRDN consultation summary and requested meeting to follow up on outstanding items
CRDN	04/09/2021	Orano provided draft 2021 Cluff Lake Engagement plan for consideration and feedback
CRDN	04/12/2021	Orano requested process for engagement on Cluff Lake project
CRDN	04/24/2021	Orano followed up to arrange an engagement meeting

Community/Interest Group	Date of Meeting	Comment
CRDN	09/21/2021	Orano proposes a meeting to discuss areas CRDN would like further engagement on.
CRDN	10/13/2021	Orano followed up regarding meeting planned for Oct 28, 2021; including draft agenda
CRDN	11/03/2021	Orano requested to arrange a meeting regarding Cluff Lake
CRDN	11/04/2021	Orano proposed a meeting to engage on LTMMP (previously provided)
CRDN	11/10/2021	Orano followed up to phone call to confirm November 18 meeting and agenda
CRDN	11/16/2021	Orano responds to CRDN postponement of planned meeting; provided LTMMP and Engagment plan for feedback
CRDN	11/19/2021	Introduction to new counil members and provide project update.
CRDN	11/24/2021	
CRDN	12/09/2021	Orano provided LTMMP upon request
CRDN	01/17/2022	Followed up with CRDN regarding LTMMP feedback requested
CRDN	01/24/2022	Orano provided Cluff Lake project update and LTMMP, with a summary of engagment to date and request for feedback deadline
CRDN	03/15/2022	Follow up to Jan 24 letter requesting meeting/feedback on LTMMP
CRDN	05/02/2022	Orano requested to arrange a meeting regarding Cluff Lake
CRDN	05/26/2022	Orano requested to arrange a meeting regarding Cluff Lake
CRDN	06/22/2022	Follow up to confirm meeting details
CRDN	06/24/2022	Orano followed up to arrange an engagement meeting
CRDN	June 2022 to on-going	Orano and CRND are negotiating a proposal by CRDN for their technical review of the LTMMP
CRDN	07/28/2022	Orano invited Chief and Council to choose one CRDN member to participate in the Cluff Lake regulatory inspection
CRDN	08/24/2022	Orano emailed Stakeholders information on Participant Funding for the Cluff Lake CNSC hearing and attached Cluff Lake fact sheet
CRDN	08/30/22	Orano and CRND finalized a proposal by CRDN for their technical review of the LTMMP
CRDN	09/09/2022	CRDN representative participating in the September regulatory inspection of Cluff LAKE
CRDN	10/11/2022	Received CRDN draft comments on LTMMP
Métis Nation of Saskatchewan (MN-S) Engagement		
MN-S	05/04/2019	Orano provided information for a planned site tour
MN-S (Northern Region #2)	09/17/2019	Orano coordinated a site visit

Community/Interest Group	Date of Meeting	Comment
MN-S (Buffalo Narrows Local)	09/17/2019	Orano coordinated a site visit
Métis Local #39 (La Loche) (President St. Pierre)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
Métis Local #37 (Beauval) (President Daigneault)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
MN-S Northern Region 2 (Regional Director Leonard Montgrand)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
MN-S Northern Region 3 (Regional Director Mervin (Tex) Bouvier)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
Buffalo Narrows Métis Community Council (Laliberte)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
Métis Local #62 (Buffalo Narrows) (President Chartier)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
MN-S Regional Director Marlen Hansen	07/17/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
MN-S (Regional Director, Northern Region 2 Director, La Loche Local Metis President	09/28/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
MN-S	01/29/2021	Meeting to provide key information.
MN-S	02/11/2021	Provided additional information requested during Jan 29,2021 meeting
MN-S	03/10/2021	MN-S distributed LTMMP to Northern Region 3 presidents
MN-S	04/15/2021	Provided key information and discussion
MN-S	04/21/2021	Continuation of April 15, 2021 meeting- provided key information.
MN-S	04/28/2021	provided information in advance of the engagment meeting
MN-S	07/06/2021	Provided LTMMP with request for input, particularly that monitoring locations reflect traditional land use areas.
MN-S	07/06/2021	Orano response to MN-S requests following LTMMP review.
MN-S	02/23/2022	Orano provided additional technical information regarding LTMMP.
MN-S	04/29/2022	Orano provided additional information regarding LTMMP and process for providing capacity funding for LTMMP review.
MN-S	07/26/2022	Orano agreed to fund the proposed scope and budget for MN-S to perform a technical review of the LTMMP
MN-S	07/28/2022	Orano invited MN-S to choose one representative to participate in

Community/Interest Group	Date of Meeting	Comment
		the Cluff Lake regulatory inspection *unfortunately the representative cancelled two days before the inspection and MNS declined to send a replacement
MN-S	08/24/2022	Orano emailed Stakeholders information on Participant Funding for the Cluff Lake CNSC hearing and attached Cluff Lake fact sheet
MN-S	09/20/2022	Orano received LTMMP technical review.
Basin Communities (Ya'thi Néné)		
AJES	04/22/2020	Presented key details and information
Ya'thi Nene Lands and Resource Office	04/22/2020	Presented key details and information
Basin Communities; YTN	07/01/2020	Newlsetter article providing key details regarding Cluff Lake.
YTN-LRO (Garrett Schmidt)	07/17/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
Y YTN-LRO (Garrett Schmidt)	08/24/2022	Orano emailed Stakeholders information on Participant Funding for the Cluff Lake CNSC hearing and attached Cluff Lake fact sheet
Other Indigenous Stakeholders		
NSEQC	07/10/2019	Orano reported key information.
NSEQC	07/17/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
NSEQC	04/21/2022	Provided Cluff Lake ERA Factsheet
NSEQC	08/24/2022	Orano emailed Stakeholders information on Participant Funding for the Cluff Lake CNSC hearing and attached Cluff Lake fact sheet
Resource Land User, Métis	08/28/2019	Orano invited individual to Cluff Lake site tour.
Resource Land User; ACFN	09/25/2019	Orano responded to a land user regarding Cluff Lake concerns
Resource Land User (Indigenous)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
Resource Land User (Indigenous)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
Birch Narrows First Nation (Chief Sylvester)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
Buffalo River Dene Nation (Chief Morrison)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary

Table A-2 Record of Public Engagement

Stakeholders and other Interested Parties		
Individual	07/09/2019	Orano provided TMA Ponded Water Risk Assessment Report following request for information
SES	10/29/2019	SES provided approach for proposed study
SES (Ann Coxworth)	07/17/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
SES (Ann Coxworth)	08/24/2022	Orano emailed Stakeholders information on Participant Funding for the Cluff Lake CNSC hearing and attached Cluff Lake fact sheet
Individual	12/13/2019	Orano provided information as requested during the community tour
Individual	02/12/2020	Provided Cluff TMA Berry chemistry- response to request
Resource Land User	02/26/2020	Orano discussed sampling location with land user
Resource Land User (Emile Burnouf)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
Resource Land User (Brian and Shelly McDonald)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
La Loche (Mayor St. Pierre)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
Ile-a-la-Cross (Mayor Favel)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
Buffalo Narrows (Mayor Woods)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
Beauval (Mayor Daigneault)	07/13/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
Rod Gardiner	07/17/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
Valerie Drummond	07/17/2020	Cluff Lake update mailed; including Cluff Lake Factsheet and Risk assessment summary
Individual	07/22/2020	Provided information on site access
La Loche Mayor	09/23/2020	Provided information and heard community feedback regarding the Cluff Lake site
Public (Northern SK)	11/2020	Radio interviews on northern Saskatchewan radio stations (MBC) provided project information and update on Cluff Lake.
Public	2020; 2022	Shared Cluff Lake Then and Now Video in English, Dene and Western Michif via social media
Ile-a-la-Crosse Mayor	08/24/2022	Orano emailed Stakeholders information on Participant Funding for the Cluff Lake CNSC hearing and attached Cluff Lake fact sheet
Buffalo Narrows Mayor	08/24/2022	Orano emailed Stakeholders information on Participant Funding for the Cluff Lake CNSC hearing and attached Cluff Lake fact sheet
Beauval Mayor	08/24/2022	Orano emailed Stakeholders information on Participant Funding for the Cluff Lake CNSC hearing and attached Cluff Lake fact sheet

La Loche Mayor	08/24/2022	Orano emailed Stakeholders information on Participant Funding for the Cluff Lake CNSC hearing and attached Cluff Lake fact sheet