Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire

CMD 26-H105.1

Date: 2026-06-29

Written Submission from Orano Canada Inc.

Mémoire d' Orano Canada Inc.

In the matter of

À l'égard d'

Orano Canada Inc.

Orano Canada Inc.

Application to renew the McClean Lake Operating Licence for 2-year term

Demande pour le renouvellement du permis d'exploitation de McClean Lake pour une période de deux ans

Hearing in writing based on written submissions

Audience par écrit fondée sur des mémoires

September 2026

Septembre 2026

Document ID: QQQVZZNDK725-166150894-13255 (PDF)

Canada

Orano Canada Inc.

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June 29, 2026

Commission Registry
Canadian Nuclear Safety Commission
Email: registry-greffe@cnsc-ccsn.gc.ca

Re: Orano Canada Inc. Renewal of the McClean Lake Operating Licence UML-MINEMILL-McCLEAN.02/2027 – CMD 26-H105.1

On August 11, 2025, Orano Canada Inc. (Orano) submitted a request to renew the McClean Lake Operating Licence UML-MINEMILL-McCLEAN.02/2027. Orano is requesting a 2-year term for the licence (expiry: June 30, 2029) with no changes to the licensing basis and authorized licensed activities, terms and conditions of the existing licence or associated Licence Conditions Handbook.

Please find enclosed Orano Canada Inc.'s Commission Member Document (26-H105.1) in support of the September 2026 hearing in writing with the Commission.

Should you have any questions, please contact me at (306) 343-4058 or by email at colin.braithwaite@orano.group.

Sincerely,

DocuSigned by:
Colin Braithwaite
3DBD7634925740F...

Colin Braithwaite
Vice President, Safety, Health, Environment and Regulatory

Encl.: Commission Member Document (CMD) 26-H105.1

cc: Salman Akhter, Senior Project Officer, Uranium Mines and Mills Division, CNSC
Orano Distribution

Original

CNSC Commission Member Document (CMD)

CMD: 26-H105.1

Date Submitted: June 29, 2026

Reference CMDs: N/A

Orano Canada Inc.

Hearing in Writing

Scheduled for:
September 2026

Request for a Licensing Decision:

Regarding:

McClean Lake Operation – Licence Renewal

Submitted by:
Orano Canada Inc. (licensee)

Table of Contents

Executive Summary

The McClean Lake Operation is a uranium mining and milling facility located in the Athabasca Basin of northern Saskatchewan. Orano Canada Inc. (Orano) operates the McClean Lake Operation in accordance with the Licence UML-MINEMILL-McCLEAN.02/2027 issued by the Canadian Nuclear Safety Commission (CNSC) on July 1, 2017 (Licence). The Licence is for a ten-year term, expiring on June 30, 2027.

On August 11, 2025, Orano applied to the CNSC to renew the operating Licence to continue authorized operations, which include: the operation and modification of a nuclear facility for the mining of uranium and the production of uranium concentrate (U_3O_8) at the McClean Lake Operation; to mine a nuclear substance (uranium ore); produce a uranium concentrate; and import, possess, use, store, transfer and dispose of nuclear substances and radiation devices; and modify the tailings management facility outer perimeter to accommodate disposal of tailings.

Orano is requesting a 2-year term for the licence (expiry: June 30, 2029) with no changes to the licensing basis and authorized licensed activities, terms and conditions of the existing licence or associated Licence Conditions Handbook (LCH). This short-term renewal is being pursued with the understanding that Orano will apply within the two-year period for a longer-term licence and will be incorporating additional mining projects: Sue F and the Midwest Project. Orano is also requesting acceptance of the revised financial guarantee for the decommissioning of the McClean Lake Operation, for C$122,557,378, as described in the revised Preliminary Decommissioning Plan and Financial Assurance (Orano, 2025c).

This Commission Member Document (CMD) describes the McClean Lake Operation's performance over the current Licence term for each of the Safety and Control Areas (SCAs) as outlined in the Licence Conditions Handbook (LCH). Orano commits to alignment with relevant Canadian Standards Association (CSA) standards and CNSC Regulatory Documents (REGDOCs).

Orano submits that it is a qualified operator who conducts its operations in a manner consistent with the requirements of the *Nuclear Safety Control Act*, its regulations and other legislative requirements. In particular, Orano submits that it is qualified to continue to operate the McClean Lake Operation and perform the activities authorized by the Licence and that the necessary measures are in place to ensure Orano continues to conduct its operations in a manner:

- to limit the risks to the health and safety of workers and the public;
- to limit the risks to the environment;
- to limit the risks to national security; and
- consistent with Canada's international obligations.

1 Introduction

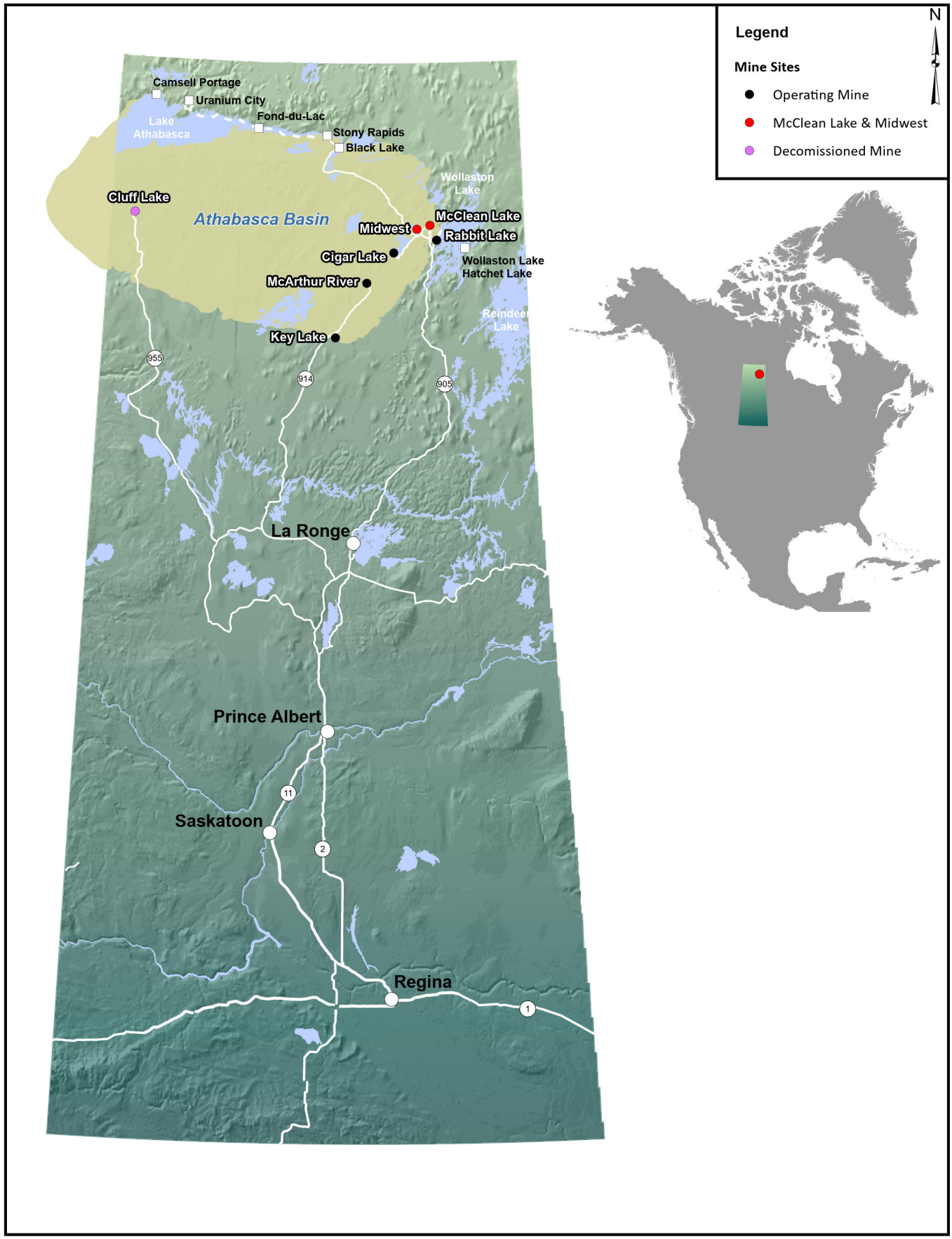
1.1 Background

The McClean Lake Operation is a joint venture between Orano and Denison Mines Inc. (Denison), operated by Orano. Orano is a Canadian company, headquartered in Saskatoon, Saskatchewan. Orano is a subsidiary of the multinational Orano group headquartered in France.

The McClean Lake Operation is a uranium mine and mill facility located in northern Saskatchewan, within a region known as the Athabasca Basin, Treaty 10 territory and within the Traditional Territory of the Denesųłiné and Cree Peoples, and Homeland of the Métis. As shown in Figure 1-1, the McClean Lake Operation is located approximately 750 kilometres north of Saskatoon, near the northern most limit of the provincial highway #905. Workers commute to and from the site by aircraft, landing at Points North, and continue by bus to the McClean Lake Operation. The nearest communities are the hamlet of Wollaston Lake (often referred to as Wollaston Post) and the Hatchet Lake Denesųłiné Nation, located approximately 50 km (direct path) east of the McClean Lake Operation.

In 1994, the Atomic Energy Control Board (AECB) (predecessor to the Canadian Nuclear Safety Commission - CNSC) issued COGEMA (predecessor to AREVA; now Orano) a Licence for the McClean Lake Operation. This Licence has since been subject to several renewals and amendments. On July 1, 2017, licence UMOL-MINEMILL-McCLEAN.00/2027 was issued for a ten-year term expiring on June 30, 2027 (Licence). The Licence was amended in 2018 to reflect a name change (from AREVA Resources Canada Inc. to Orano Canada Inc.) and again in 2022 to include the vertical expansion of the JEB Tailings Management Facility (McClean Lake Application to Amend Licence - JEB TMF Expansion).

Construction of the McClean Lake Mill began in 1995 and extraction of the uranium ore at the McClean Lake Operation commenced in 1995 (JEB pit). In 1999, the McClean Lake Mill was commissioned with run-of-mine uranium ore stockpiled from JEB orebody through a conventional Grinding Circuit. The mill was initially constructed for an annual production rate of 3,636,360 kilograms uranium concentrate (kg U_3O_8) [or otherwise referred to as 8 million pounds uranium concentrate (8 Mlbs U_3O_8)] and at that time was licensed for an annual production of 2,727,270 kg (6 Mlbs) U_3O_8, with the anticipation of future expansions of the milling circuits. Production capacity was subsequently authorized to 3,636,360 kg (8 Mlbs) U_3O_8 per year. Run-of-mine ore processing continued from 1999 through 2010 with average annual ore grades ranging from 0.4% to 2.5% uranium, at annual production levels ranging from 681,800 kg (1.5 Mlbs) to 2,954,540 (6.5 Mlbs) U_3O_8. During this period (1999-2010), the mill processed ore from the open mining of the JEB pit (mined 1995 - 1997), Sue C pit (mined 1999 - 2005), the adjacent Sue A pit (mined 2005 - 2006), Sue E pit (mined 2006 - 2008), and Sue B (mined in 2008).



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McCLEAN LAKE OPERATION

FIGURE 1-1
LOCATION OF THE McCLEAN LAKE OPERATION IN NORTHERN SASKATCHEWAN

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In 2005, the McClean Lake Operation commenced construction of the Mill Expansion Project. The project included construction activities to modify the McClean Lake Mill for receipt and processing of high-grade ore slurry from the Cigar Lake Mine and to expand the annual production capacity of the McClean Lake Mill to 5,909,085 kg (13 Mlbs) U_3O_8. At that time, 100% of the ore slurry from the Cigar Lake Mine was planned to be transported to the McClean Lake Mill for initial processing, while the back-end processing and packaging was to be shared between the McClean Lake Mill and Cameco's Rabbit Lake Mill. In 2006, during the construction activities to expand the mill, an inflow occurred at the Cigar Lake Mine, which delayed the receipt of ore slurry. In 2007, temporary modifications were made to the McClean Lake Mill to process low grade ore and to increase the volume of ore feed through the Mill Optimization Project. By 2009, the planned construction and commissioning activities associated with both the Mill Expansion Project and the Mill Optimization Project were complete, apart from the commissioning of the Slurry Receiving Circuit.

In 2004, a research program was proposed to develop a new mining method. The Mining Equipment Development Program (MED) was designed to test the mining of ore bodies from the surface using a "hydraulic borehole" (jet boring) mining method. In 2009, Orano received an amended licence that included the full scope of the MED Program as an authorized activity and included mining of the McClean North deposit (Pods 1E, 1W, 2 & 5) via the MED Program (now referred to as Surface Access Borehole Resource Extraction (SABRE)). The SABRE equipment development program continued intermittently until 2024. In 2025 activities at the McClean North deposit transitioned from an equipment development program to a continuously operating mine.

In July 2010, with no further economic ore sources available, the McClean Lake Mill transitioned into a temporary cessation of milling. The McClean Lake Mill underwent a safe and systematic shut-down, clean-out and flushing of each circuit. The McClean Lake Operation took advantage of the shut-down period to install a new yellowcake packaging system in 2013 and was ready to operate in March 2014.

In November 2011, Orano and its McClean Lake Joint Venture and Cigar Lake Joint Venture partners entered into an agreement to process and package 100% of the ore slurry from the Cigar Lake Mine at the McClean Lake Mill. The agreement required an upgrade of the McClean Lake Mill from its annual back-end capacity of 5,909,085 kg (13 Mlbs) U_3O_8 to 10,909,090 kg (24 Mlbs) U_3O_8. The decision to process and package 100% of Cigar Lake ore at the McClean Lake Mill was a return to the milling concept initially assessed and approved in the 1995 Environmental Impact Statement (EIS) for the Cigar Lake Operation and maintained in subsequent environmental assessments. As a result of the business decision to process and package 100% of the ore slurry from the Cigar Lake Mine at the McClean Lake Mill, Orano submitted its proposal to upgrade the existing McClean Lake Mill to allow for an annual production rate of 10,909,090 kg (24 Mlbs) U_3O_8.

In 2012, Orano received approval from the CNSC Commission to operate the high-grade ore circuits and the Slurry Receiving Circuit, increase annual production to 5,909,085 kg (13 Mlbs)

U_3O_8 and process ore from the McArthur River mine. During the 2012 proceedings before the Commission the CNSC Staff presented, and the CNSC Commission approved the adoption of the LCH format, which now lists the McClean Lake Operation's authorized activities, including the annual production rate for the McClean Lake Mill. Subsequent to this Licence amendment, the McClean Lake Operation submitted a notification to the CNSC and an application to Saskatchewan Ministry of Environment (SMOE) to construct the Mill Upgrade Project, which would increase the mill's annual capacity to 10,909,090 kg (24 Mlbs) U_3O_8. Evaluation of both project and process alternatives were presented in the application, together with corresponding risk analyses. In 2013, approval of the Mill Upgrade Project was included as an amendment to the McClean Lake Operation's LCH. The construction commenced in 2013, and the Mill Upgrade Project was substantially completed in 2015, with the exception of the new Tailings Neutralization Circuit, which was completed in 2016 and commissioned with product in early 2017.

In 2010, the CNSC approved Orano's request to conduct activities to ensure the assessed capacity of the JEB TMF would be realized. The activities were to ensure slope stability and pond water containment during the operation of the JEB TMF and involved sloping of existing till slopes and the placement of a bentonite amended liner. The project was entitled the JEB TMF Optimization project, the first stage was conducted in 2012-2013, making slope improvements and placing liner material to 439 meters above sea level (mASL). The second stage, involving sloping improvements and placement of liner to 443 mASL, was completed in 2018.

In 2014, it was determined that additional tailings capacity was required and expanding the JEB TMF was the preferred option. The project description was submitted to the CNSC in 2016 as a notification to update the McClean Lake Operations LCH. The notification to expand the JEB TMF to an elevation of 457.5 mASL, with the top of the consolidated tailings at an elevation of 448 mASL, was accepted by the CNSC in 2017. A request to construct the project was submitted to and approved by the SMOE in 2019. Construction of this expansion was completed in phases in 2019 (liner placement to 448 mASL), 2021 (embankment expansion to 457.5 mASL), and 2023 (liner to 452.5 mASL). The remaining phase (liner expansion to 457.5 mASL) is planned for spring/summer 2027.

Intermittent ore slurry shipments from Cigar Lake Mine commenced in March 2015. With consistent delivery of Cigar Lake ore slurry received through the Slurry Receiving Circuit since September 2015, Orano accomplished a successful restart, commissioning, and increase of production at the McClean Lake Mill, as demonstrated in the Commissioning Report. In 2016, the CNSC approved Orano's request to increase annual production to 10,909,090 kg (24 Mlbs) U_3O_8.

As processing of ore from the Cigar Lake mine has progressed, the tailings produced from milling Cigar Lake ore used more capacity (per tonne of ore processed) of the TMF than initially expected. In 2019, Orano submitted an updated project description to CNSC for the further expansion of the JEB TMF to 468 mASL. In 2020 CNSC staff determined that the project would result in a change to the existing licensing basis and therefore required a Commission decision. The CNSC

commission hearing was held on October 4, 2021, with a favorable decision received on January 17, 2022. Orano was authorized to modify the outer perimeter of the JEB TMF for vertical expansion up to 468 mASL and to accommodate disposal of tailings up to a consolidated tailings elevation of 462 mASL. The implementation of this project is planned after 2029.

In 2024, Orano began the process of transitioning the SABRE mining test project into mining operations. In 2025, the McClean Lake Operation successfully restarted mining at the McClean North deposit with the recovery of approximately 4,400 tonnes of uranium ore.

With consistent delivery of Cigar Lake ore slurry and the successful restart of mining operations, the McClean Lake Operation continues to demonstrate safe, reliable operating performance producing an average annual rate equivalent to 8,181,810 kg (18 Mlbs) U_3O_8.

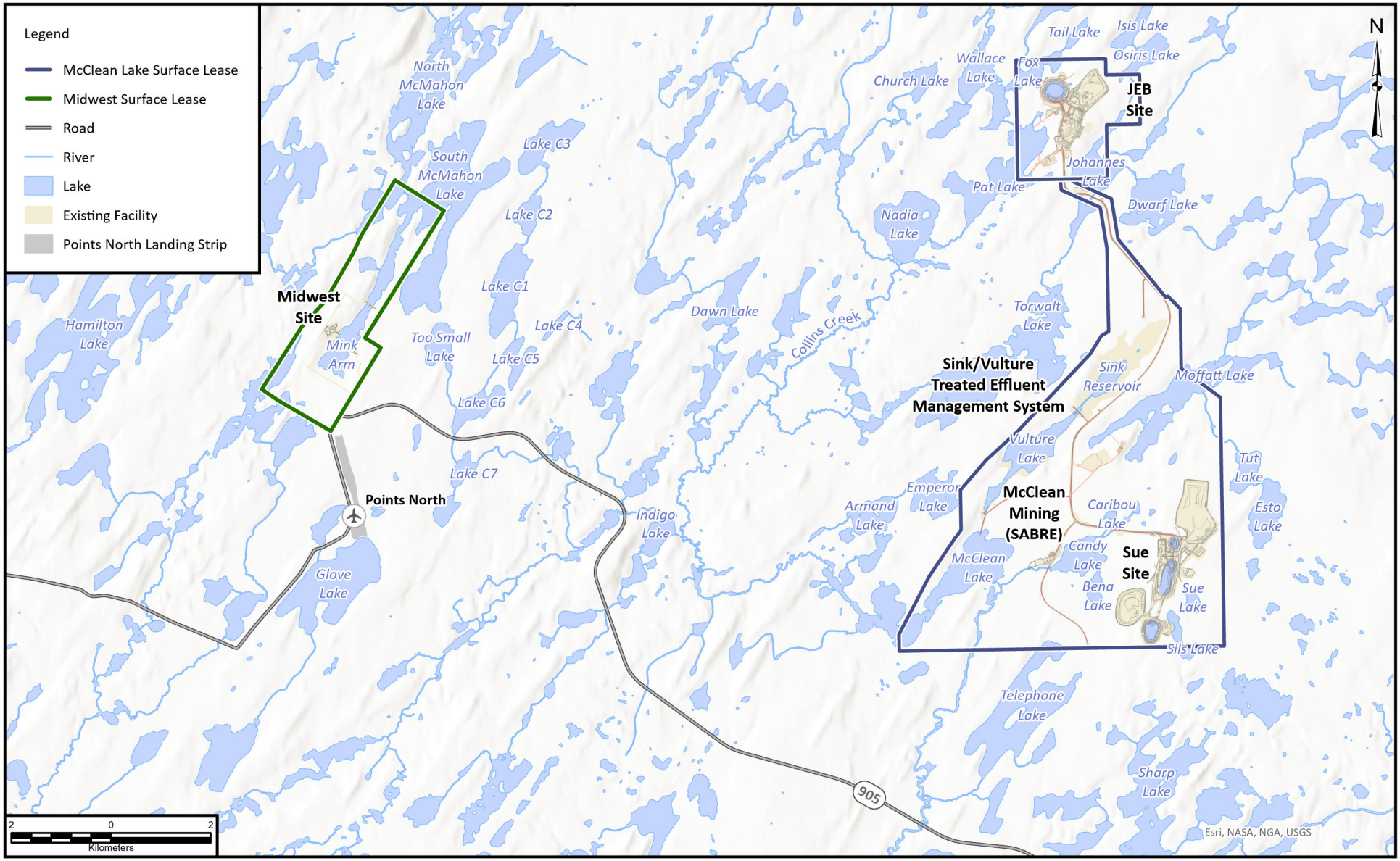
1.1.1 Overview of the McClean Lake Operation

As shown in Figure 1-2, the McClean Lake Operation consists of four main areas: the area containing the JEB TMF, JEB waste stockpile, ore pad, mill, and office complex with the associated outbuildings (JEB site), the Sue site, the McClean Mine site and the Midwest site. Figure 1-3 shows the various facilities located on the McClean Lake Surface Lease. The JEB site contains the McClean Lake Mill and other ancillary facilities related to the milling operation such as the JEB Water Treatment Plant and JEB TMF. The Sue site, connected to the McClean Lake Mill by a 12 km haul road, contains the majority of the previously mined deposits (i.e. Sue C, A, E, B) and the Sue Water Treatment Plant. The McClean Mine site is the location of the McClean North deposit and current mining activities using the Surface Access Borehole Resource Extraction (SABRE) mining method. The Sink Vulture Treated Effluent Management System (S/V TEMS) controls the release of effluent from the McClean Lake Operation to the environment, while allowing water treatment effluent to be discharged as required. The Midwest site has undergone multiple environmental assessments for varying mining techniques; the latest environmental assessment for open pit development was approved federally and provincially in 2012. The Midwest site is currently connected to the McClean Lake Operation by the Provincial highway #905.

A further description of each of these four main areas is provided in the following sub-sections.

JEB Site

The McClean Lake Mill located at the JEB site was designed and constructed to process both uranium ore slurry and run-of-mine ore at grades ranging from less than 1% to over 30% uranium. The McClean Lake Mill uses grinding, leaching and a solvent extraction recovery process to extract and concentrate the uranium from the ore. The potential environmental impacts of the McClean Lake Operation have been assessed for a production rate of 12,272,715 kg (27 Mlbs) U_3O_8 per year (Mining and Milling the Midwest Project). The McClean Lake Mill was initially



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McCLEAN LAKE OPERATION

FIGURE 1-2
McCLEAN LAKE AREA GENERAL AREAS

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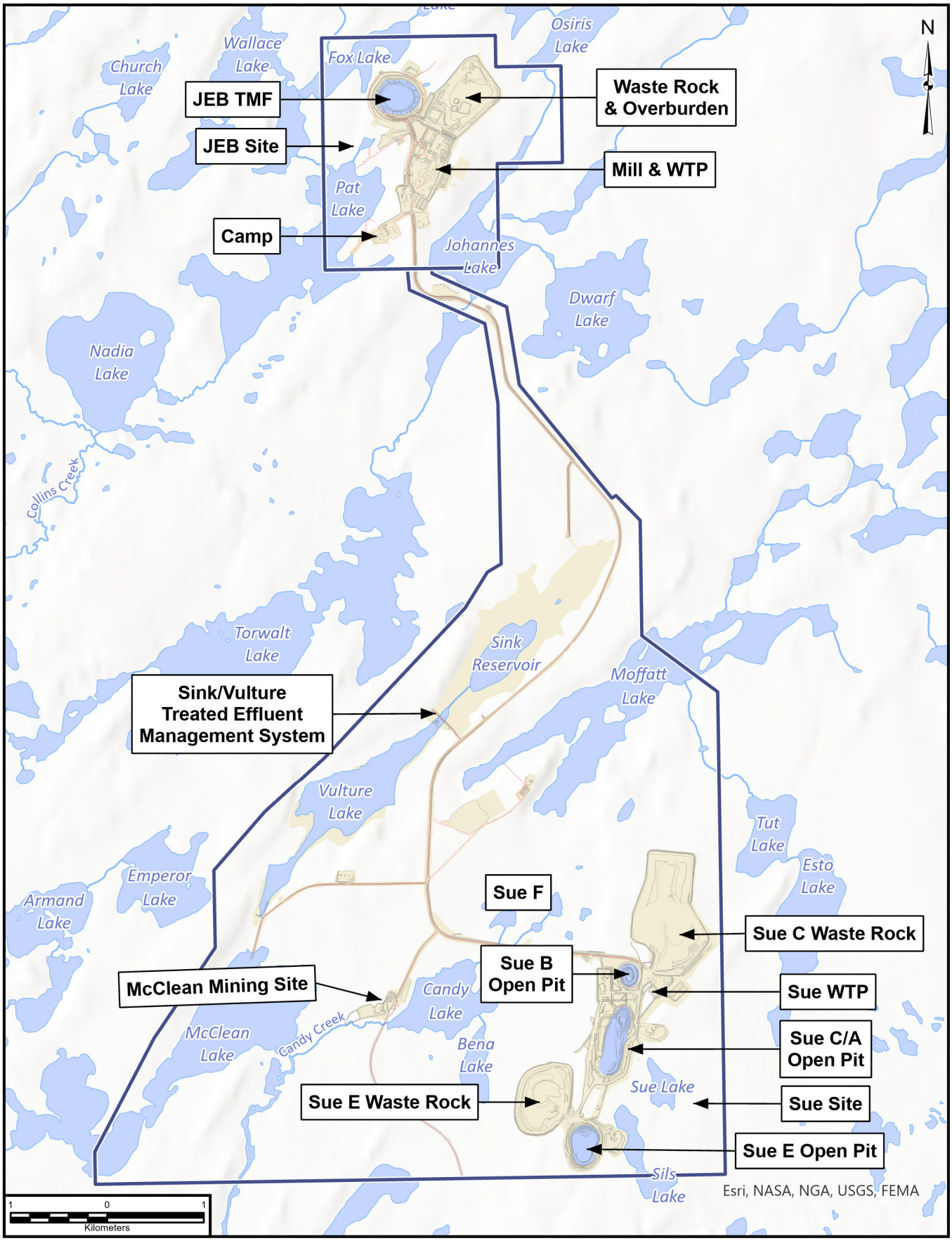

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McCLEAN LAKE OPERATION

FIGURE 1-3
McCLEAN LAKE OPERATION - SITE LAYOUT

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constructed to produce 3,636,360 kg (8 Mlbs) U_3O_8 per year but was expanded from 2005 to 2007 to produce 5,909,085 kg (13 Mlbs) U_3O_8 per year with the construction of the ore Slurry Receiving Circuit. The McClean Lake Mill was further expanded from 2013 to 2016 to produce 10,909,090 kg (24 Mlbs) U_3O_8 per year.

The JEB Tailings Management Facility (TMF) is located at the JEB site and is the repository for tailings resulting from uranium processing at the McClean Lake Mill. The overall tailings management system is comprised of the Tailings Neutralization Circuit within the McClean Lake Mill, the tailings delivery system, and the JEB TMF. The facility is designed and operated to provide stable physical containment and to reduce the migration of soluble constituents from the JEB TMF to the receiving environment throughout the operational and post-decommissioning periods. Figure 1-4 shows the JEB site with the TMF in the background of the photograph.

Figure 1-4: McClean Lake Mill and JEB TMF at the JEB Site

Sue Site

The Sue site has been the primary mining area to date; hosting the Sue deposits. Sequential open pit mining of the Sue C, Sue A, Sue E, and Sue B pits was completed using conventional drill, blast, load, and haul mining methods. The Sue site main infrastructure includes the Sue

Water Treatment Plant and the Sue Heavy Duty Maintenance Shop. Figure 1-5 shows the Sue site, with the Sue C/A pit in the near center of the photograph.

The Sue F deposit (formerly known as the Caribou deposit) underwent an environmental assessment and approval in 2009 to be mined using open pit mining methods. The mining project has undergone a feasibility study to be mined using the SABRE mining method, and is included in the long term mine plan, pending regulatory authorizations. The Sue F deposit currently has no associated infrastructure as the area has not yet been developed.

The S/V TEMS is located between the JEB and Sue sites; it receives treated effluent from both water treatment plants and consists of Sink Reservoir, Vulture Lake and McClean Lake east basin, as well as flow control structures between the waterbodies.

Figure 1-5: Sue Site

McClean Mine Site

The McClean Mine site is located in the south-western portion of the McClean Lake Surface Lease (Figure 1-3), approximately 2 km west of the Sue site. The McClean North deposit consists of a series of pods of uranium mineralization located at a depth of approximately 165 m that extend

over an approximately 800 m trend, with portions of these individual pods hosting economic grades of mineralization.

The McClean Mine site served as the mining equipment testing area for the development of the SABRE mining method from 2007 to 2024. Once the SABRE mining method was proven to be a viable option for extracting high-grade uranium ore, it was implemented for mining the McClean North deposits, initially as a test mine, and subsequently as a fully operational mine site (Figure 1-6) targeting Pods 1E, 1W, 2, and 5 of the McClean North deposit. The full-scale uranium ore mining with the SABRE mining method commenced at the McClean Mining site in 2025.

Figure 1-6: McClean Mine Site (Pod 1E)

Midwest Site

The Midwest site (Figure 1-7) was the location of an underground test mine operated by the previous operator, Denison Mines Corp, in the late 1980's. Orano became operator of the Midwest Project in 1993 when the site was placed into a safe state of care and maintenance. In August 2012, the environmental assessment to mine Midwest as an open pit mine with the run-of-mine ore transported on a new 17 km haul road to the McClean Lake Mill for processing was approved (Mining and Milling the Midwest Project). Due to economic conditions at the time, the mining

project did not proceed to the licensing phase and has not yet been developed. The Midwest Project is currently undergoing a feasibility study of the mining project using the SABRE mining method. Orano will be advancing the CNSC licensing for this project in the coming years.

The SABRE mining method is an alternative to conventional open pit and underground mining that allows access to resource deposits that were previously deemed economically unfeasible. The SABRE mining method is based on hydraulic borehole mining. This non-entry vertically selective approach to mining involves drilling access holes from the surface and extracting the underlying ore by cutting the ore using a high-pressure water jet and air-lifting the slurry to surface. Water used to jet the ore is recycled in the process. No ground freezing is required, and no additives or acids are used in the mining. Mining equipment is positioned on a relatively small mining pad above ground. The SABRE mining method received a Canadian patent in February 2016 and a US patent in 2019.

At present the Midwest surface lease covers approximately 647 hectares and is located on South McMahon Lake, about one kilometre from the Points North Landing airstrip and about 17 kilometres west of the McClean Lake Operation. The Midwest site consists of a few surface facilities located on the western edge of Mink Arm of South McMahon Lake. The facilities were constructed to support the 1980s underground test mining activities and include a building that formerly served as a water treatment plant, two settling ponds, and a test mine shaft. The site is currently in care and maintenance.

The future Midwest SABRE Mining Project components include:

- development of the Midwest ore body using SABRE mining method (same equipment and same process to extract uranium ore which currently used at McClean Mining Site);
- construction of an earthen pad extending into the Mink Arm portion of South McMahon Lake;
- partial temporary dewatering of Mink Arm to accommodate the mining pad construction;
- construction of supporting infrastructure on the Mink Arm shore;
- construction of a 17 km haul road linking Midwest SABRE Mine to the McClean Lake Mill;
- processing uranium ore at McClean Lake Mill (no change from currently approved capacity of 24 Mlbs U_3O_8 per year); and
- managing the tailings at the existing Tailings Management Facility.

Compared to the previously approved Midwest Open Pit Mining Project, SABRE mining offers clear environmental advantages, including a much smaller project footprint, significantly lower

volumes of waste rock to be excavated and stored, reduced water management requirements, and elimination of the need for a large, permanently flooded pit lake.

The Midwest Open Pit Mining Project EIS is already included in the licensing basis for the McClean Lake Operation. Orano is required to submit detailed construction and operating plans, designs and programs to the CNSC prior to mining the Midwest ore body. The future licensing submission will describe the integration of SABRE facilities and activities within the existing McClean Lake Operation safety and control framework and demonstrate consistency with the site's approved environmental protection, radiation protection, and operational programs.

Figure 1-7: Midwest Site

1.2 Highlights

1.2.1 Implemented Improvements

During this licensing period, Orano has made the following improvements to the facility and programs:

- In 2017, completion of the Ore Pad Runoff Pond construction at JEB site (to manage the stormwater) and relocation of the Temporary Contaminated Landfill to the Permanent Location in Sue C/A pit.

- In 2017-2018, Orano introduced Anchors which are life saving rules, to educate and make employees more aware of hazards that can result in serious injuries or fatalities (high potential). These anchors have specific rules that must be adhered to by all employees conducting work related to the anchor. The anchors/critical risks are also used to analyze events and employees are encouraged to focus on these in their workplace inspections or safety improvement opportunities

- In 2018, the Sulphur Dioxide Mitigation Project was successfully implemented to manage elevated sulphur dioxide emissions from the calciner exhaust stack and elevated ambient airborne concentrations in and around the mill. The project resulted in control and mitigation of sulphur dioxide hazards.

- In 2019, Orano completed drainage improvements to reduce runoff reporting to the Sue B pit which included removal of culverts and construction of a drainage diversion channel. This reduces the amount of clean surface waters being captured and treated going forward.

- In 2019, the “Your Pathway to Safety” system was implemented, replacing the 5 Point Safety System and uses the STOP, THINK, ACT philosophy. It is a behavioral shift from viewing safety practices as an obligation to taking ownership of safety and creating the desire to want to work safe. It is an everyday, every moment reminder for workers to keep Safety at the forefront of our minds and close to our hearts.

- In 2020, Orano implemented the Selenium Adaptive Management Plan with a proposal for a long-term solution for the sustained reduction of selenium loading to the environment at the McClean Lake Operation. In 2023, a ferrous sulphate treatment system was implemented in the JEB Water Treatment Plant to reduce selenium concentrations in the treated effluent. This followed the favorable outcome of the pilot testing conducted in 2020 that demonstrated the efficacy of using ferrous sulphate reagent to treat selenium in the JEB Water Treatment Plant. In spring 2023, the commissioning of the Ferrous Treatment System in the JEB Water Treatment Plant was initiated, but due to low concentrations of selenium in the effluent, the system has yet to be fully commissioned.

- In 2021, Orano implemented a Process Safety Management program that provides a structured and systematic approach to identifying, assessing, controlling, and monitoring hazards associated with hazardous materials and energy sources.

- In 2021, the Behavior Based Observation (BBO) program was introduced to the McClean Lake Operation. Employees participate in this program by using it as a recognition and

coaching tool for peer-to-peer observations. In particular, workers are encouraged to use BBO to observe work involving high risk tasks.

- In 2021, Orano proceeded with the next phase of the JEB TMF expansion and constructed an embankment to 457.5 mASL creating a tailings embankment above “natural” ground level. In 2023, JEB TMF liner expansion was completed to increase the crest elevation from 448.0 mASL to 452.5 mASL.

- In 2021, Orano initiated a program aimed at in-situ remediation of the Sue pits and improved surface water quality at the time of decommissioning of the McClean Lake Operation. The program is being undertaken as a medium to long-term research initiative which will involve several stages of investigation, development, and implementation of the technique. A pilot scale application (proof of concept) of the in-situ treatment program was initiated in 2023 based on treatment design considerations from the laboratory-based bench scale studies. In 2024, Orano installed equipment at Sue E pit ramp and observation area to deliver ferric sulphate to the Sue E pit to treat the target constituent of potential concern (COPC) – arsenic. Sampling and analyses began immediately after the addition of the reagent. Seasonal test work continues on the efficiency of this treatment.

- Starting in 2022, Orano combined industrial and contaminated waste in the Sue C Contaminated Landfill. Centralizing waste in the Sue C Contaminated landfill simplifies waste management and segregation onsite and minimizes the total footprint of landfills onsite which will facilitate future decommissioning.

- In 2024, Orano and the University of Saskatchewan Department of Biology collaborated to initiate two-year research of large mammals in the McClean Lake Operation and Midwest areas. The research objective is to develop a better understanding of vegetation resources and the relative densities of interacting species in the SK1 Boreal Caribou Range.

- In 2024, Orano initiated a multi-phase project to upgrade fire detection and suppression in the Solvent Extraction Circuit. The project includes installation of additional heat and fire detection in vessels and building areas, as well as additional fire suppressions systems (Compressed Air Foam and carbon dioxide). Completion of the project installation is expected in early 2027.

- In 2025, after 20 years of testing and developing the mining method, Orano successfully restarted mining at McClean Lake Operation utilizing SABRE mining method and extracted first operational ore in June.

1.2.2 Licence Renewal Request

On August 11, 2025, Orano applied to the CNSC to renew the CNSC licence UML-MINEMILL-McCLEAN.02/2027 issued to the McClean Lake Operation, which will expire on June 30, 2027. The renewal of the licence provides Orano the ability to continue operations authorized by the licence, which include: the operation and modification of a nuclear facility for the mining of uranium and the production of uranium concentrate; import, possess, use, store, transfer and dispose of nuclear substances and radiation devices; and modify the tailings management facility outer perimeter to accommodate disposal of tailings.

Orano is requesting a 2-year term for the licence (expiry: June 30, 2029) with no changes to the licensing basis and authorized licensed activities, terms and conditions of the existing licence or associated LCH. This short-term renewal is being pursued with the understanding that Orano will apply within the two-year period for a longer-term licence and amendments to incorporate the Sue F and Midwest Mining Projects. Orano expects that the future application for a longer-term licence with the additional mining projects will be reviewed at a public hearing before the Commission.

Orano is aware of the effort for intervenors, CNSC staff, and the Commission Registrar to review and prepare for renewal and amendment hearings. The two-year licence duration will allow sufficient time for all parties to provide a thorough review and consideration, without duplication of effort by having multiple renewal and amendment hearings within a short period of time.

1.2.3 Licencing History

In 1994, the AECB (CNSC predecessor) issued COGEMA (predecessor to AREVA; now Orano) a Licence for the McClean Lake Operation, which has since received several renewals and amendments. Table 1-1 (next page) lists the renewals and amendments that have been received throughout the years as operations changed.

On July 1, 2017, Licence UMOL-MINEMILL-McCLEAN.00/2027 was issued a ten-year term, expiring on June 30, 2027 (Licence). The Licence was amended in 2018 to reflect a name change (from AREVA Resources Canada Inc. to Orano Canada Inc.) and again in 2022 to include the vertical expansion of the JEB Tailings Management Facility.

1.2.4 Acceptance of Revised Financial Guarantee

Orano is requesting to amend the McClean Lake Operation Licence Condition Handbook Section G.3 Financial Guarantee to note the provincially accepted updated financial guarantee of $122,557,378.

Table 1-1: Licences Issued by the CNSC, and its Predecessor, the Atomic Energy Control Board (AECB)

CNSC (AECB) Licences	Licenced Activities	Date Issued
AECB-MFEL-161-0	Mining Facility Excavation Licence (Midwest)	September 9, 1988
AECB-MFEL-167-0	Mining Facility Excavation Licence (Midwest)	1993
AECB-MFEL-148-2	Site Preparation	April 1, 1994
AECB-MFEL-167-0-2	Mining Facility Excavation (Midwest)	June 1, 1994
AECB-MFCL-169-0	Mine facility construction of all necessary surface support facilities in preparation to mine and operate mill and waste treatment systems	June 29, 1994
AECB-MFCL-169-0.1	Mill process change from Strong acid to ammonium sulphate stripping	December 19, 1994
AECB-MFCL-169-0.2	Surface stripping JEB and operation of associated dewatering and water treatment facilities	September 18, 1995
AECB-MFOL-170-0	Operation of JEB open pit mine and associated water management systems	March 12, 1996
AECB-MFEL-167-0.2	Mining Facility Excavation (Midwest)	December 16, 1996
AECB-MFOL-170-0.1	Sue C site preparation and operation of associated water management systems	March 9, 1998
AECB-MFOL-170-0.3	Preparatory work to Construct JEB TMF	August 14, 1998
AECB-MFOL-170-0.4	Approval to construct JEB TMF and associated tailings and water systems	March 26, 1999
AECB-MFOL-170-0.5	Approval to operate JEB Mill, TMF and associated facilities	June 21, 1999
AECB-MFOL-170-0.6	Approval to mine Sue C ore;	November 9, 1999
AECB-MFOL-170-0.7	Approval to possess, import and use radioactive prescribed substances;	May 29, 2000
AECB-MFEL-167-0.4	Mining Facility Excavation (Midwest)	May 29, 2000
UMOL-MINEMILL-McCLEAN.08/2001	Licence extension of AECB-MFOL-170.7	June 21, 2001

CNSC (AECB) Licences	Licenced Activities	Date Issued
UMOL-MINEMILL-McCLEAN.09/2005	Mine Sue C, A and B, produce up to 8 Mlbs/year	August 21, 2001
UMSL-Excavate-Midwest.05/Indf	Site Preparation Licence (Midwest Project)	May 31, 2002
UMOL-MINEMILL-McCLEAN.00/2009	Licence renewal with amendments to modify the JEB mill to receive and process Cigar Lake ore	May 19, 2005
UMOL-MINEMILL-McCLEAN.02/2009	Amendment to allow preparatory work at Sue E mine site	July 21, 2005
UMOL-MINEMILL-McCLEAN.03/2009	Amendment to allow open pit mining of Sue E orebody	December 9, 2005
UMOL-MINEMILL-McCLEAN.04/2009	Amendment to allow Phase II of the Mining Equipment Development Program	March 30, 2006
UMSL-Excavate-Midwest.06/Indf	Site Preparation Licence (Midwest Project)	June 14, 2006
UMOL-MINEMILL-McCLEAN.04/2009	Approval to construct and operate ferric sulphate circuit under condition 3.1 of operating licence	December 5, 2006
UMOL-MINEMILL-McCLEAN.05/2009	Licence extension	May 25, 2009
UMOL-MINEMILL-McCLEAN.00/2017	Licence renewal, includes authorization to mine the McClean Lake North Deposits consisting of pod number 1E, 1W, 2 and 5 using the Mining Equipment Development Program (now known as SABRE mining method). Revoked the Midwest Uranium Site Preparation Licence and included it in the McClean Lake Operation Licence.	July 1, 2009
UMOL-MINEMILL-McCLEAN.01/2017	Licence amendment; adopt the Licence Condition Handbook framework	December 19, 2012
UMOL-MINEMILL-McCLEAN.01/2017 - Licence Condition Handbook Revision 0	Original document; Increase annual production to 13 Mlbs; operate high grade ore slurry receiving circuit and high-grade ore milling circuits; process high grade ore from the McArthur River Mine	March 7, 2013

CNSC (AECB) Licences	Licenced Activities	Date Issued
UMOL-MINEMILL-McCLEAN.01/2017 - Licence Condition Handbook Revision 01	Construct the Mill Upgrade Project to increase annual production capacity to 24 Mlbs	July 9, 2013
UMOL-MINEMILL-McCLEAN.01/2017 - Licence Condition Handbook Revision 02	Administrative and editorial changes	April 23, 2014
UMOL-MINEMILL-McCLEAN.01/2017 - Licence Conditions Handbook Revision 03	Added JEB Ore Pad as contingency measure; changed annual U_3O_8 production to 24,000,000 lbs; added documents to licensing basis; administrative and editorial changes.	June 23, 2016
UMOL-MINEMILL-McCLEAN.00/2027	Licence renewal	July 1, 2017
UMOL-MINEMILL-McCLEAN.00/2027 - Licence Conditions Handbook Revision 04	Allow placement of tailings up to 448 mASL	October 6, 2017
UMOL-MINEMILL-McCLEAN.01/2027	Licence update to reflect name change from AREVA Resources Canada Inc. to Orano Canada Inc.	July 12, 2018
UML-MINEMILL-McCLEAN.02/2027	Amendment to allow JEB TMF Expansion (468.8 mASL)	January 17, 2022
UML-MINEMILL-McCLEAN.02/2027 - Licence Conditions Handbook Revision 05	Reflects Licence amendment, UML-MINEMILL-McCLEAN.02/2027, includes revised financial guarantee value and introduces references to most recent CNSC regulatory documents and Canadian Standard Association documents.	April 14, 2022
UML-MINEMILL-McCLEAN.02/2027 - Licence Conditions Handbook Revision 06	The LCH was updated to include CNSC regulatory documents and Canadian Standard Association documents, which were published after the last update of the LCH Rev 5 dated April 14, 2022.	May 1, 2024

2 Business Plan

This section describes Orano's business plan for the McClean Lake Operation.

2.1 McClean Lake Mill Production Forecast

The McClean Lake Mill production forecast is dependent on ore availability, as well as market conditions. The current on-going ore feed is from the Cigar Lake Mine and the McClean Mine; with no changes expected within this licensing period. Current approved licenced production capacity and capabilities of the McClean Lake Mill is 10,909,090 kg (24 Mlbs) U_3O_8, with an annual production target of 8,181,810 kg (18 Mlbs) U_3O_8 from Cigar Lake and 181,800 – 318,180 kg (0.4 – 0.8 Mlbs) U_3O_8 from McClean Mining.

2.2 Mining Production Forecast

The McClean Lake Operation restarted mining in 2025 using the SABRE mining method to recover ore from the McClean North deposit. The current mine plan is forecasting to recover an annual 150-350 tonnes of uranium (0.4 – 0.8 Mlbs U_3O_8) during this licensing term.

2.3 Improvement Plans and Significant Activities

Orano provides the CNSC staff with a forecast of activities that may occur over the Licence term. These activities will be subject to regulatory oversight of the CNSC and may require approvals and updates to the LCH.

2.3.1 Mill Modification

As the McClean Lake Mill continues to process uranium, it continues to improve the mill circuits to optimize the production to suit the different qualities of ore. It is expected that the McClean Lake Mill will undergo modifications targeted at implementing improvements in the Leaching Circuit, improving treatment capacity in the water treatment plant, and increasing reagent storage and distribution systems as needed.

2.3.2 Gypsum Mitigation

In 2023, the JEB Water Treatment Plant experienced challenges in achieving nominal plant throughput capacity due to very high levels of gypsum scaling throughout the process and effluent discharge piping. In early 2024, a significant cleaning campaign was conducted to address the scale accumulation throughout the process. Upon restart of the JEB Water Treatment Plant the

gypsum monitoring program was implemented. This program monitors sulphate content within JEB Water Treatment Plant circuits and adds low sulphate solution (treated barren strip from the Ammonium Sulphate Crystallization Plant (CX) process or fresh water) as required to ensure that the final process effluent is below the gypsum saturation threshold, to prevent scale buildup within the water treatment plant infrastructure.

The current gypsum monitoring program is temporary with the intention of implementing long-term chemical treatment to mitigate the gypsum formation process. In 2024 and 2025, laboratory test work was successfully performed to validate the effectiveness of a chemical treatment process to reduce gypsum formation, with an in-plant trial scheduled for 2026. Pending the success of the in-plant trial, Orano is expecting to implement a Gypsum Mitigation Treatment System to relieve the stress of gypsum build-up on the water treatment infrastructure.

2.3.3 JEB TMF Liner Expansion

In 2017, CNSC accepted Orano's proposal to expand the JEB TMF to an elevation of 457.5 mASL, with the top of consolidated tailings at an elevation of 448 mASL. An application to construct this project was submitted to and approved by the Saskatchewan Ministry of Environment in 2019. Construction of the JEB TMF expansion was completed in phases over a course of several years with liner placement to 448 mASL completed in 2019, embankment expansion to 457.5 mASL in 2021, and another liner expansion to 452.5 mASL in 2023. The remaining phase of this project – another liner expansion to 457.5 mASL - is planned for spring/summer 2027.

2.3.4 Potential Future Mining and Milling

The mining of the Sue F deposit (formerly known as the Caribou deposit), the remaining McClean deposits, the Sue D deposit (an extension to the Sue C deposit), and the Midwest deposit are pending development decisions. The mining of these deposits may be completed using the SABRE mining method. The processing of these ores and the disposal of tailings generated will occur at the McClean Lake Mill.

Orano notes that these potential future mining activities, which have not already been subject to an environmental assessment may, in some cases, be required to undergo an environmental assessment. Currently approved environmental assessments considered open pit mining of the Sue F Project and the Midwest Project, and underground mining of the McClean deposits. Mining these deposits will require further approvals from the CNSC and the Saskatchewan Ministry of Environment prior to commencing construction and operation. The mining of the Sue D deposit has not undergone an environmental assessment and may be subject to environmental assessment.

Modifications to the McClean Lake Mill may be required to safely and efficiently process ore from the Midwest Project. These modifications have been contemplated in the Midwest EIS (Mining and Milling the Midwest Project). and will require further review by the CNSC prior to commencing construction and operation.

3 Safety and Control Areas

Orano recognizes the safety and health of our personnel and the public, protection of the environment, and quality of our operational processes as our highest priorities.

During the licence term the CNSC did not have concerns related to the SCAs at the McClean Lake Operation. All SCAs have consistently received satisfactory ratings from the CNSC in the annual regulatory oversight reports presented by the CNSC staff to the Commission.

The CNSC conducts regular inspections of the McClean Lake Operation. Issues, notices of non-compliance, or recommendations are documented and addressed to the satisfaction of the CNSC. The following SCAs are discussed in this section:

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

3.1 Management System

The Management System SCA covers the framework which established the processes and programs required to ensure an organization achieves its objectives, continuously monitors its performance against these objectives, and fosters a healthy safety culture.

3.1.1 Relevance and management

Activities at the McClean Lake Operation are described and facilitated using a comprehensive Integrated Management System (IMS). The IMS manual applies to the regulated activities performed by employees and contractors, and to other key activities included for business reasons. The IMS manual includes management system policies and references IMS procedures, and other controlled documents. It also describes the organization of the McClean Lake Operation and position responsibilities for the performance of work affecting the integrated management system.

The primary objectives of the IMS are:

- to ensure that Orano product, processes and services consistently meet the needs and expectations of our customers;
- to provide assurance to regulatory agencies and other interested stakeholders that the product, processes and services are consistent and conducted as approved;
- to achieve continual improvement in the product, processes and services; and
- to ensure that the interests of Orano are met.

The IMS is designed to meet the requirements of the following standards:

- CSA N286-12 (management system requirements for nuclear facilities),
- ISO 14001:2015 (for the environmental management system),
- ISO 45001:2018 (for the health and safety management system), and
- ISO 17025:2017 (for the competence of testing and calibration laboratories).

Orano has received and maintains certification for each of the International Organization for Standardization (ISO) standards above for its McClean Lake Operation, each being re-certified or in the process of being recertified in 2026. McClean Lake Operation health and safety management system initially received certification to the OHSAS 18001:2007 standard in 2008 and has maintained the external certification until transitioning to the ISO 45001:2018 standard in 2020.

The IMS is comprehensive. The activities of the employees are included in the system. Each of the key process and support service activities are managed by a department head, and the department heads are responsible for maintaining and improving quality in their respective departments. This approach establishes clear lines of accountability and responsibility with respect to quality.

As presented in Figure 3-1, the President and Chief Executive Officer (CEO) is the most senior person at the McClean Lake Operation having final authority over operational activities at the McClean Lake Operation including the integrated management system. Site personnel report to either the McClean Lake Operation General Manager, Mining Director, or Engineering and Projects Director, who each report to the President and CEO. The McClean Lake Operation General Manager, Mining Director, or Engineering and Projects Director along with the site managers comprise the McClean Lake Operation management team; this management team is responsible for managing work affecting the IMS at the McClean Lake Operation.

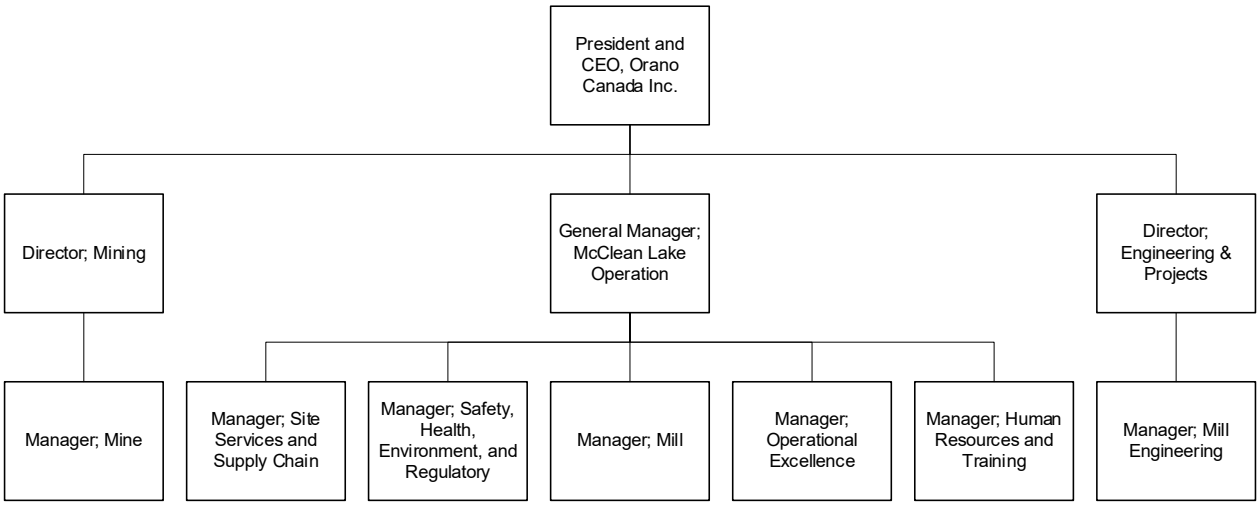


Figure 3-1: McClean Lake Management Team Organizational Chart

3.1.2 Past performance

The management system is the framework that guides the processes and programs required to ensure objectives are achieved, performance is monitored, and a healthy safety culture is maintained during production, maintenance, materials handling, waste management and other activities. This includes but is not limited to requirements for work planning, change control, corrective action, document control, audits, and management review.

Routine inspections by CNSC staff continue to confirm that the McClean Lake Operation is in overall compliance with these requirements. Findings made by CNSC staff are reviewed and used to strengthen existing programs and controls to ensure safety, security and the environment are not compromised.

The McClean Lake Operation uses both internal and external audits to evaluate various aspects of site operations related to the management system and licensed activities. Internal audits are conducted by the Regulatory Relations Group (and designates) with the management system being audited on a three-year rotation. An external auditor and registrar conduct audits to the ISO 14001 and ISO 45001 standards on an annual basis. The audits are considered either surveillance audits or re-certification audits. The re-certification audits are conducted every three years and consist of a complete audit of the system. Surveillance audits are conducted for the period between the re-certification audits and consist of pulling out portions of the management system. The McClean Lake Operation was re-certified to these standards twice during the licence term. An external auditor and registrar also conduct audits to the ISO 17025 standard. These audits are conducted on a two-year rotation.

Results of audits are reviewed and tracked internally to ensure findings, identified opportunities for improvement, and areas of concern are reviewed by site management and responded to accordingly. There were no significant issues identified in internal or external audits completed during the current licence term.

The McClean Lake Operation conducts periodic management reviews of the management system to evaluate the systems continuing suitability, adequacy and effectiveness; changes to physical, human and financial resources; and actions related to possible changes to policies, objectives, targets and other elements of the management system.

Orano continues to take opportunities to improve the safety performance and will continue to establish challenging objectives to reinforce the drive towards reducing risks. To facilitate the objectives and gauge the perception of employees in relation to safety culture, safety culture assessments are conducted regularly. Orano hosts an annual safety day in which management, supervision and employees partake. The safety day consists of presentations and group activities.

The McClean Lake Operation has a methodical change control program. The purpose of the program is to ensure that changes made to the facilities, personnel or operating methods are controlled. Safety and radiation protection is the paramount consideration. Risks are identified and controlled to guide decisions and actions. The process determines whether the change can be implemented safely and considers traditional safety concerns such as industrial hygiene, personal protective equipment, and process safety concerns.

The McClean Lake Operation has a contractor management program that is designed to manage outsourced work performed at the McClean Lake Operation. The program summarizes how contractor management and oversight responsibilities will be conducted, and provides requirements for monitoring contractor compliance with safety, health, environment, and radiation policies as well as procedures and relevant legislative requirements.

3.1.3 Future plans

While the existing management system meets current regulatory and ISO requirements, Orano is committed to continual improvement of the management system. The McClean Lake Operation will work towards certification in ISO 14001:2026 for the next certification cycle in 2029. Future efforts regarding the management system will be guided by updates and development of the regulatory framework, standards and REGDOC's, as well as findings from self-assessments, internal audits, external audits and regulatory inspections. The McClean Lake Operation will continue to be audited regularly and as required, existing procedures will be augmented as new activities or equipment are integrated into the McClean Lake Operation's management system.

3.1.4 Challenges

As the regulatory framework continues to develop with changes in existing standards and REGDOC's, along with the development of new standards and REGDOC's, on-going assessment and identification of gaps will be required, followed by the planning and implementation of required changes or improvements. Orano will continue to work closely with the CNSC staff to implement new and standardized requirements under the regulatory framework in a manner mutually agreed upon and in a manner that will ensure safe and reliable operation during any implementation phase.

3.1.5 Requests

Orano has no requests related to the management system SCA, at this time.

In conclusion, Orano submits that it has the management system measures in place for the safe operation of the McClean Lake Operation and in support of this Licence Renewal request.

3.2 Human Performance

The Human Performance Management SCA covers activities that enable effective human performance through the development and implementation of processes. This ensures that the number of licensee staff is sufficient in relevant job areas and that licensee staff have the necessary knowledge, skills, procedures and tools in place to safely carry out their duties.

3.2.1 Relevance and management

Training activities at the McClean Lake Operation are conducted in accordance with programs defined within the IMS and adhere to the Systematic Approach to Training (SAT). The Training Group, in conjunction with the Mill Department Trainers and applicable Safety, Health,

Environment, and Regulatory (SHER) personnel are responsible for determining, coordinating, and implementing the classroom and practical onsite training.

The Training Group is responsible to ensure employees are provided with the required safety training to competently perform their duties by addressing applicable federal and provincial regulations. These training programs include classroom training, where trainees are evaluated using knowledge-based theory exams and skill-based practical assessments where applicable. Technical and other professional development opportunities are provided to employees and are conducted onsite and offsite.

Mill Operator, Power Engineer Unit Process and Environmental Trainee Training Programs are used to train new hires and to support ongoing skill development. Mill Operators and Power Engineer training is supported by Mill Operator and Power Engineer Trainee Handbooks. All three trainee programs also use the IMS procedures and work instructions, to ensure a consistent focus on task level competency. For new circuit installations and significant equipment modifications, vendor supplied training materials are incorporated as applicable.

Training includes a combination of:

- classroom instruction;
- on the job training;
- coaching by a qualified Trainer;
- vendor led training;
- self study; and
- peer training with senior operators and environmental technicians.

Trainees are evaluated through knowledge based written examinations and weighted, skill based practical assessments during training and upon completion. These evaluations confirm competency in unit specific tasks and duties. A comprehensive records management system documents operator qualifications and proficiency by unit process.

With the start up of Mining Operations using the SABRE method, training programs have been developed for Mine Utility and Bauer Rig Drill operations. Employee evaluations include written exams and competency checks, supported by on-the-job performance observations.

The Training Group, in collaboration with the Site Services Group, are responsible for training related to heavy duty equipment and powered mobile equipment used in reclamation and site services. New equipment and refresher training is provided to General Maintenance Operators,

Heavy Duty Equipment Mechanics, and Automotive/Light Duty Mechanics to ensure competency for each equipment type. Training is typically delivered by equipment vendors through on-site classroom instruction and supervised hands-on practice. Refresher training uses manufacturers' operation and maintenance manuals, equipment specific trainee and trainer manuals, and IMS procedures and work instructions, with emphasis on site–specific tasks and duties.

3.2.2 Past performance

Orano has maintained a longstanding commitment to developing northern and Indigenous employment opportunities. Since its inception in 2012, the Mill Operator Training Program (MOTP) has successfully prepared numerous trainees for entry-level mill operator roles, providing both the technical competencies and the safety culture required to succeed in the uranium industry.

This program responds to Orano's goal of increasing local participation in the mining workforce, while achieving its mandate of fostering employment readiness and skills development for Residents of Saskatchewan's North (RSN).

The Mill Operator Training Program aims to:

- Equip trainees with the essential safety knowledge, technical skills, and work habits required for employment in the uranium milling industry.
- Increase participation of northern residents, Indigenous peoples, and women in mining and processing roles.
- Strengthen the long-term sustainability of northern employment by providing job-ready candidates for Orano.
- Support the transfer of knowledge from experienced Orano employees to new entrants through structured mentorship.
- The 12-week program combines classroom instruction, hands-on training, and mentorship in an operational uranium mill setting.

Key program components include:

- Safety Training: Participants will complete core safety certifications such as Fall Protection, Confined Space Entry, Lock Out/Tag Out, Fire Extinguisher use, Workplace Hazardous Materials Information System (WHMIS), Transportation of Dangerous Goods, and Harassment & Violence Prevention.

- Operational Training: Trainees will rotate through multiple mill circuits—including Ore Slurry Receiving, Leaching, Counter Current Decantation, Packaging, and Water Treatment— as an introduction to all aspects of uranium milling.

- Environmental Protection: Instruction and practical work in water treatment and tailings management systems emphasize Orano's strong environmental stewardship standards.

- Digital Literacy and Essential Skills: Participants pre-employment testing both before and after the program to measure improvement in literacy, numeracy, and digital skills essential for operating modern mill control systems.

- Mentorship and Support: Each trainee is paired with a peer mentor and supported by experienced trainers, supervisors, and a site Elder and counsellor to promote wellbeing and successful adaptation to the industrial work environment.

Recruitment is carried out through community partnerships, radio and social media outreach, and the support of community liaisons in northern communities such as Hatchet Lake, Black Lake, Fond du Lac, and Pinehouse.

Graduates of the MOTP will possess the training, confidence, and hands-on experience to be considered for employment with Orano Canada in temporary or permanent mill operator positions. The timing of the program aligns with Orano's annual operational cycle, allowing trainees to transition directly into roles during the mill's spring cleaning and maintenance phase.

The program also supports Orano's future workforce needs as the company prepares for expanded operations and increased production beyond this Licencing term.

The Trades Helper Program continues to grow in strength. The program prepares employees for indenture into an apprenticeship in a specific trade. It provides employees with up to one year of employment, working and studying alongside journeypersons to gain knowledge and develop skills in the trade. In addition, Trades Helpers are assessed using applicable trade theory assessments and on-the-job performance evaluations to determine eligibility for indenture.

Since 2017, 13 employees have entered the Trades Helper Program, with eight successfully completing the program. All eight individuals continued to become indentured apprentices in a trade through the Saskatchewan Apprenticeship and Trade Certification Commission (SATCC). In addition, two individuals were hired directly into apprenticeships in 2025 from the pre-employment program at Saskatchewan Polytechnic.

Throughout the Licence term, training programs were reviewed and updated accordingly as per the requirements of the SAT. As well, new training programs were designed, developed and implemented to meet the needs of McClean Lake Operation during the Licence term.

3.2.3 Future plans

In 2026, the CNSC conducted an inspection of the McClean Lake Operation training program under the Human Performance SCA. The inspection identified opportunities to strengthen the governance, consistency, and application of the Orano's Systematic Approach to Training in support of effective human performance.

Orano has developed an action plan that includes:

- Enhancing SAT processes to ensure training is systematically analyzed, designed, developed, implemented, evaluated, and managed for change, with clear documentation and traceable outputs;
- Ensuring job, task, and training needs analyses are consistently conducted and integrated across all positions performing licensed activities;
- Strengthening training program evaluation and use documented results to support continuous improvement;
- Ensuring personnel qualifications for mandatory safety training remain current;
- Formalizing qualification and instructional skills training for peer trainers and other trainers; and
- Ensuring SAT is applied consistently across operational, maintenance, engineering, emergency response, and security functions.

Once the action plan is implemented, Orano will conduct routine self-assessments to ensure that these areas for improvement are addressed to ensure actions are effective and continue to align with CNSC Human Performance SCA expectations.

3.2.4 Challenges

Throughout this licence term, the Training Group experienced increased workload associated with new employee and contractor onboarding. Over the past five years, the number of new employee orientations increased by up to 52%, and contractor training increased by up to 63%. These increases reflect expanded site activities, including mining restart, increase in exploration on-site activities, and on-going construction projects. Orano continues to meet these challenges and is working with the Management Team to ensure that adequate training personnel are available for planned future activities.

3.2.5 Requests

Orano has no requests related to the Human Performance SCA, at this time.

Orano continues to implement and enhance its Human Performance Management measures, including the application of the Systematic Approach to Training, to ensure personnel are qualified, competent, and able to safely perform their duties. Results of audits, inspections and self-assessments continue to be addressed through planned improvements to training program governance, documentation, evaluation, and trainer qualification, consistent with continuous improvement principles.

Based on the current program and planned enhancements, Orano submits that appropriate Human Performance management measures are in place to support the safe operation of the McClean Lake Operation and the requirements of this licence renewal.

3.3 Operating Performance

The Operating Performance SCA includes an overall review of the conduct of the licensed activities and the activities that enable effective performance. The Licence requires the McClean Lake Operation to have a program in place that ensures the safe operation of its facility. The McClean Lake Operation IMS defines the programs in place to ensure on-going performance is maintained and continuous improvement is achieved.

3.3.1 Relevance and management

The licensed activities are performed in a controlled manner as prescribed in the IMS. The IMS and associated programs establish safe, uniform and efficient operating practices and processes within the facility to ensure the safety of employees, the public and the environment. The IMS uses the Plan-Do-Check-Act methodology and encompasses the Environmental Protection Code of Practice (ECOP) and the Radiation Protection Code of Practice (RCOP) for problem identification and resolution. Each Code of Practice defines action levels and administrative levels, while the appropriate steps required to respond are specified in the IMS. The IMS is applicable to individuals such as managers, supervisors, employees, contractors, and visitors. As discussed in Section 3.1.2, appropriate changes to process, system, structure or components are managed effectively and are documented within the McClean Lake Operation change control process.

The McClean Lake Operation reports operational performance, including safety performance, to the CNSC staff annually. The results of the Radiation Protection Program and the Environmental Protection Program are reported quarterly to the CNSC staff and are included in the Annual Report. Orano provides notification to the CNSC staff of any event that occurs outside of normal operations.

The McClean Lake Mill operated safely through the past licensing term while meeting its production targets. The JEB Water Treatment Plant continued to operate and effectively treat effluent. Regular inspections were conducted to ensure deficiencies were identified and remediated. Routine safety, health, environment and radiological monitoring continued throughout the licensing term. Monitoring of workers and workplaces verifies that Orano is continuing to keep worker doses as low as reasonably achievable (ALARA) while processing high-grade ore. Environmental performance objectives continue to be achieved. The Environmental Management System has proven successful in the prevention of unreasonable risk to the environment. Orano continues to take opportunities to improve the safety performance and will continue to establish challenging objectives to reduce risks.

3.3.2 Past performance

Throughout the Licence term, the McClean Lake Operation achieved its annual production targets when operating with average ore grades fed through the mill ranging between 11.85% U and 19.3% U. The McClean Lake Mill and associated facilities continue to operate in a manner that supports safe and reliable production in compliance with applicable standards and regulations.

In 2018, a final phase of the JEB TMF Optimization Project was completed. It included TMF slope improvements and construction of soil bentonite liner to 443 mASL. This project was completed as per the JEB TMF Optimization Project application and subsequent acceptance.

In 2017, CNSC accepted Orano's proposal to expand the JEB TMF to an elevation of 457.5 mASL, with the top of consolidated tailings at an elevation of 448 mASL. An application to construct this project was submitted to and approved by the Saskatchewan Ministry of Environment in 2019. Construction of the JEB TMF expansion was completed in phases over a course of several years with liner placement to 448 mASL completed in 2019, embankment expansion to 457.5 mASL in 2021, and another liner expansion to 452.5 mASL in 2023. The remaining phase of this project – another liner expansion to 457.5 mASL - is planned for spring/summer 2027.

As processing of ore from the Cigar Lake mine has progressed, it became evident that further expansion of JEB TMF capacity would be required. In 2019, Orano submitted a project description to CNSC for the expansion of the JEB TMF embankment to 468 mASL. In 2020, CNSC staff determined that the project would result in a change to the licensing basis and therefore required a Commission decision. The CNSC commission hearing was held on October 4, 2021 with a favorable decision received on January 17, 2022 (McClean Lake CNSC Operating Licence 2027). Orano was authorized to modify the outer perimeter of the JEB TMF for vertical expansion up to 468 mASL and to accommodate disposal of tailings up to a consolidated tailings elevation of 462 mASL. The implementation of this project is planned to begin after 2029.

In 2023, Orano installed the Ferrous Treatment System in the JEB Water Treatment Plant. The system is a long-term solution for the sustained reduction of selenium loading to the environment at the McClean Lake Operation in accordance with CNSC's *REGDOC 2.9.1: Environmental Protection: Environmental Principles, Assessments, and Protection Measures*; as well as the *Canadian Environmental Protection Act*, principles of pollution prevention and the need for continuous improvement. The objective of the Ferrous Treatment System is to maintain the average selenium loadings below the Exposure-Based Release Level. Due to low selenium concentration in the JEB Water Treatment Plant feed over past years, the system has not been utilized but remains in place, should a future need to treat selenium arise.

In 2025, Orano transitioned from SABRE research and development program to a full-scale production mining at its McClean Mine. Since 2025, the McClean Mine supplies ore to McClean Lake Mill (along with Cigar Lake mine). In 2026, Orano initiated a proposal to modify the mining method from conventional open pit mining method to the SABRE mining method for the Sue F uranium deposit and Midwest Main uranium deposit.[1][2]

McClean Mine ore processing required a restart of the Grinding Circuit. The circuit was safely restarted in June 2025. The restart of the system required refurbishment of some key components of the circuit.

Noteworthy accomplishments during the current Licence term include:

- In 2017, completion of the Ore Pad Runoff Pond construction at JEB site (to manage the stormwater) and relocation of the Temporary Contaminated Landfill to the Permanent Location in Sue C/A pit.
- Over 2017-2019 Orano completed decommissioning of the dewatering wells around JEB TMF.
- In 2018, Orano added a new 56,000-liter Hydrogen Peroxide Tank. In the same year, Orano re-sloped and constructed soil bentonite liner to the elevation of 443 mASL at JEB TMF and implemented a sub-aqueous tailings deposition.
- In 2019, the JEB TMF was further expanded with liner placed to 448 mASL.

[1] *Midwest SABRE Mining Technical Proposal. February 2026.* Orano Canada inc.

[2] *Sue F SABRE Mining project Technical Proposal. April 2026.* Orano Canada Inc.

- In 2020, Orano implemented selenium mitigation measures at the JEB TMF (increased distance between the tailings thickener overflow discharge and the reclaim intake, silt curtain installation at the reclaim intake).

- In 2021, after a brief Care and Maintenance period (January to April) due to Covid-19 pandemic, Orano proceeded with the next phase of the JEB TMF expansion and constructed an embankment to 457.5 mASL creating a tailings dam above “natural” ground level.

- In 2022, a third ferric sulphate reactor was installed, commissioned and put into operation in the Ferric Sulphate Plant.

- In 2023, JEB TMF liner expansion was completed to increase the crest elevation from 448.0 mASL to 452.5 mASL. The same year an arsenic flotation pilot plant trial was conducted. The goal of this process was the isolation and removal of arsenic in Counter Current Decantation Circuit (CCD) residues prior to treatment in the Tailings Neutralization Circuit. The pilot was successful, selectively removing arsenic with high efficiency and specificity. Throughout the year, numerous projects were implemented to improve mill automation in areas that were previously highly manual processes. In spring 2023, the commissioning of the Ferrous Treatment System in the JEB Water Treatment Plant was initiated, but due to low concentrations of selenium in the effluent, the system has yet to be fully commissioned.

- In 2024, Orano initiated a multi-phase project to upgrade fire detection and suppression in the Solvent Extraction Circuit. The project includes installation of additional heat and fire detection in vessels and building areas, as well as additional fire suppressions systems (Compressed Air Foam and carbon dioxide). The same year, Orano launched an in-situ remediation project at Sue E pit, which aims at lowering nickel and arsenic concentrations in the pit lake as part of the progressive decommissioning effort.

- In 2025, Orano successfully restarted mining at McClean Lake Operation utilizing SABRE mining method.

Reporting

Orano reports unplanned events as required by the *Nuclear Safety Control Act* (NSCA), its regulations and the Licence conditions. During the Licence term, incidents related to health and safety, radiation protection and/or environmental performance requiring reporting to the CNSC was completed in a timely fashion, were considered low risk and none were considered of a nature that would require reporting to the Commission. Orano reports events to the CNSC Duty Officer that trigger actions under the emergency response program, including false alarms, or when an event occurs that could trigger stakeholder interest, or an event that fits under the requirements of the *General Nuclear Safety and Control Regulations*, subsection 29.

Incidents are investigated through the McClean Lake Operation non-conformance procedure as outlined in the IMS. Non-conformances are identified and classified so that corrective and preventative actions are completed to minimize and/or eliminate similar non-conformances in the future. Corrective and preventative actions are implemented, and the investigation is documented as required.

3.3.3 Future plans

The McClean Lake Operation will continue to ensure safety is paramount and will focus its efforts on continual improvement and adaptive management initiatives. One such initiative will be to implement a gypsum mitigation plan to improve water treatment plant performance and throughput. Orano will continue to invest in capital improvements at the McClean Lake Operation required to ensure safe production through operating performance that provides protection for people and the environment, as required.

3.3.4 Challenges

The JEB Water Treatment Plant has experienced challenges in achieving nominal plant throughput capacity due to high levels of gypsum scaling throughout the process and effluent discharge piping. With the pending success of the in-plant trial, the implementation of a Gypsum Mitigation Treatment System is expected to relieve the stress of gypsum build-up on the water treatment infrastructure.

3.3.5 Requests

Orano has no requests related to the operating performance SCA, at this time.

In conclusion, Orano submits that the operating performance measures in place for the safe operation of the McClean Lake Operation are in support of this Licence renewal request.

3.4 Safety Analysis

The Safety Analysis SCA is a systematic evaluation of the potential hazards associated with the conduct of a proposed activity or facility and considers the effectiveness of preventative and mitigating measures and strategies in minimizing the risk of such hazards.

3.4.1 Relevance and management

Facilities at the McClean Lake Operation are designed according to the documented change control process, which follows the ISO 45001 standard requirements for hazard identification and risk assessment. Orano systematically assesses risk using risk analysis tools to ensure

sustainable and safe operation, including process hazard analysis (PHA), risk assessments, change control, hazard register, safe work plans, permitting systems and the Pathway to Safety Program – Stop, Think and Act.

Orano has implemented a Process Safety Management (PSM) program that provides a structured and systematic approach to identifying, assessing, controlling, and monitoring hazards associated with hazardous materials and energy sources. The PSM framework integrates organizational responsibilities, technical standards, and management oversight to ensure that operational risks and major accident hazards are identified and managed throughout the full lifecycle of operations. PHA outcomes are reviewed and consolidated into a safety action plan, where improvement areas are identified, prioritized, and scheduled for implementation. Process Hazard Analyses also inform the Critical Control Management program that focuses on mitigating major accident hazards by ensuring that critical controls are clearly identified, implemented, maintained, and routinely verified for effectiveness.

Change control is completed prior to implementing changes to processes, systems, structures or components and includes an assessment of the proposed changes or modifications, identification and assessment of potential risks and impacts and proposed mitigation measures. The Change Control process ensures changes consider operational needs as well as safety, health, radiation protection, environmental protection and regulatory requirements.

The hazard register is a high-level identification and assessment of health and safety risks and controls across the site. The hazard register is reviewed every two years and updated as required after changes to facilities, equipment, or processes. It is also reviewed after high potential incidents, regulatory changes, and workplace inspections.

Safe work plans are used to identify and mitigate workplace and task related hazards. Safe work plans are mainly used for non-routine work which do not have a work instruction or are not commonly performed on site.

Permitting systems are used to assess high risk workplace and task related hazards. Permits are intended to facilitate proactive communication among workers before a task begins with focus on identified hazards and mitigative controls. Specific permits include work permit, the work-at-height permit, confined space permit, hot work permit, and ground disturbance permit.

The *Pathway to Safety Program – Stop, Think, Act* is a safety booklet that is to be kept on an employee’s person while performing their work duties in the field. The booklet contains safety information in the form of cards inserted into plastic sleeves that includes reference to Orano’s life saving rules (Anchors and Standards), chemical awareness, a hazard assessment tool, radiation protection information and a Safety Improvement Opportunity booklet (document any identified hazards and have them mitigated).

Additional risk analyses maintained for the facility under voluntary, provincial or federal requirements include:

- Fire protection reviews and hazard assessments, as required, are conducted. The objectives of the fire protection assessments are to demonstrate that a comprehensive review has been made of potential fires and that their impacts on people, equipment, buildings and the environment are acceptable. The assessments include reference to the *CSA N393 Fire protection for facilities that process*, handle or store nuclear substances and fire protection systems, the *National Building Code of Canada*, and the *National Fire Code of Canada*. New proposed projects with the potential to impact the fire protection are reviewed.

- Business Risk Model (BRM) evaluations identify hazards and mitigate risks associated with the development and implementation of projects of all sorts. The BRM evaluation is conducted at an early stage in the development process at a project level to address business risks in the planning stage.

- Environmental risk assessment (ERA) for the McClean Lake Operation is conducted in a manner consistent with *CSA N288.6-12 Standard for Environmental Risk Assessments at Class I Nuclear Facilities and Uranium Mines and Mills*. This updated ERA is presented in the Environmental Performance (EP) Technical Information Document (TID). The library of TIDs is a leading practice, developed by Orano, that provides a basis for continual improvement and alignment with current and developing standards (refer to Section 3.9 for more detailed information).

- An environmental aspects registry to meet the requirements of ISO 14001 Environmental Management System Standard.

- Amenability studies prior to processing ores from individual ore bodies (e.g., Midwest ore and McClean Mine ore) to determine the optimal operating parameters for successful processing. The amenability studies enable Orano to determine the specific parameters for tailings preparation and wastewater treatment necessary to effectively treat waste streams produced during milling.

These assessments provide additional analysis specific to respective SCAs and support that the McClean Lake Operation, including the McClean Lake Mill and support facilities, are operated in a manner that is protective of the people and the environment.

3.4.2 Past performance

Safety analyses for the facility are reviewed regularly and as required, depending on the type of analysis. For example, safe work plans are completed almost daily, the hazard registry is reviewed

every two years (at a minimum), and the environmental risk assessment (ERA) documented through the environmental performance technical information document (EP TID) is prepared every five years. Safety analyses ensure changes to the facility are controlled and that risks posed are acceptable. During the Licence term, the following activities were completed and to support the safety analysis for the facility:

- PHAs identified process safety-related hazardous scenarios that could occur and ensured there were adequate controls in place to reduce the likelihood of a hazardous event to a level that is ALARA. The PHAs were conducted in the following areas:
    - Propane Storage and Distribution
    - Hydrogen Peroxide Storage Area
    - Solvent Extraction Circuit and Areas
    - Ammonia Storage Area
    - Sulphuric Acid Plant and Storage Area
    - Leaching Circuit and Nitrogen Storage Area

In 2021, Orano executed a 5-year contract with a third-party consulting firm to establish the appropriate inspections, needs analysis, compliance reviews, audits and assessments to ensure compliance to the *CSA N393 Fire protection for facilities that process, handle or store nuclear substances and fire protection systems*. From 2021 through 2025, thirteen (13) reviews were undertaken and included:

- Annual Facility Conditions Inspection (5);
- Fire Response Needs Analysis (1);
- Code Compliance Review (1);
- Fire Drill Assessment (2);
- Fire Protection Plan Audit (2);
- Fire Safety Training Needs Analysis (1); and
- Fire Hazard Assessment (1).

Any actions resulting from the assessments are prioritized based on risk and tracked in Orano's action management database. Overall completion of the actions to April 30, 2026, was 88%.

An Environmental Performance Technical Information Document (EP TID) was submitted in December 2025, in two volumes. Volume 1 functions as a repository of environmental performance information to provide current understanding of the environment surrounding the McClean Lake Operation; predictive risk modelling is provided in Volume 2 which includes an updated ecological risk assessment.

Recommendations from the CNSC on the safety analyses are considered continual improvement and incorporated into the management system and contribute to the overall safety of people and protection of the environment.

3.4.3 Future plans

Orano will continue to conduct safety analyses prior to implementation of changes throughout facilities.

3.4.4 Challenges

Orano does not have any challenges associated with this SCA.

3.4.5 Requests

Orano has no requests related to the safety analysis SCA, at this time.

In conclusion, Orano submits that it has the safety analysis measures and controls in place for the safe operation of the McClean Lake Operation and in support of this Licence Renewal request.

3.5 Physical Design

The Physical Design SCA relates to activities that have impact on the ability of systems, components and structures to meet and maintain their design basis given new information arising over time and taking changes in the external environment into account.

3.5.1 Relevance and management

Orano maintains a management of change (MOC) program for managing facility changes described in the IMS; this program is referred to as Change Control. The purpose of the Change Control program is to manage the risk of changes made to facilities, controls or operating methods, and to standardize the design function used.

As such, the mill, mine and other facilities at the McClean Lake Operation are designed, installed, operated and modified in accordance with the MOC program. On-going optimization and

continuous improvements are made to the McClean Lake Mill circuits, equipment, McClean Mine, and associated facilities. The change control processes are triggered when a modification or addition to facilities, processes or equipment is proposed and is not considered a replacement in kind and therefore requires design. The Change Control process at the McClean Lake Operation follows ten controlled steps:

1. Problem Identification/Justification for Change: a proponent describes the problem and provides justification for why the change should occur.

2. Initial Consideration: The Group Head (head of the group within which the change is requested), reviews and assesses the effects of the proposed change, determining if it is justified and feasible.

3. Evaluation and Classification: The change proceeds to a stakeholder approval and priority meeting for review, approval and calibration against other needs.

4. Design: Design control, a systematic process to capture design requirements and the steps to execute the design, is executed. This is an impeded process within the change control program.

5. Review: Done to ensure that a comprehensive, systematic examination of the change occurs and is documented. Depending on the scope of the change, this includes design review(s) with affected stakeholders and process hazard analysis.

6. Approval for Implementation: The deliverables of the design function on the proposed change are reviewed for approval by an appropriate group of stakeholders, following delegation of authority requirements. If approved, implementation can proceed. If denied, rework is required.

7. Implementation: Managed through work management processes, safe work plans and/or project management plans.

8. Commissioning: Confirmation that the change performs as intended, meeting user needs, often separated into four activities: construction (C1), functional (C2) and operational validation (C3 & C4).

9. Transfer of Custody: Turnover of the change to operations and involves the provision of information for the operation; and

10. Documentation Transfer: The compilation of records that describe the complete change/design history of the project.

Proposed changes, not considered to be replacement in kind, are controlled through the change control program as outlined in the McClean Lake Operation IMS. The program assesses risks and determines if mitigation of risks can be done to an acceptable level. Orano considers the change control program to be effective and controlled. The program ensures safety is paramount and ensures that process safety is inherent to the design of the McClean Lake Mill and associated facilities.

3.5.2 Past performance

During the current Licence term, the McClean Lake Operation made many improvements to the change control process and procedures as part of continual improvement, and to address areas for improvement as identified in audits and inspections. The improvements included developing a tiered training program for users, improved document control with the enhancement of the change control database, and updates to the risk review portion of the procedure to better involve subject matter experts.

3.5.3 Future plans

McClean Lake Operation is looking to enhance and improve the change control program to better prioritize projects and to improve the commissioning and turnover aspects of the program. Improvements to include better standardization of the commissioning and turnover processes, as well as updated training for users. The McClean Lake Operation is actively working towards continual improvement in this area.

3.5.4 Challenges

Orano does not have any challenges with this SCA.

3.5.5 Requests

Orano has no requests related to the physical design SCA, at this time.

In conclusion, Orano submits that it has physical design measures and controls in place for the safe operation of the McClean Lake Operation, and in support of this Licence Renewal request.

3.6 Fitness for Service

The Fitness for Service SCA covers activities that impact the physical condition of structures, systems and components to ensure that they remain effective over time. This area includes programs that ensure equipment is available to perform its intended design function when called upon to do so.

3.6.1 Relevance and management

McClean Lake Operation has programs and procedures that ensure the facility is operated in a safe, clean and reliable manner. These programs and procedures address the following areas that comprise this SCA:

- asset management through predictive and preventative maintenance (PM) program;
- loss elimination program (reliability);
- an in-service inspection program; and
- maintenance and operating parameters.

Orano has an established PM program as defined in the IMS. The program is administered, organized and controlled through a computerized maintenance management system. This system manages the PM program for mill equipment and documents the equipment operating history. Preventative maintenance and reactive maintenance tasks are managed, initiated and documented through the work notification and work order functions of the system and are based on equipment manufacturer recommendations and equipment history. The PM work is monitored for completeness and accuracy.

Orano has an in-service inspection program which includes those related to safety significant systems. The program is comprised of secondary containment inspections, structural integrity inspections and tank integrity inspections. Qualified tradespersons are assigned to perform the initial assessment and are guided by procedures as outlined in the IMS. Inspections are documented in the computerized maintenance management system. Contract specialists are brought in occasionally, dependent upon the deficiencies noted.

Fire protection systems are tested according to an established schedule as outlined in the Fire Protection Program. Third-party reviews, audits and assessments are conducted to confirm required tests and inspections with respect to fire protection are completed and comply with *CSA 393:22 Fire protection for facilities that process, handle, or store nuclear substances*.

The PM program ensures that systems, equipment and devices are maintained in good working order and within design specifications. Calibrations are performed and documented on

instruments, controls and associated indicators. Overall, Orano considers the PM program to be effective.

3.6.2 Past performance

Throughout the Licence term, the PM program has proved to be successful and has been improved and enhanced in the following areas:

- Improvements within the computerized PM management system through the development of new processes and changes to computerized maintenance management system screens for ease of planning and scheduling work;
- Considerable resources were focused on improving the management of the secondary containment inspection program;
- Enhancements were implemented in the tank integrity inspection program with further development of the inspection procedure and scheduling;
- Critical safety equipment such as pressure relief valves have been set up in the computerized maintenance management system to be serviced or replaced at the regulated intervals; and
- Development of an equipment refurbishment process through the PM program that allows rebuilt equipment to be returned to the warehouse for restocking in proper locations.

Key performance indicators (KPI) are in place for the PM program and key aspects are periodically monitored and reviewed. The areas monitored through these KPI's are a measure of maintenance performance and an indication of future opportunities for improvement. Some areas reviewed are:

- Reserved stock inventory that moved against the work orders is an indicator of whether work is planned well and repair parts are selected correctly;
- Predictive and preventative maintenance compliance is an indicator of the amount of unscheduled work interrupting the planned schedule;
- Percentage of break-in work opposed to planned work is an indicator of the health of the equipment, predictive and preventative plans and the overall maintenance effectiveness; and
- There are other indicators used that relate to total work order count and cost, which are reviewed periodically.

The development and use of these KPI's have created transparency in the health and performance of the maintenance program. There have been improvements in preventative maintenance

activities and progress in the accuracy and performance activities like shut-down planning using KPI reporting.

3.6.3 Future Plans

It is Orano's intention to improve equipment reliability by further developing the preventative maintenance program by reviewing existing PM plans to ensure they are effective and value added in each case. An examination of the present maintenance practices to look for opportunities for improvement in areas of proactive and predictive maintenance supports a reliability focus. Orano plans on enhancing the existing computerized PM system (SAP) to provide efficiencies in work planning, scheduling and KPI reporting.

3.6.4 Challenges

Orano does not have any challenges with this SCA.

3.6.5 Requests

Orano has no requests related to the fitness for service SCA, at this time.

In conclusion, Orano submits that it has the fitness for service measures in place for the safe operation of the McClean Lake Operation in support of this Licence Renewal request.

3.7 Radiation Protection

The Radiation Protection SCA covers the implementation of a radiation protection program in accordance with the *Radiation Protection Regulations*. This program ensures that contamination and radiation doses received are monitored and controlled.

3.7.1 Relevance and management

Orano has an extensive Radiation Protection Program (RPP) to meet the requirements of the *Radiation Protection Regulations.* The RPP is composed of several program elements. Each element is supported by a system procedure. Each procedure describes required activities that must be performed to comply with the program objectives. The elements of the radiation program include:

- Doses remain ALARA;
- Dosimetry monitoring;

- Radiological hazard area monitoring;
- Radioactive Contamination Control;
- Bioassay sampling for uranium in urine;
- Ventilation monitoring;
- Management of radioisotopes;
- Shipment of radioactive materials;
- Radiation Protection training;
- Personal protective respiratory equipment management; and
- Emergency response.

In addition to the above elements, the RPP includes the *Radiation Protection Code of Practice* (RCOP) for the milling and mining, including supporting operations. The collection of documented information provides information on general ALARA principles, site specific radiological protection information and direction in the event of upset conditions to ensure doses are maintained ALARA. This direction ensures regulatory compliance with the *Uranium Mines and Mills Regulations* and *Radiation Protection Regulations*.

The RPP utilizes the principle of maintaining doses ALARA while considering social and economic factors. This principle has been integrated into each of the elements and is implemented through McClean Lake Operation procedures. The verification of this principle is obtained through the dosimetry monitoring procedure which ensures appropriate dosimetry monitoring is conducted for each required individual. Dosimetry monitoring documents worker exposures to gamma radiation, radon progeny and long-lived radioactive dust. Dosimetry results demonstrate compliance with dose limits as defined by the regulations, LCH and administrative and action levels defined in the RCOP for the McClean Lake Operation.

Routine radiological area monitoring is performed throughout the McClean Lake Operation. This routine monitoring includes quantitative sampling of gamma radiation, radon progeny and long-lived radioactive dust and is comprised of a matrix of sampling locations and frequencies. Each location and frequency is determined based on worker occupancy and potential radiological hazards that may be present. The routine monitoring also includes contamination control monitoring to minimize the spread of radioactive materials and provides general housekeeping assessments. Routine bioassay sampling is also established to monitor workers for internal contamination. Routine reporting of results includes internal monthly reporting of area monitoring, quarterly reporting of official dosimetry as well as quarterly notification to workers of personal dose.

As described in Section 3.2, the RPP also includes training aspects. Radiation protection training material is provided in Basic Orientation, Radiation Protection at McClean Lake and Radiation

Protection Supervisor training. The intent of each training aspect is to ensure workers have an acceptable level of radiation protection knowledge, workers have increased awareness of radiological hazards in the workplace and that knowledge of lessons learned from past events can be shared.

Engineering controls that support the RPP are included in the design of the McClean Lake Mill, with the specific intent to control worker radiation doses during the processing of high-grade ore. The design features to isolate high radiation sources include physical barriers, shielding, containment and ventilation.

Additional ALARA initiatives during the current Licence term included:

- Relocation, redesign and continued improvement of the calciner/packaging Personal Protective Equipment (PPE) donning/doffing station;
- Designation of a segregated muster location for workers who are wearing calciner and packaging enclosure PPE during mill evacuations;
- Reprogramming of slurry tote wash cycle to eliminate manual tote cleaning;
- Relocation of the metallurgical laboratory storage sea-can to a lower occupancy area;
- Redesign of the leach tank cleaning methods using high pressure washing and remote rodding;
- Updated sample frequencies to optimize the sampling strategy;
- Dose analysis on Scaffolders - determined several changes that can be implemented to potentially reduce long-lived radioactive dust (LLRD) exposure;
- Implementation of additional contamination controls, including sticky mats at exits from packaging enclosure and new floor coating to improve visualization of contamination and improve cleaning efforts in packaging area to reduce exposure to calcined and non-calcined yellowcake; and
- Leak identification and repair program to reduce the elevated dust on the fifth floor of the calciner enclosure.

Performance of the program is routinely assessed through the review of worker doses and area monitoring results. Worker dose reviews include the daily, weekly and monthly review of direct reading dosimeter results along with worker dose analysis and discussion at monthly exposure meetings where worker doses are measured against established internal dose constraints.

3.7.2 Past performance

Over the course of the Licence term, ore processing continued and mining utilizing the SABRE method started. The restart of mining and the mill Grinding Circuit occurred in 2025 and, in the first year, demonstrated no appreciable change in worker average dose. The RCOP was updated in 2024, creating more conservative (lower) internal mitigative limits in terms of radiation contamination control and worker exposure. Figure 3-2 (next page) demonstrates the maximum and average doses over the past 9 years relative to the annualized regulatory limit of 20 mSv millisiverts (mSv)/year and internal annual Total Effective Dose target of 12 mSv. Figure 3-2 demonstrates doses are well below the annualized regulatory limit and the new internal mitigative limit (12 mSv) set in the RCOP.

During the Licence term, there were four exceedances of the weekly Action Level of 1 mSv reported, one in 2020 and three in 2023. The four Action Level exceedances occurred during non-routine operational and maintenance activities:

- In 2020, a combined dose from radon progeny and ore dust for a mill operator was 2.42 mSv, exceeding the 1 mSv per week action level. The investigation of the exceedance showed no clear task or activity that identified the source of exposure. Area monitoring results collected in the areas of the work conducted showed no elevated LLRD or Radon Progeny Level (RnP) results. The most likely source of exposure was during dust-generating cleaning activities within a vessel in the water treatment plant. In 2021, dust sampling pumps were deployed, and Radiation Work Permits were issued for interior cleaning of vessels within the water treatment plant to identify potential sources of exposure in this traditionally low exposure area.

- In 2023, the four action level exceedances occurred while performing similar tasks during a September maintenance shutdown. The three exceedances were for calcined LLRD intakes of 2.19 mSv, 4.84 mSv, and 5.42 mSv. During the period from September 14 to September 17, Orano personnel performed cleaning activities in the Calciner hearths in order to conduct an inspection. Cleaning of the hearths is considered a non-routine job and is performed on an annual basis. Workers are required to don special PPE when entering the Calciner enclosure as well as the Calciner hearths. Six workers performing the cleaning activities experienced difficulties with their PPE resulting in either the workers inhaling or ingesting calcined yellowcake. When the events occurred, the workers immediately exited the Calciner, doffed their PPE, and washed. The workers reported to their Supervisor and Health Centre and subsequently provided a uranium in urine (U in U) sample. Workers with elevated U in U results were removed from the tasks with high exposure potential until their results returned to normal. As a result of the exceedances, Orano developed a procedure for calciner hearth cleaning to minimize or eliminate hearth entry. Radiation Protection staff have been instructed to dispose of the filters used for calciner hearth cleaning after first use to eliminate loss of airflow to the respirator. In addition, if respiratory protection

equipment is compromised from an incident where calcined yellowcake may have entered the mask, it too will be disposed of.

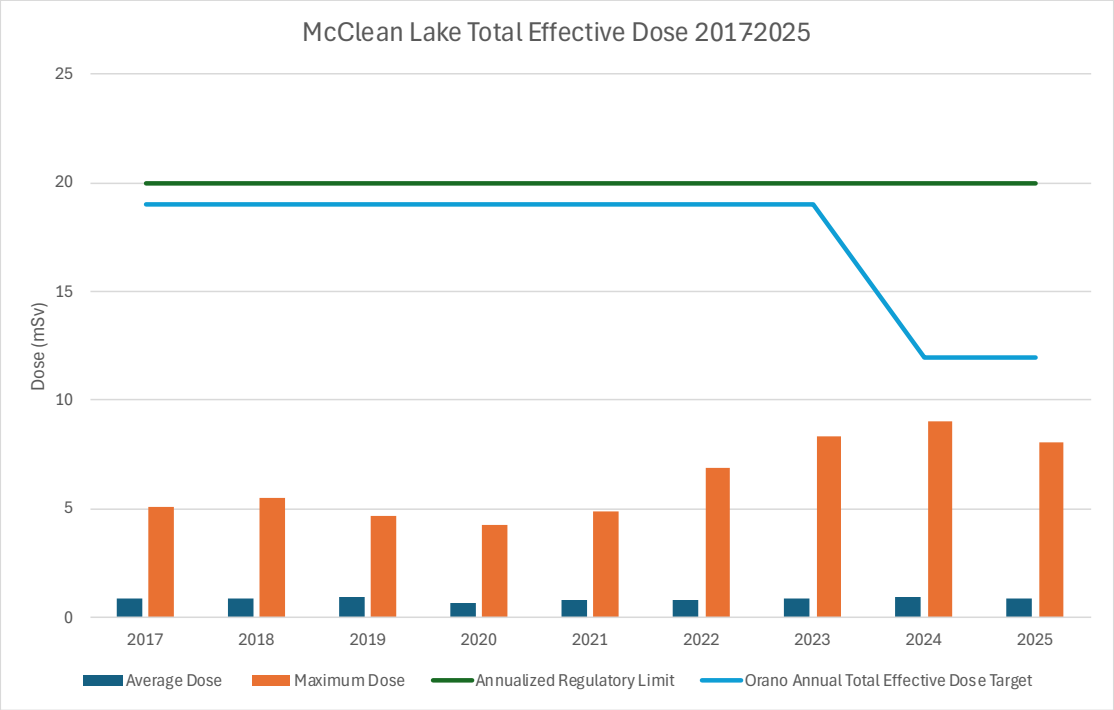


Figure 3-2: McClean Lake Operation Total Effective Dose

3.7.3 Future plans

The RPP is a mature program that has maintained doses ALARA. The current dose results have demonstrated the effectiveness of the program. Orano continues to focus on continual improvement and the reduction of the top worker doses and improvement of contamination control. The improvements will be achieved through various worker communication strategies and application of lessons learned.

3.7.4 Challenges

Doses remain well below regulatory limits, irrespective of grade and production because of a robust RPP, engineered radiation protection design features of the mill and a strong radiation protection safety culture on site.

Foreseeable challenges include maintaining worker vigilance within the mature radiation protection program in mill operations and adapting monitoring practices, as required, as the mining program continues to evolve. To support ongoing worker engagement and reinforce ALARA principles, initiatives may include increased collaboration sessions with workers, enhancements to training

and awareness materials, and the integration of radiation protection topics into weekly safety huddles.

3.7.5 Requests

Orano has no requests related to the radiation protection SCA, at this time.

In conclusion, Orano submits radiation protection measures in place for the safe operation of the McClean Lake Operation in support of this Licence renewal request.

3.8 Conventional Health and Safety

3.8.1 Relevance and management

Orano is committed to providing a healthy, safe and secure work environment for all employees and contractors, and to ensuring that all work and processes are performed in a safe and responsible manner that meets regulatory and company standards. Within its policy Orano commits to:

- foster a positive safety and security culture throughout the organization;
- prevent injury and protect the physical and mental health of employees and contractors;
- implement, maintain and support the process safety management principles as a means to manage and control hazards and prevent major accidents;
- identify and evaluate the likelihood and severity of major hazards and address workplace risks;
- fulfill its compliance obligations;
- maintain radiation doses to its employees and contractors ALARA, social and economic factors considered;
- develop and monitor internal leading indicator objectives and targets to achieve continual improvement in health and safety performance and the management of risk associated with major accident hazards;
- support all employees and contractors in fulfilling their health and safety responsibilities;
- include consultation and participation of workers and their representatives;
- develop, implement, maintain and test emergency procedures; and
- investigate reported incidents that result or could result in employee illness or injury and apply lessons learned.

Orano has a comprehensive and well-established Occupational Health and Safety (OH&S) Program that ensures these commitments are met. Furthermore, Orano's policies, programs and procedures are developed to adhere to the requirements of *The Mines Regulations, 2018, chapter S-15.1 Reg 8, The Occupational Health and Safety Regulations, 2020* and *The Saskatchewan Employment Act (Part III)*.

To ensure Orano meets the minimum requirements of a robust OH&S program, Orano continues to be certified to ISO 45001:2018 Occupational Health and Safety Management Systems. Registration to this standard provides Orano a framework to manage risks and continue to improve OH&S performance. The standard establishes criteria for an OH&S policy, objectives, planning, implementation, operation, auditing and review. Key elements include leadership commitment, worker participation, hazard identification and risk assessment, legal and regulatory compliance, emergency planning, incident investigation and continual improvement. Annual maintenance audits and recertification audits are conducted at the McClean Lake Operation by a third-party auditor, addressing any nonconformances to ensure continued improvement within the organization.

Since the last relicensing period, Orano has implemented multiple areas of improvement that are described below. The most significant shift has been a closer focus on leading indicators instead of the traditional lagging indicators; this shift has promoted employees to think about what can be done to improve safety before a safety event occurs.

Human Factors and Behavior Based Programs

Recognizing that the organization has a significant impact on employees' behaviors and choices, and in turn affecting their safety performance, much effort has been focused on understanding and improving these factors. In the last 10 years, efforts have been dedicated to human factor improvements to support safer performance; these 3 key areas include supporting workers to identify the hazards they work with, having coworkers support each other in their work and promoting leaders to interact with employees in the field.

Your Pathway to Safety

"Your Pathway to Safety" system was implemented in 2019, replacing the 5 Points Safety System and uses STOP, THINK, ACT philosophy. It is a behavioral shift from viewing safety practices as an obligation to taking ownership of safety and creating the desire to want to work safe. It is an everyday, every moment reminder for workers to keep Safety at the forefront of our minds and close to our hearts.

The three main aspects of the program are as follows:

- Why I work Safely Card
- Stop & Think Card (hazard and risk assessment)
- Safety Improvement Opportunities booklet

Behavior Based Observations

Behavior Based Observation (BBO) program was introduced to the McClean Lake Operation in 2021. Employees participate in this program by using it as a recognition and coaching tool for peer-to-peer observations. In particular, workers are encouraged to use BBO to observe work involving high risk tasks.

Manager in the Field

The Manager in the Field (MIF) is a program that encourages leaders to support workers in the field. The leaders are tasked with understanding work in the workplace and to get to know the worker and have the leader support where improvements can be made. Leaders are expected to identify both successes and challenges. Any inappropriate behavior relating to safety or process is also the responsibility of the leader to correct and coach as needed.

The MIF, BBO and Your Pathway to Safety are further supported by an incentive program. In 2021, Orano rolled out a new Safety and Excellence Award program in the form of a 'BINGO' card. The program is designed to encourage all personnel at the McClean Lake Operation to be actively involved in their Pathway to Safety and Operational Excellence. The aim is to:

- Create a desire to work safe through proactive actions;
- Create a positive safety culture; and
- Establish a mentality to achieve excellence.

Leading Indicators

Safe Work Plans

In the last decade, Orano has increased its expectation for teams to use safe work plans more frequently to communicate the hazards and controls for work, in particular non-routine work involving increased hazard risk. Updates to the program include making the system more efficient and effective including the creation of a Safe Work Plan Library for all employees to access, updates to the Safe Work Plan form including addition of visual indicators of the anchors (critical risks), providing additional guidance for anchors and controls, and incorporating process safety aspects.

Permits

Permitting systems are used to encourage proactive communications between workers and reinforce hazard assessments and corresponding mitigative actions for high-risk work such as confined space entry, fall protection, hot work and ground disturbance. Improvements to multiple permit systems have been done over the last decade to make them more effective in controlling hazards, thus protecting workers and assets.

Hazard Identification and Program Improvements

Orano Safety Anchors and Standards

In 2017-2018, Orano introduced Anchors (Figure 3-3); life saving rules, to educate and make employees more aware of hazards that can result in serious injuries or fatalities (high potential). These anchors have specific rules that must be adhered to by all employees conducting work related to the anchor. The anchors/critical risks are also used to analyze events and employees are encouraged to focus on these in their workplace inspections or safety improvement opportunities.

Figure 3-3: Orano Safety Anchors

Orano currently has nine Safety Standards (Figure 3-4) which complement the Anchors. The standards correspond to a rule or best practice whose application contributes to the management of risk and the prevention of accidents. In line with continual improvement, Orano introduced two new standards in 2025 which included fire protection and radiation protection.

Figure 3-4: Orano Safety Standards

Fall Protection Program

Improvements to the Fall Protection Program progressed throughout 2018-2020. Key items of improvement include:

- better management of fall protection equipment including the creation of fall protection equipment tracking database,
- the creation of a fall protection plan to manage safe work at height,
- the purchasing of new equipment to support work at height,

- increased use of scaffolding wherever feasible to promote safer work at height,
- installation of additional engineered anchor points at were also installed in early 2020, and
- better tracking of portable stepladders.

Lagging Indicators

Although the focus has shifted in more recent years to monitoring leading indicators, Orano continues to monitor the traditional safety statistics including some new classification to aid the organization in understanding significant health and safety events.

In 2017, a new classification introduced HIPO (high potential events) which captures all events with potential for injury, in addition to just those that resulted in actual injuries. Orano dedicated time to supporting workers to understand and report these events, classifying, investigating and sharing of the lessons learned. Over the course of nearly a decade, Orano continues to promote this indicator and has experienced that employees regularly report and learn from HIPO events.

Personnel

Since 2017, additional resources have been added to the Safety Group at the corporate and operational level which includes the onboarding of 4 Safety Technicians, 1 Process Safety Specialist, and 1 new Health Coordinator. This brings the Health and Safety Team up to 12 personnel that support the McClean Lake Operation over 2 shifts. The Group is also supported by the Emergency Response Team (ERT), comprised of various volunteer personnel from different departments. There are 32 individuals on the ERT team with a minimum of 8 present at site during each shift.

Occupational Health and Safety Committee

The Occupational Health and Safety Committee (OHC) works with the employer and workers to create a healthy and safe work environment by detecting Occupational Health and Safety (OHS) hazards and developing practical approaches to eliminate or control those hazards. OHCs are essential for bringing health and safety concerns into the open, focusing attention on them, and recommending ways to correct and resolve them. The role of the OHC is to provide advice and make recommendations to Orano. Orano works closely with the OHC to consult and cooperate with them on health and safety matters.

Some of the duties of the OHC include:

- Helping employers identify, eliminate, or control hazards

- Making recommendations to the employer for improving workplace health and safety
- Talking with workers about health and safety concerns and helping resolve the concerns
- Inspecting the workplace regularly
- Investigating reportable incidents (meaning accidents and dangerous occurrences)
- Helping establish and promote health and safety programs, policies, and training
- Investigating refusals to work

Safety Days

Orano continues to have its annual dedicated Safety Days to allow employees to be engaged in Safety related activities and to spend some time outside their normal work environment to focus on health and safety. First established in 2008 as a couple hours of safety talk, this day has since evolved to a more engaging, interactive format for employees to learn and have fun. Topics vary from year to year, covering a variety of health, emergency response and safety topics. Recent years' topics include demonstrations of a specific hazard (e.g. acid or peroxide), drug dog, mental health, process safety, emergency response, Occupational Health Committee awareness, and psychological safety. External relevant keynote speakers are invited to share their stories with a health or safety message.

3.8.2 Past performance

Orano tracks past performance for hours worked, lost time injury (LTI) events and days lost as a result of these events to determine frequency and severity rates, Table 3-1.

Table 3-1: 2017-2025 Safety Performance

Year	2017	2018	2019	2020	2021	2022	2023	2024	2025*
Total number of FTE workers[1]	360	394	348	295	339	383	415	399	450
Number of LTIs[2]	0	1	4	2	3	3	3	2	1
Severity Rate[3]	67.8	4.8	48	42.8	49.8	28.6	64.8	48.6	33.7
Frequency Rate[4]	0	0.3	0.9	0.7	0.9	0.8	0.7	0.5	0.3

[1] Total number of workers (employees and contractors) expressed as full-time equivalents (FTE). FTE = total person-hours / 2,000 hours worked per employee per year.

[2] Lost-time injury - an injury that takes place at work and results in the worker being unable to return to work for a period of time.

[3] Severity rate - the accident severity rate measures the total number of days lost to injury for every 200,000 person-hours worked at the site. Severity = [(# of days lost in last 12 months)/# of hours worked in last 12 months)] x 200,000.

[4] Frequency rate - the accident frequency rate measuring the number of LTIs for every 200,000 person-hours worked at the site. Frequency = [(# of injuries in last 12 months)/ # of hours worked in last 12 months)] x 200,000.

*2025 values are based on data up until Sept 30, 2025

The trend since 2019 for LTIs continues to trend downwards; Orano believes that significant lost time injuries are preventable. Thorough investigations are conducted and specific actions to target the identified causal factors are carried out to prevent future occurrences.

As noted, starting in 2017, Orano put a focus on High Potential Events (HIPO) or potential Serious Injury or Fatality events (Figure 3-5). The classification of HIPOs along with Orano's strong reporting culture has allowed Orano to learn as an organization.

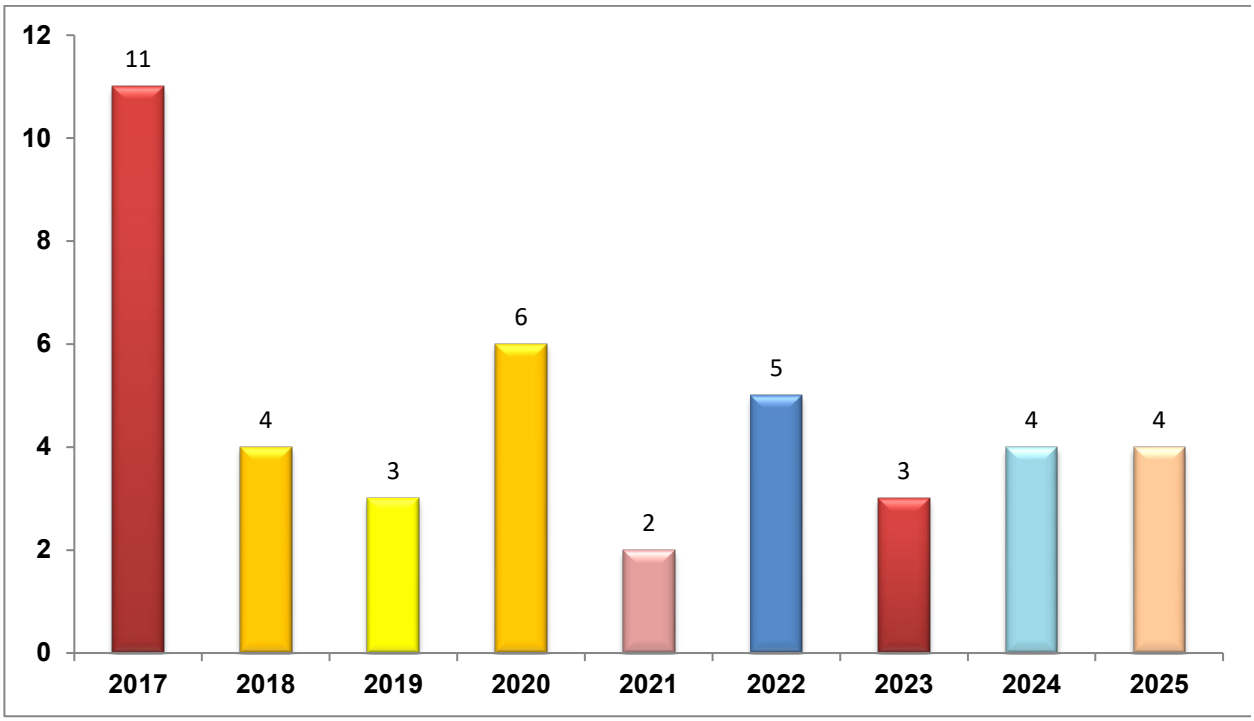


Figure 3-5: High Potential Events (HIPO)

3.8.3 Future plans

Orano believes in continual improvement and continues to support their employees in performing work in a healthy and safe manner. Orano sets annual objectives and targets to promote continual improvement to foster a safe work environment.

3.8.4 Challenges

Orano does not foresee any immediate challenges with respect to health and safety that would impact the licence renewal request. Orano is committed to addressing any challenges as they arise to ensure the safe performance of their workers.

3.8.5 Requests

Orano has no requests related to the conventional health and safety SCA, at this time.

Orano concludes that it has a sufficiently comprehensive conventional health and safety program which includes continuous improvements to ensure safe operation in support of this Licence Renewal request.

3.9 Environmental Protection

The Environmental Protection SCA covers programs that identify, control and monitor releases of radioactive and hazardous substances and effects on the environment from facilities or as the result of licensed activities.

3.9.1 Relevance and management

Environmental Protection at the McClean Lake Operation is managed through the Environmental Management System (EMS) which provides a system for control of environmental issues both current and future. The EMS is designed to meet the requirements of the CNSC, the Saskatchewan Ministry of Environment and Environment and Climate Change Canada (ECCC). Additionally, the EMS is designed to meet the criteria of the International Standard Organizations (ISO) 14001:2015 standard, as well as internal requirements. The documents that comprise the EMS identify the following:

- waterborne effluents and airborne emissions;
- the programs that are in place to monitor them and the receiving environment;
- legal requirements; and
- reporting requirements.

Two integral components of the EMS are the *Environmental Monitoring Program* (EMP) and the Environmental Code of Practice (ECOP). The EMP integrates effluent monitoring, environmental monitoring, and groundwater protection and monitoring, in conformance with the Canadian Standard Association (CSA) Standards *N288.0 Environmental management of nuclear facilities: Common requirements of the CSA N288 series of Standards*, *N288.4 Environmental monitoring programs at nuclear facilities, N288.5 Effluent and emissions monitoring programs at nuclear facilities;* and *N288.7 Groundwater protection and monitoring programs for nuclear facilities and uranium mines and mills*. The EMP is periodically *reviewed* to ensure compliance with the CSA standards. The EMP's purpose is:

- to verify compliance with authorized release limits;
- to address any action levels, performance indicators, or internal objectives and targets established for effluent control and groundwater protection;
- to confirm that controls at the emission source are effective;
- to provide supporting data needed to evaluate risks to human health and safety, as well as potential environmental effects, as identified in the ERA or applicable regulations;
- to demonstrate that controlled releases to fish-bearing waters are not acutely lethal; and
- to support and evaluate the effectiveness of any adaptive management measures.

In addition to the EMP, supplementary studies are conducted to achieve specific, well-defined objectives, in line with the requirements of the CSA N288 series of standards. The results of these studies are used to strengthen environmental risk assessments by reducing uncertainty, identifying confounding factors, improving understanding of the local environment and the behavior of constituents of potential concerns (COPCs) and other stressors, examining specific findings from environmental monitoring programs, and evaluating the effectiveness of implemented mitigation measures.

The ECOP describes administrative and action levels for environmental protection, pertaining to routine operational and environmental monitoring. Examples of where administrative and action levels are applied include tailings preparation and water treatment. The McClean Lake Mill treated effluent that is released to the environment is required to comply with the Environment and Climate Change Canada (ECCC) *Metal and Diamond Mining Effluent Regulations* (MDMER) discharge limits, which are also appended to the current operating Licence. The action levels for effluent are developed in line with applicable requirements of CSA standard *N288.8 Establishing and implementing action levels for releases to the environment from nuclear facilities.*

The information generated by the environmental monitoring, implementation of action levels, and regular reviews of the Environmental Risk Assessment (ERA), performed in compliance with CSA standard *N288.6 Environmental Risk Assessments at Nuclear Facilities and Uranium Mines and Mills*, support the implementation of the CNSC's environmental protection regulatory framework (REGDOC-2.9.1) and fulfill the requirements of the current operating Licence and LCH.

The EMS has proven to be successful in the prevention of unreasonable risk to the environment during operations to date. When action level exceedances or unplanned releases to the environment occur, steps are taken to both correct the issues and prevent them from recurring. These steps are handled through the site-wide non-conformance procedure outlined in the IMS.

The EMS is an adaptive management system. As new projects are proposed and approved, monitoring is adjusted to support predictions made in the environmental assessments s. Additionally, follow-up programs to environmental assessments and updates to technical information documents and scientific modeling are ongoing.

Continual improvement is at the forefront of environmental performance. Site inspections, environmental training, reviews of environmental monitoring data and systematic audits of the EMS are performed routinely. As part of the ISO 14001 EMS and to fulfil one of the responsibilities detailed within the Orano Environment Policy, objectives and targets are created at the beginning of every year and support continual improvement and the prevention of pollution. The objectives and targets program requires participation from all departments with a significant effort put on developing a strong environment culture across site.

The series of Technical Information Documents (TIDs) for the McClean Lake Operation provide consolidated presentations of technical subject areas. The TIDs serve as principal reference documents in support of environmental assessment of new projects and activities, and future licensing. The TIDs contain a summary of recent assessments, studies and predictions conducted for McClean Lake Operation. The McClean Lake Operation TIDs are regularly revised and are comprised of the following suite of documents:

- Environmental Performance TID Volume 1 – Environmental Performance Assessment (EP TID), focuses on assessing the McClean Lake Operation environmental performance based on the most recent monitoring and operational data. The EP TID Volume 1 also summarizes key environmental aspects of the McClean Lake Operation and Midwest Project areas as well as results of the supplementary studies and follow-up program. The last edition of EP TID Volume I was released in 2025.

- Environmental Performance TID Volume 2 – Environmental Risk Assessment (ERA), presents an updated ERA based on the most recent environmental data, refined model inputs based on the new monitoring data, recent and anticipated operational performance, adjustments to the mine plan, scientific advancements in ERA methodology, and changes in the regulatory framework. ERA aims to support licensing applications and environmental assessments, inform environmental protection and monitoring, and identify opportunities for continual improvement and the need for additional mitigation measures, where required. The most recent ERA update was submitted for regulatory review as part of EP TID Volume II in December 2025. The 2025 ERA scope included consideration of effects associated with developing the Midwest deposit with the SABRE Mining method and milling Midwest ore at the McClean Lake Mill.

- Hydrogeology and Groundwater Modelling of the Collins Creek Basin TID (GW TID), integrates the available hydrogeological information relevant to the McClean Lake Operation, Sue F Project and Midwest Project into a comprehensive regional

hydrogeological perspective. GW TID is based on data acquired through field studies and assessments in the Collins Creek basin and conceptualized through a numerical groundwater model which describes the region. A solid understanding of the hydrogeological setting of the Collins Creek drainage basin as reflected in GW TID enables evaluation of the effects of mining activities on the local the environment. The most resent version of GW TID was released in 2011, and the newest version is being prepared for release in 2026.

- Tailings Management Technical Information Document (Tailings TID) provides a comprehensive understanding of tailings management at the McClean Lake Operation and is supported by results of recent geochemical and geotechnical investigations. Tailings TID provides details of the design, operation, and future decommissioning of the tailings management facility at the McClean Lake Operation, specifics of operational performance, and predictions of long-term, post-closure environmental performance. The Tailings TID is regularly updated. The most recent version was released in 2025.

- Waste Rock Technical Information Document (WR TID) contains information on waste volume present at McClean Lake Operation, contaminant concentrations, and modelled impacts on adjacent water bodies. The WR TID is intended to confirm that the impacts of waste management activities at the McClean Lake Operation match the initial predictions made during McClean Lake EA process, i.e. that the environment is protected and the water quality in nearby lakes remains within acceptable concentrations for aquatic life. The latest version of WR TID was released in 2021and it includes an assessment of a waste rock deposition from SABRE mining of the Midwest ore into Sue C/A pit (Appendix B.1). The newest WR TID update will be released in 2026.

3.9.2 Past performance

Environmental performance is reported to the CNSC through routine quarterly and annual reports, as well as through Environmental Performance Technical Information Documents that provide multi year data analysis, comparison with the EIS and ERA predictions, and review of environmental risks based on the most recent data.

During the Licence term, there were nine exceedances of action levels for treated effluent discharge as established in the ECOP, including five which were above the maximum authorized concentrations for total suspended solids (TSS) per the *Metal and Diamond Mining Effluent Regulations (MDMER)*. A TSS exceedance registered on March 6, 2018, was caused by gypsum precipitating out of a solution as a result of temperature changes and lag time between collection and analysis at the SRC laboratory. The measured result of 268 mg/L was not representative of the effluent quality. The effluent quality as deposited was not in exceedance of the maximum authorized concentration.

The elevated TSS results observed on June 1, 2021, August 27, 2023, September 23 and 24, 2023 were attributed to sample contamination, with confirmatory tests and investigation demonstrating that the effluent as deposited was not in exceedance of the maximum authorized concentration.

An elevated TSS of 18.9 mg/L observed on August 25, 2019, at the JEB Water Treatment Plant exceeded the Action Level as per the ECOP (12 mg/L) and was related to a lengthy JEB Water Treatment Plant shutdown. The effluent as deposited was not in exceedance of the maximum authorized concentration of 22.5 mg/l as per the MDMER.

The remaining three Action Level exceedances occurred on March 28, 2020, March 29, 2020, and April 4, 2020, when the selenium concentrations in the JEB WTP effluent exceeded the Interim Selenium Action Level of 0.078 mg/L set out in the ECOP, with the test results at 0.084 mg/L 0.081 mg/L, and 0.085 mg/L, respectively. The effluent, as deposited, was not in exceedance of the maximum authorized concentration of 0.9 mg/L as per the MDMER. An updated Selenium Management Plan was prepared in response to the elevated selenium concentrations.

Continual Improvement

Continual improvement is at the forefront of environmental performance. Site inspections, environmental training, reviews of environmental monitoring data and systematic audits of the EMS are performed routinely. As part of the ISO 14001 EMS, and to fulfill one of the responsibilities detailed within the Orano Environment Policy, objectives and targets are created at the beginning of every year and support continual improvement and the prevention of pollution. The objectives and targets program requires participation from all departments with a significant effort put on developing a strong environment culture across site.

Some examples of recent continual improvement initiatives are as follows:

- In 2019, Orano completed drainage improvements to reduce runoff reporting to the Sue B pit which included removal of culverts and construction of a drainage diversion channel. This reduces the amount of clean water being captured and treated going forward.

- In 2020, Orano completed cleaning of the Sue site pre-sedimentation ponds to improve retention time and reduce nickel in the effluent.

- In 2020, Orano submitted an updated Selenium Adaptive Management Plan to the CNSC and SMOE with a proposal for a long-term solution for the sustained reduction of selenium loading to the environment at the McClean Lake Operation. The 12-month rolling average selenium loadings have consistently remained below the McClean Lake Operation Effects Based Release Limit (EBRL) since September 2020 and are expected to remain below the

EBRL until the end of Q3 2031. Additionally, the selenium transfer study was implemented in collaboration with the University of Saskatchewan in 2018-2023. The research outcome confirmed that the McClean Lake Mill Operation stays protective of the downstream aquatic species and informed the 2025 ERA update (Orano, 2025b).

- In 2021, Orano initiated a program aimed at in-situ remediation of the Sue pits and improved surface water quality at the time of decommissioning of the McClean Lake Operation. The program is being undertaken as a medium-to-long-term research initiative which will involve several stages of investigation, development, and implementation of the test. A pilot scale application (proof of concept) of the in-situ treatment program was initiated in 2023 based on treatment design considerations from the laboratory-based bench scale studies. In 2024, Orano installed and monitored three trailer mounted pumps and accessories) at Sue E pit ramp and observation area to deliver ferric sulphate to the Sue E pit to treat the target COPCs, (arsenic). Sampling and analyses began immediately after the addition of the reagents.

- Starting in 2022, Orano combined industrial and contaminated waste in the Sue C Contaminated Landfill. Centralizing waste in the Sue C Contaminated landfill simplifies waste management and segregation onsite and minimizes the total footprint of landfills onsite which will facilitate future decommissioning.

- In 2022, the Vulture/McClean Lake sluice gate was re-installed to ensure the capability to cease effluent release in the event of an exceedance.

- In 2023, ferrous sulphate addition was implemented in the JEB Water Treatment Plant to reduce selenium concentrations in the treated effluent. This followed the favorable outcome of the pilot testing conducted in 2020 that demonstrated the efficacy of using ferrous sulphate reagent to treat selenium in the JEB Water Treatment Plant.

- In 2023, re-sloping of the Sue C/A Waste Rock Pile, and demolition and disposal of the former Sue Site mining offices were completed. Re-sloping of the waste rock pile improves long-term stability and reduces potential for erosion and sediment runoff. Demolition and disposal of infrastructure that no longer serves an operational purpose reduces the potential for deterioration of building materials and uncontrolled waste generation.

- In 2023, Orano, in collaboration with the University of Saskatchewan Department of Biology, initiated research of bats in the McClean Lake Operation and Midwest areas to gain a better understanding of the bat species present in the area. The preliminary survey results were used to plan the 2024 surveys which included installation of 11 ultrasonic autonomous recording units at Midwest and McClean Lake Operation areas from April to October.

- In 2024, a removal strategy for sludge in the east CX Plant holding pond was developed. In 2026, the removal of the sludge and replacement of the liner is ongoing.

- In 2024, a plan to reduce gypsum scaling in the JEB Water Treatment Plant was developed and implemented. Additional freshwater was routed to the JEB Water Treatment Plant to lower the concentration of sulphate in JEB Water Treatment Plant feedwater, to prevent the development of gypsum scale throughout the JEB Water Treatment Plant infrastructure. In addition, the treated barren strip (TBS) water was routed directly to the JEB Water Treatment Plant, previously the TBS water was routed to Tailings Neutralization Circuit.

- In 2024, Orano and the University of Saskatchewan Department of Biology collaborated to initiate two-year research of large mammals in the McClean Lake Operation and Midwest areas. The research objective is to develop a better understanding of vegetation resources and the relative densities of interacting species in the SK1 Boreal Caribou Range. The 2025 research activities included aerial surveys of the McClean Lake Operation and Midwest study areas. The data will be used to identify large mammals (caribou, moose, wolves, and black bears), their habitat, and beaver dams present in the area.

- Orano completed wildlife camera surveys from 2024-2025 to collect additional data on large and medium-sized mammal occurrence for McClean Lake Operation and Midwest areas. In 2025, routine camera maintenance was completed and the cameras were retrieved from the field after being kept in place for a 12-month period.

- In 2025, Orano initiated wildlife camera surveys along the proposed haul road from the Midwest site to JEB Site to collect baseline data on caribou. Thirty-three wildlife cameras were installed in caribou preferred habitat in October 2025.

- In 2025, Orano initiated refinement of the existing ecosite classification based on ground-truthing data collected in 2024-2025 vegetation surveys, LiDAR captured along the Midwest Haul Road in 2025, high-resolution aerial imagery collected for a portion of the area in 2025, and updated wildfire burn extent data obtained from the Canadian Wildland Fire Information System. The refined ecosite dataset was then further enhanced through alignment with the Saskatchewan Ministry of Environment's Species Detection Landform 'dominant habitat' terminology to produce a dominant habitat category. Finally, habitat suitability in relation to the refined ecosite dataset was assessed for vascular plant Species of Conservation Concern, woodland caribou, and moose.

- In 2025, an amphibian survey and two bird surveys were implemented at McClean Mining to detect any sensitive species or species of concern.

- In 2025, Orano performed vegetation surveys within the future Midwest terrestrial footprint to identify rare plant locations and preliminary assessment for pileated woodpeckers and great blue heron nesting habitat. The vegetation studies included ecosite identification at survey areas.

- In 2025, Aquatic surveys were completed to collect current information on the aquatic environments in Candy Creek. The field surveys included aquatic habitat assessment, fish community surveys, limnological measurements and hydrological surveys completed in May 2025 & hydrological studies completed in September 2025.

- In 2025, Orano set a target to improve contamination control in the calciner tower and achieved a 26.2% reduction in elevated dust, largely through identification and repair of leaks and improved contamination control.

- In 2025, an assessment was conducted to modify the ventilation in the Norseman building to significantly reduce GHG emissions. Feasibility of the modifications has been completed and a change control for the work has been approved

- In 2025, the calciner stack scrubber system received various upgrades and changes were made to preventative maintenance to improve emissions. Upgrades were completed on the calciner propane burner management system. Electrical interlocks were added to the calciner scrubber fan to automatically shut down the fan if the scrubber vessel drainage becomes blocked. Daily preventative maintenance was added to ensure the scrubber vessel level indication vent line is clear for reliable high-level detection. An annual inspection of the calcined product lump disintegrator trommel screen and grinding media balls was also added.

- A “blue box” recycling program for office paper, cardboard and laser printer toner cartridges is maintained at the McClean Lake Mill/Office and the JEB Camp throughout the year. As part of continual improvement, a repository for used, clean clothing and other items in good condition was put in place in camp to be sent off-site for local northern charities.

Effluent Quality

Treated effluent released from the JEB and Sue Water Treatment Plants (WTP) continues to meet effluent discharge limits to ensure that the downstream water bodies meet the applicable water quality guidelines.

Mass loading of key water quality parameters such as arsenic, nickel, radium-226, selenium and uranium continue to be well below the mass loadings predicted in the EIS (Figure 3-6, Figure 3-7, Figure 3-8, Figure 3-9, and Figure 3-10).

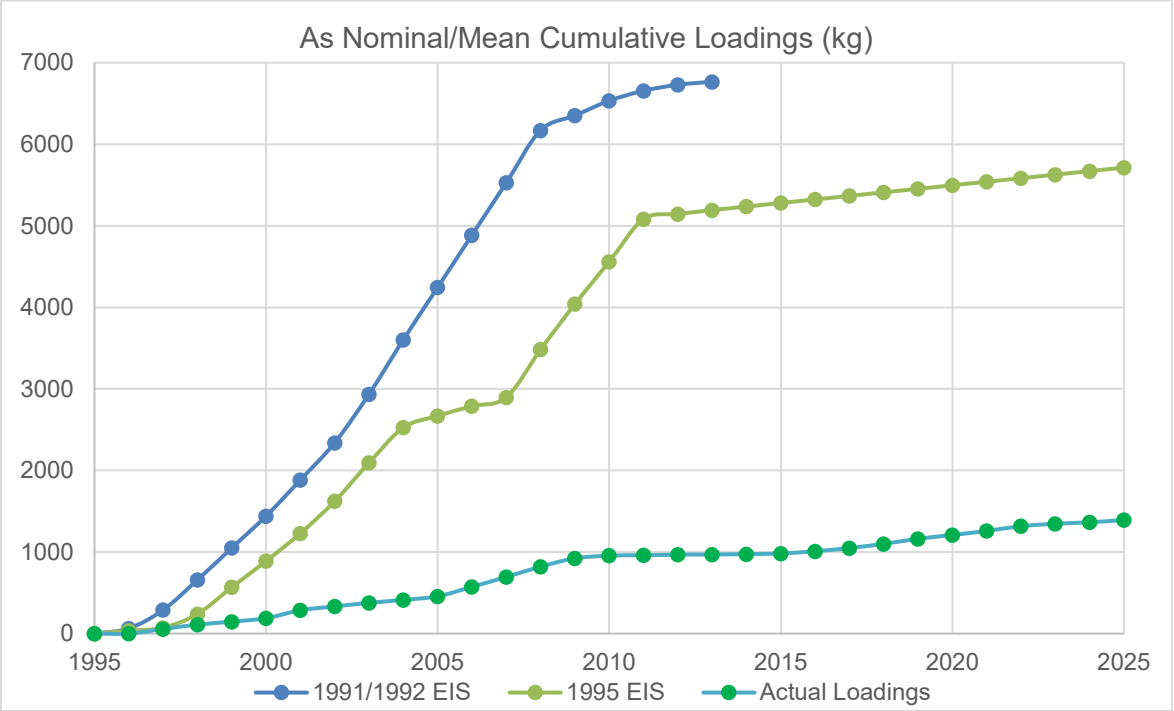


Figure 3-6: JEB and Sue Water Treatment Plant Cumulative Mass Loadings - Arsenic.

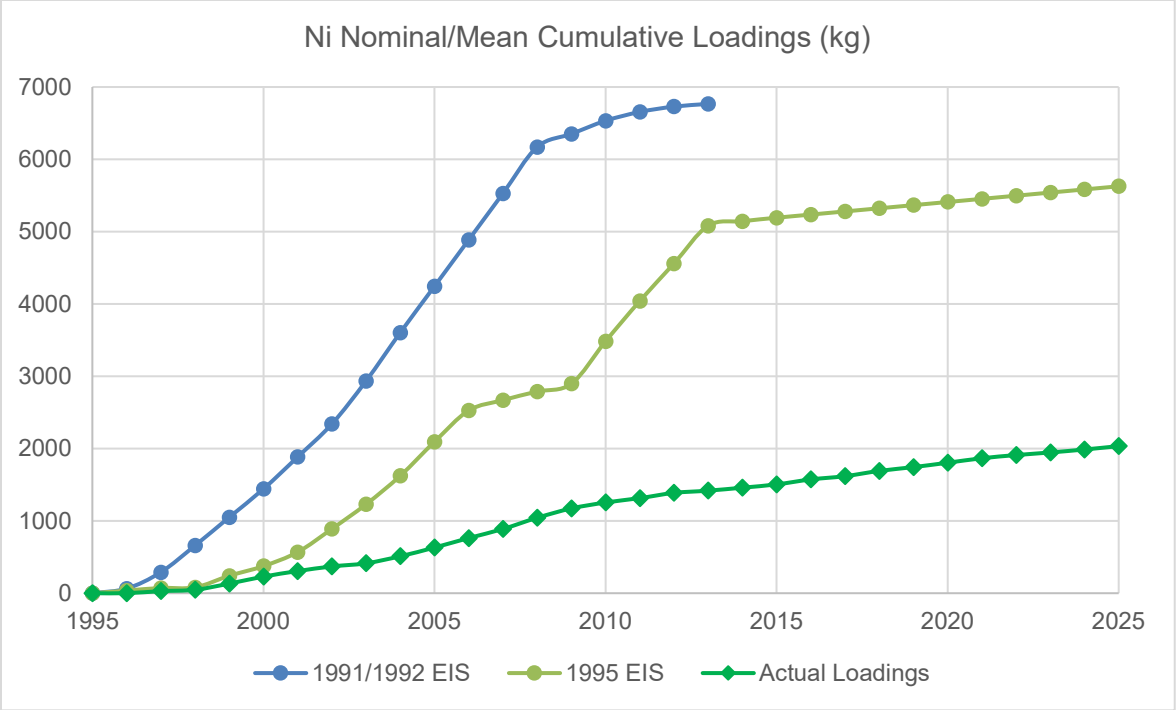


Figure 3-7: JEB and Sue Water Treatment Plant Cumulative Mass Loadings - Nickel.

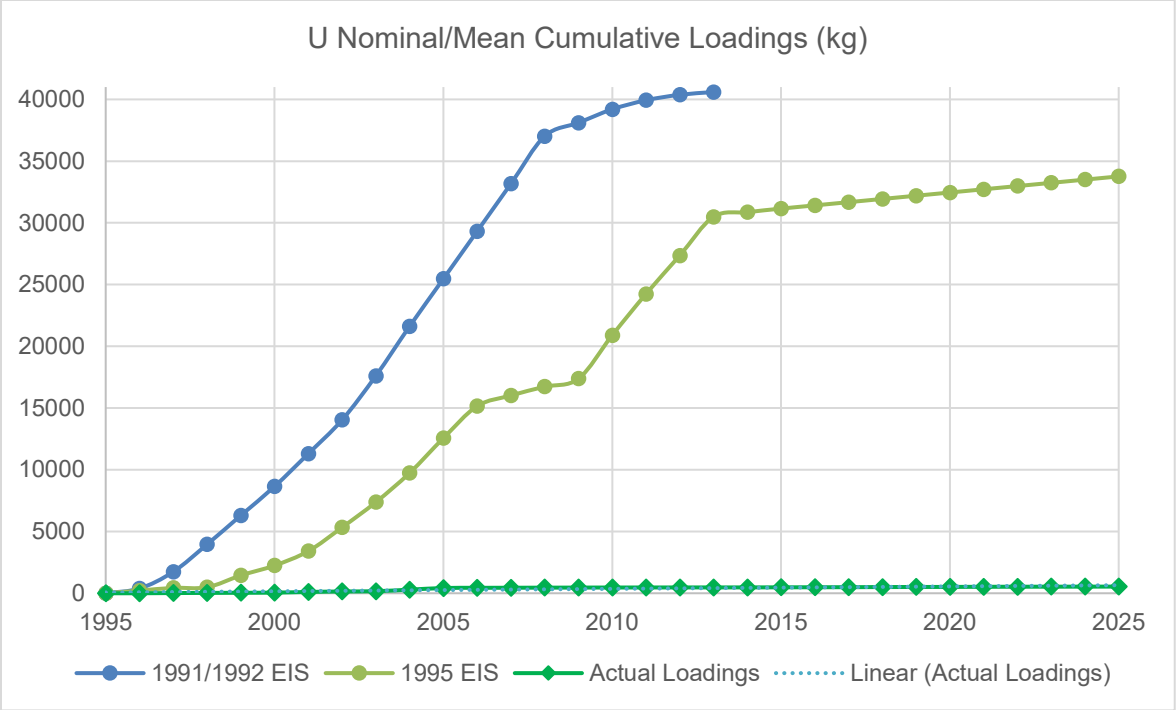


Figure 3-8: JEB and Sue Water Treatment Plant Cumulative Mass Loadings - Uranium.

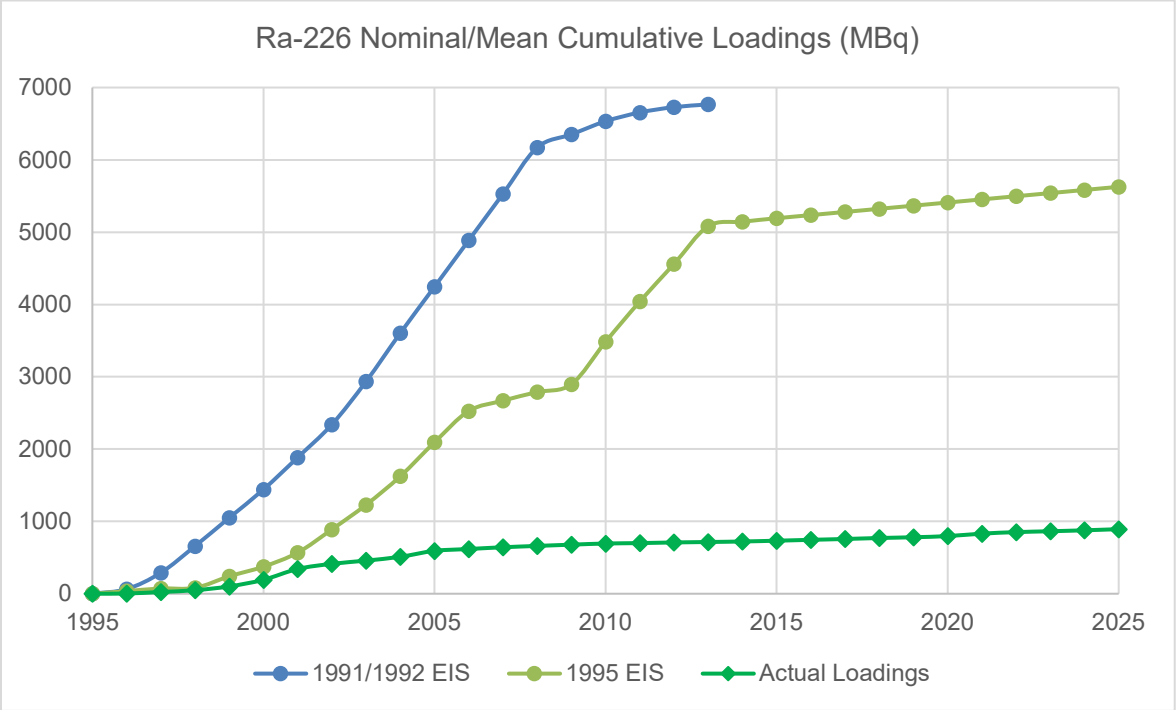


Figure 3-9: JEB and Sue Water Treatment Plant Cumulative Mass Loadings – Radium-226.

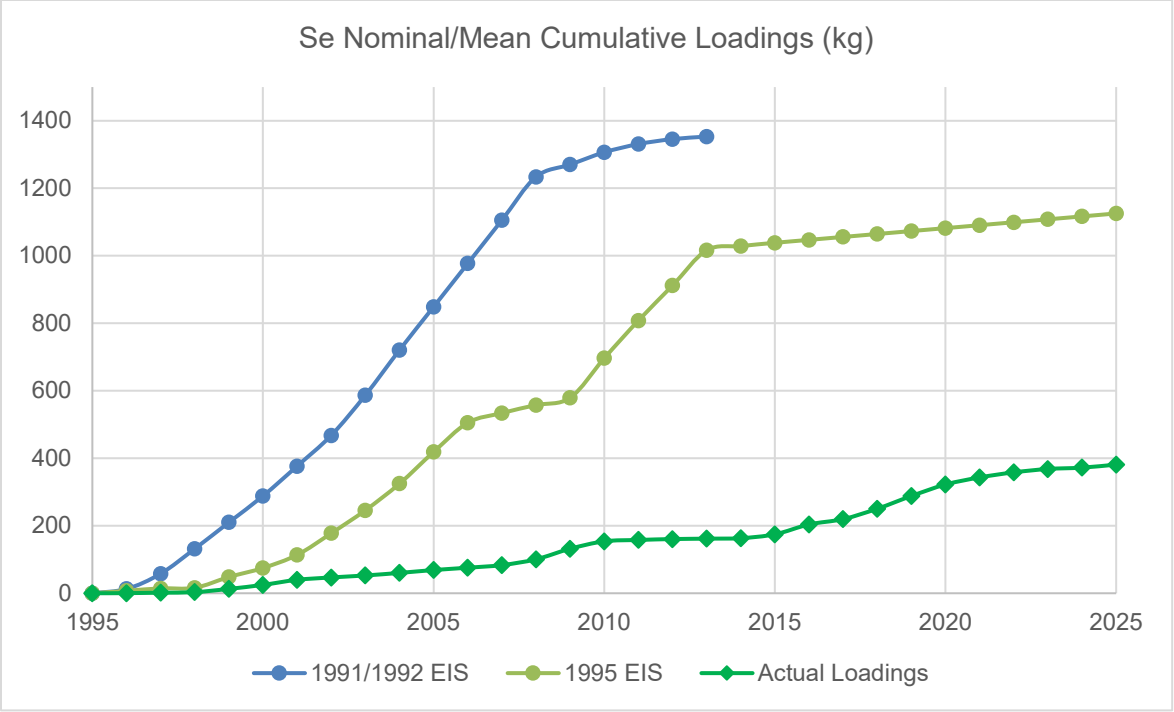


Figure 3-10: JEB and Sue Water Treatment Plant Cumulative Mass Loadings – Selenium.

Groundwater Monitoring

The McClean Lake Operation has an extensive network of groundwater monitoring wells. Water quality is routinely sampled at both near field and far field locations, to monitor whether the operation is having effects on the groundwater in the area. Water levels are also measured routinely and used to observe post mining groundwater recovery, monitor hydraulic containment of the JEB Sue and McClean Mining sites, and for the calibration of groundwater flow models.

Dewatering activities during mining at both the JEB and Sue sites depressed groundwater levels in the surrounding areas. As mining at the JEB and Sue sites ended, water management decreased from operational dewatering to management of hydraulic containment of the JEB TMF and Sue re-flooded pits. The water level in the JEB TMF has risen over time and the surrounding groundwater level has been rebounding. Similarly, since the cessation of mining in the Sue area in 2008 the pits have been allowed to flood, and the surrounding groundwater level has also started recovering.

Analysis of groundwater quality monitoring results has recently been expanded as part of the Environmental Performance TID Volume 1 and will be repeated every five years. Based on newly implemented evaluation criteria, significant trends were identified particularly, in select wells on the mill terrace, and adjacent to the McClean Mining Site. The results of the EP TID analysis have resulted in the recommendation of supplementary studies including:

Mill Terrace: Updated contaminant transport modelling to evaluate any potential impacts from wells with elevated parameters.

- McClean Mining: Installation of new monitoring wells (completed in 2026) and rehabilitation of historical wells (planned for 2027) to provide improved groundwater monitoring of the mining activities. Completion of an ecological risk assessment for the McClean Mining operations.

Contaminant transport modelling is also completed every five years as a part of the Waste Rock and Tailings Management TIDs evaluating any potential post decommissioning impacts from the McClean Lake Operations. The Waste Rock Management TID is updated with any changes in waste management facilities and includes evaluations of potential future waste management scenarios with the exception of the TMF (Orano, 2023). The Tailings Management TID specifically updates and evaluates Orano's understanding of the Tailings Management Facility (Orano, 2025d).

Reportable Releases

Although the McClean Lake Operation has experienced reportable spills in each year of the licensing period, the spills were quickly cleaned up thoroughly as described in the McClean Lake Operation spill response procedures outlined in the IMS, ensuring negligible impacts to the environment. Figure 3-11 shows the number of reportable spills from 2017 through 2025.

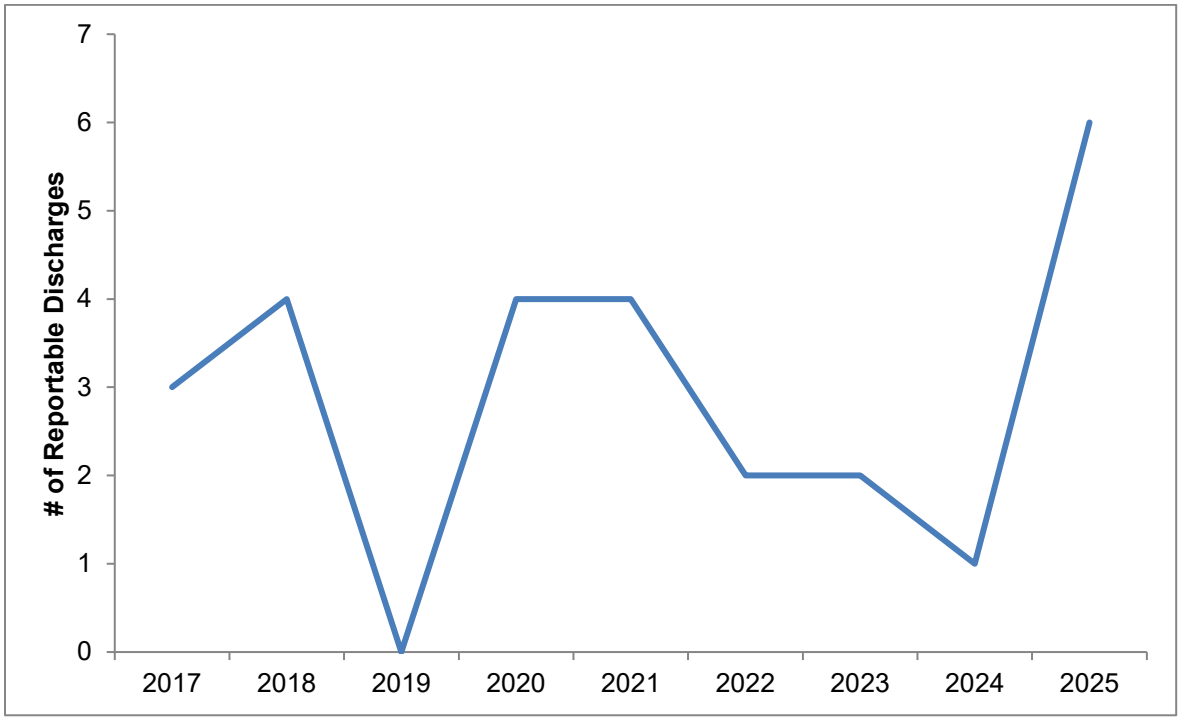


Figure 3-11: Reportable discharges from 2017 to 2025

Ambient Air Monitoring

Across the 2017–2025 period, monitoring data indicates that the McClean Lake Operation has had limited impact on local air quality, with concentrations of total suspended particulates (TSPs), radon, and sulphur dioxide (SO_2) being within the impact predictions of the 1991 McClean and 1995 Midwest EAs and consistent with the Environmental Risk Assessment (ERA) predictions. A few isolated exceedances of Saskatchewan Ambient Air Quality Standards (SAAQS) were linked to site-specific activities such as JEB TMF expansion, Sulphuric Acid Plant start-up or environmental factors (forest fire smoke). The radon monitoring program demonstrated that radon levels were elevated near sources of emissions, but the measured levels rapidly decreased to be consistent with background levels within a short distance. Overall, these findings demonstrate stable ambient air quality conditions over time, with minor transient increases driven by project activities or external environmental factors (Orano, 2025a).

3.9.3 Future plans

Future plans include:

- Continued review of the McClean Lake ERA, EMP, and ECOP at least every five years to ensure alignment with REGDOC 2.9.1 and with CSA N288 series of Standards.
- Test and potentially implement the addition of sodium aluminate reagent into the JEB Water Treatment Plant treatment process to rescue the formation of gypsum scale, to minimize the deposition of gypsum scale to the downstream environment, and to protect the water treatment plant and effluent pipeline infrastructure. Orano plans to conduct a plant trial in 2026 to assess the feasibility of sodium aluminate addition within the hydroxide circuit of the JEB Water Treatment Plant.

- Underperforming groundwater monitoring wells which are part of the McClean Lake Operation EMP have been catalogued and identified in the most recent update to the EP TID. Additionally in 2025, initial investigations of these wells were conducted to identify the problems with each location and initiate the development of a remediation plan. In 2026, phase one remediation will be undertaken to redevelop/unblock wells identified as recoverable, and to further evaluate the potential redrill/ relocate other wells which may be damaged beyond recovery.

3.9.4 Challenges

In 2022, Orano identified that gypsum scale ($CaSO_4$) was building up in tanks and pipes within the JEB Water Treatment Plant and within the treated effluent discharge pipeline leading from the JEB

Water Treatment Plant to Sink Reservoir, causing decreased water treatment capacity. The decrease in water treatment capacity has led to challenges in managing the water elevation of the Tailings Management Facility (TMF). In response, Orano has conducted periodic shutdowns in the JEB Water Treatment Plant to complete cleaning and repairs to the JEB Water Treatment Plant infrastructure. Long-term plans include the introduction of sodium aluminate into the JEB Water Treatment Plant, to minimize the deposition of gypsum scale to the downstream environment, and to protect the water treatment plant and effluent pipeline infrastructure.

The gypsum scale buildup was caused by an increase in sulphate concentration within the TMF pond water (reclaim water), the primary feed to the water treatment plant. The sulphate concentration in the reclaim water has been increasing since the McClean Lake Operation mill began processing Cigar Lake ore in 2014. The increasing sulphate trend can be attributed to the physical and chemical characteristics of the Cigar Lake ore.

Increasing concentrations of major ions have been observed in the surface water of Bena and Candy Lakes in recent years. These concentrations have generally remained within applicable water quality guidelines, except for nitrate levels in Bena Lake. A potential source of elevated nitrate was previously identified as groundwater flow from below the Sue E Clean Waste Rock Pile. Pore water from the Sue E Clean Waste Rock Pile contains elevated concentrations of nitrate and nitrite, which are attributed to residues of blasting agents used during open pit mining of the Sue E deposit. Groundwater modelling of loads from the Sue E Clean Waste Rock Pile was conducted in 2025; however, it determined that this pathway alone is insufficient to explain the observed nitrate patterns in Bena Lake. As a result, Orano has initiated an investigation in the Sue E Clean Waste Rock Pile and Bena Lake area to better understand nitrate pathways and identify appropriate mitigation measures. This investigation will continue through 2026, with a mitigation plan to be developed upon completion.

A risk evaluation for Bena Lake was conducted based on current conditions. The assessment concluded that recent nitrate levels pose no risk to the aquatic community in downstream Candy Lake and represent a potentially low risk to sensitive fish species in Bena Lake. The potential for eutrophication was also evaluated. Given the system’s low phosphorus levels, nitrate concentrations are not expected to influence the trophic status of either Bena or Candy lakes. This information was used to propose a site-specific objective for nitrate, which is currently under regulatory review.

3.9.5 Requests

Orano has no requests related to the environmental protection SCA, at this time.

In conclusion, Orano is confident that the environmental protection measures in place for the safe operation of the McClean Lake Operation are in support of this Licence renewal request.

3.10 Emergency Management and Fire Protection

Emergency management and fire protection covers emergency plans and emergency preparedness programs which exist for emergencies and for non-routine conditions. This SCA also includes any results of emergency response exercise participation.

3.10.1 Relevance and management

Emergency planning is a requirement of the *Nuclear Safey and Control Act*, its regulations and the Licence. In addition to the CNSC licensing requirements, ECCC and the Saskatchewan Ministry of Environment have requirements related to emergency planning and spill prevention. Emergency response planning is conducted to ensure emergency situations are responded to quickly and efficiently to protect the safety of personnel and the public, and to minimize the impact to the environment and facilities. These emergencies may include scenarios involving:

- Fires
- Environmental spills
- Injury
- Major Accident Hazards
- Off-site Transportation Emergency
- Search for lost persons
- Radiation - Nuclear Devices and Restricted Areas
- Confined space rescue

While several personnel provide assistance in the event of an emergency, certain designated positions play key roles in directing and/or supporting emergency response activities. The responsibilities and activities of specific individuals in the event of a site emergency are described in the applicable IMS documentation. McClean Lake Operation maintains an emergency response team (ERT) which is trained to respond to emergencies.

Training for the ERT members is provided through a variety of methods. Routine weekly training is conducted by Orano personnel and consultants are brought to site to provide specialized training as required. This specialized training can include:

- Technical Rope/Confined Space Rescue;
- HAZMAT (Hazardous Materials) Responder (Awareness & Operations);
- Wildland Fire Awareness;

- Advanced Medical Responder; and
- National Fire Protection Association (NFPA) Industrial Fire Brigade training.

Classes are verified to meet the applicable standard such as NFPA, St. John Ambulance or other requirements. Orano upgraded the fire training grounds with the addition of a propane firefighting prop. As a result, Orano was able to certify the fire training groups to facilitate NFPA 1081 Fire Brigade training courses onsite.

Orano has an established Fire Protection Program (FPP), which applies to routine and non-routine work activities at McClean Lake Operation, including commissioning, operation and decommissioning. This FPP outlines the components that comprise the overall approach to fire protection at the site. The objective of the FPP is to prevent uncontrolled fires from starting, detect, extinguish and control fires that do occur, provide adequate protection to protect structures, systems and components to life safety so that safe shut-down can be achieved if a fire does occur. The FPP also ensures:

- personnel, including emergency response personnel, are adequately trained with respect to fire safety and emergency response;
- that the McClean Lake Operation comply with the National Fire Code, National Building Code of Canada and *CSA N393 Fire protection for facilities that process, handle or store nuclear substances and fire protection systems*; and
- that continual monitoring, auditing and reporting of conditions and programs occurs.

3.10.2 Past performance

Each year, the McClean Lake Operation conducts a number of internal drills and training exercises to assess the ability to manage and respond to an emergency involving the ERT with coordinated efforts from other site groups and offsite mutual aids. A list of large-scale mock emergency exercises and drills conducted over the Licence term for training purposes is provided below (not limited to):

- A light duty pick up truck collides into a propane transport truck while offloading at the propane bullets;
- Anhydrous ammonia release during offload causing levels Immediately Dangerous to Life or Health (IDLH) near the anhydrous storage area;
- Explosion at a drill rig caused mass casualty event;
- Construction trailer fire;
- Vehicle rollover and casualty extrication;

- Release of elevated concentrations of sulphur dioxide in the Sulphuric Acid Plant;
- Release of hydrogen peroxide due to a rupture in a delivery hose;
- Medical emergency in Sulphuric Acid Plant berm resultant in high angle rope rescue; and
- Molten sulphur spill and explosion while offloading.

Orano also performs many small-scale scenarios with focus on fire, medical, search and rescue, ice rescue, and spill response.

Following up on the mock emergencies and drills, debrief sessions were held with the exercise participants. Positive comments and areas for improvement were exchanged. Action items resulting from the exercises were recorded and tracked to completion.

The McClean Lake Operation ERT participated in the 2017, 2018, 2019, 2022, 2023, 2024, and 2026 Saskatchewan Mining Association Annual Mine Rescue Competition. The competition was comprised of five different events. These included a first aid scenario, proficiency (gas testing, written exam and Self-Contained Breathing Apparatus (SCBA) bench test) event, a surface problem (technical rope rescue), a surface practical skills event (search and rescue), and a firefighting event using 20 lb fire extinguishers.

Daily, weekly, monthly, quarterly and annual checks and inspections are conducted as a part of the FPP. Checks performed as per the program include annual fire hydrant flushes, monthly emergency equipment, wheeled extinguisher, post indicator valve, sprinkler tree, fire hose cabinets, semi-annual propane ground monitor, fire department connection, fire doors, kitchen fire suppression and hood cleaning.

The fire protection alarm system was updated to new software to allow for better visibility of the fire alarms. The update gives more clarity and precision to the ERT Team response.

In 2021, Orano executed a 5-year contract with a third-party consulting firm to establish the appropriate inspections, needs analysis, compliance reviews, audits and assessments to ensure compliance to the *CSA N393 Fire protection for facilities that process, handle or store nuclear substances and fire protection systems*. From 2021 through 2025, thirteen (13) reviews were undertaken and included:

- Annual Facility Conditions Inspection (5);
- Fire Response Needs Analysis (1);
- Code Compliance Review (1);
- Fire Drill Assessment (2);

- Fire Protection Plan Audit (2);
- Fire Safety Training Needs Analysis (1); and
- Fire Hazard Assessment (1).

Any actions resulting from the assessments are prioritized based on risk and tracked in Orano's action management database. Overall completion of the actions to April 30, 2026, was 88%.

In 2025 the emergency response team upgraded its training from Medical First Responder to Emergency Medical Responder, which expanded the scope of the emergencies the ERT is trained to respond to.

3.10.3 Future plans

Starting in 2026, Orano has established a 6-year contract with a third-party consulting firm to continue to assess the Fire Protection Program – thirteen (13) assessments in total. The next Fire Hazard Assessment will be included and is scheduled to be completed in 2029.

3.10.4 Challenges

Orano was challenged with the training of ERT personnel as many ERT members retired or resigned. As such, Orano has put significant resources into the training of the ERT members in recent years with focus on Hazmat Awareness, Hazmat Operations, Emergency Medical Responder, Fire Brigade, and Fire Brigade Leader training.

3.10.5 Requests

Orano has no requests related to the emergency management SCA, at this time.

In conclusion, Orano submits that it has the appropriate emergency management and fire protection measures in place for the safe operation of the McClean Lake Operation in support of the Licence renewal request.

3.11 Waste Management

Waste management covers internal waste-related programs that form part of the facility's operations up to the point where waste is either permanently disposed of on site or removed from the facility to a separate waste management facility. This SCA also covers the planning for decommissioning.

3.11.1 Relevance and management

The McClean Lake Operation has a waste management plan that forms part of the IMS. The waste management plan describes how waste is managed, and by whom, throughout its lifecycle at the McClean Lake Operation to the point of disposal - may it be on-site or off-site. The plan has an overall objective to reduce, reuse and recycle.

McClean Lake Operation personnel, including short and long-term contractors, are trained and regularly reminded of proper waste segregation and waste disposal.

The McClean Lake Operation handles both conventional waste and radiologically contaminated waste. Facilities for handling waste include:

- waste rock piles;
- the JEB TMF;
- several landfills;
- an incinerator;
- the hydrocarbon landfarm;
- the sewage solids disposal area, the special waste pad; and
- the HAZMAT pad.

Additionally, many domestic and industrial wastes are recycled. Waste volumes are tracked and reported annually to the CNSC as part of the McClean Lake Operation Annual Report.

Global Industry Tailings Management Standard

As a subsidiary of Orano Group, which is member company of the International Council on Mining and Metals (ICMM), Orano Canada Inc. applied the requirements of the ICMM's Global Industry Standard on Tailings Management (GISTM) to the JEB TMF. The consequence of an unlikely failure of the JEB TMF was analyzed and classified in the "very high" category and therefore compliance to the GISTM was required by August 5, 2023.

As part of GISTM conformance, Orano developed an Operations, Maintenance, and Surveillance (OMS) manual, and an Emergency Preparedness and Response Plan (EPRP) for the JEB TMF. These documents are internally reviewed on an annual basis and updated as required.

The OMS manual is intended to provide guidance and procedures for the operation, maintenance, and surveillance of the JEB TMF and its appurtenant structures. It covers roles and responsibilities,

a facility description, general operational requirements, outlines the requirements for regular inspections and monitoring, and describes the processes for both routine and corrective maintenance.

The EPRP describes the emergency preparedness and emergency response protocols for the unlikely event of a failure of the JEB TMF. Included in the EPRP are the Trigger Action Response Plans (TARPs) utilized to mitigate specific identified credible failure modes. Responses are planned around potential failure scenarios and potential impacts to personnel, infrastructure, and the environment.

Preliminary Decommissioning Plan

Orano maintains a Preliminary Decommissioning Plan (PDP) and Financial Assurance (FA) for the McClean Lake Operation as per requirements of the *General Nuclear Safety and Control Regulations* and the provincial *Mineral Industry Environmental Protection Regulations*. The PDP and FA is intended to provide sufficient planning for decommissioning to ensure adequate financial assurances are in place to decommission the McClean Lake Operation should a governmental agency assume responsibility for decommissioning the site in the unlikely event Orano is unable to fulfill its obligations. Orano is obligated to decommission the McClean Lake Operation at the end of its lifecycle and will provide detailed plans for regulatory approval prior to commencing final decommissioning activities. The PDP is reviewed and revised every five years, last updated in 2022.

3.11.2 Past performance

The McClean Lake Operation has three clean waste rock piles, which include the JEB, Sue C and Sue E piles that were derived from open pit mining operations that took place from 1999 to 2008. Orano monitors the effects of the clean waste rock piles. Operational monitoring results from wells installed in the piles are evaluated as a part of the EP TID (most recently updated in 2025). Conclusions of the TID were:

- JEB Clean Waste Rock Pile: Nitrate levels as well as other parameters were elevated, as expected, when compared to groundwater monitoring locations at the JEB Site. Elevated nitrate is attributed to residues from explosives used during mining.

- Sue C and E Clean Waste Rock Pile: Concentrations of some metals (e.g. dissolved aluminum, cobalt, cadmium were elevated in one or more monitoring wells in or around the Sue C and E clean waste rock piles). Increased nitrate was identified in the Sue E Waste Rock Pile wells and there are increasing trends of some major ions (e.g. chloride and calcium) in groundwater locations downgradient of the Sue C Clean Waste Rock Pile.

Modelling of post decommissioning contaminant transport from the clean waste rock piles is updated every five years as a part of the Waste Management TID (Most recently updated in January 2021). Conclusions of the TID were:

- Monitoring results for the clean waste rock stockpiles indicate that the piles are performing as predicted and have low potential for acid generation.
- Contaminant transport modelling from the clean waste rock piles and the pit lake water sources was completed to predict incremental concentrations of key constituents of potential concern (COPCs) in Collins Creek. Arsenic was identified as the most important indicator for evaluating potential impacts on the environment.
- The current approved decommissioning plan for McClean Lake Operation waste rock management is protective of the water quality in Collins Creek and adjacent surface water bodies. In addition, six other waste management scenarios were effective at limiting potential impacts at Collins Creek and the adjacent surface water bodies to COPC concentrations below the Saskatchewan Environmental Quality Guidelines.

Mill tailings are placed sub-aqueously in the JEB TMF through subaqueous tailings deposition pipelines. The quantity, density, and concentration of contaminants in solids and porewater are monitored throughout the operational period and reported semiannually. Contaminants of concern (e.g., arsenic) concentrations were below the EIS predictions throughout the licensing period. The tailings are also evaluated every five years to model any potential post-decommissioning effects on the downstream environment as part of the Tailings Optimization and Validation Program (TOVP). The TOVP was most recently updated in 2025 as a part of the Tailings Management Technical Information Document (Orano, 2025d). The TOVP evaluates the geotechnical and geochemical properties of the placed tailings to ensure that they are performing as designed. Sampling results are used to update contaminant transport predictions from the tailings post-decommissioning to down-stream receptor lakes. The most recent results of the contaminant transport modelling show that there will be no significant effects from the tailings on the downstream environment.

The special waste pad originally held mining waste, however all mining waste from the special waste pad has been transferred to the Sue C/A Pit for disposal. Since 2002, the special waste pad has been used primarily to store sludges removed from settling ponds during cleaning.

Hydrocarbon contaminated soil is placed in the land farm for rehabilitation. Solids from the sewage system are placed in the sewage landfill. Both the land farm and the sewage solids landfill are on top of the JEB waste rock pile.

Waste generated on site is categorized into:

- Domestic waste;
- Industrial waste;
- Contaminated waste; and
- Hazardous waste.

In 2022, Orano obtained regulatory approval to combine the industrial and contaminated waste streams for disposal into the Sue C Contaminated Landfill. The industrial landfills have been left in place as contingency disposal locations, but little waste has been deposited in the industrial landfill since 2022.

Domestic waste consists of green waste (food and kitchen waste) and non-recyclable materials. Since 2002, domestic waste contained in garbage bags collected from the industrial facilities (JEB, Sue, and McClean Mine sites) and camp has been incinerated to reduce the use of the domestic landfill, as well as to reduce the potential for wildlife attraction to the landfills and other site infrastructure.

Domestic waste that is not incinerated is transferred to the Moffat domestic landfill where they are buried to reduce the potential spread of refuse by wind and animals. Non-recyclable plastics and glass are disposed of in the Sue C Contaminated Landfill.

A “blue box” recycling program is maintained on site and paper and cardboard, domestic plastic and metal, and computer and printer components are collected and sent off site for recycling. Additionally, drink containers are collected by housekeeping staff and sent for recycling.

Clean waste wood is stored for mulching.

Chemically and radiologically contaminated wastes are placed in the Sue C Contaminated Landfill located inside the Sue C/A pit. Radiologically contaminated waste originates primarily from the McClean Lake Mill, McClean Mine Site as well as the JEB and Sue Water Treatment Plants.

Industrial materials that are sent off-site for recycling include: fluorescent light bulbs, antifreeze, waste oil and grease, waste oil/fuel filters, and batteries. These materials are stored on the hazardous materials storage (HAZMAT) pad until they are shipped off site. Double walled tanks are used to store used oil at both the JEB and Sue maintenance shops. Waste dangerous goods are also stored on the HAZMAT pad until they are transported off site for disposal at a registered facility. These goods include paint and paint-related materials, and various chemicals.

Waste facilities are monitored regularly to ensure proper segregation.

3.11.3 Future plans

Orano is currently removing the sludge from the east Ammonium Sulphate Crystallization Plants's holding pond and will be subsequently replacing the pond liner with a new double liner with a leak detection system.

Orano intends to move an overburden stockpile located immediately north of the TMF to the top of the JEB clean waste rock pile, to facilitate future TMF embankment expansion work.

3.11.4 Challenges

It may be necessary to extend the existing landfills or build new ones in the future. The requirements for expanding and building landfills are stringent, posing a potential challenge to future landfill management.

3.11.5 Requests

Orano has no requests related to the waste management SCA, at this time.

In conclusion, Orano is confident that the waste management measures in place for the safe operation of the McClean Lake Operation are in support of this Licence renewal request.

3.12 Security

The Security SCA covers the programs required to implement and support the nuclear security requirements stipulated in the *General Nuclear Safety and Control Regulations* and other CNSC requirements.

3.12.1 Relevance and management

The McClean Lake Operation implements and maintains security measures to prevent the loss of nuclear substances and prevent acts of sabotage at the facility. The IMS outlines the responsibilities of the Security Group with respect to site security, site access and assisting with emergency response. The objective of the security plan is to ensure safe and secure operation of the facility, by maintaining protection through use of equipment, personnel and procedures. The McClean Lake Operation implements sections of *REGDOC 2.12.3, Security of Nuclear Substances: Sealed Sources that are applicable to uranium mines and mills*.

3.12.2 Past performance

The McClean Lake Operation has completed numerous Security Threat and Risk Assessments (STRA), with the most recent conducted in 2021. Orano considers the threats as assessed in control.

3.12.3 Future plans

Although the McClean Lake Operation has had no security threats or issues in the past, Orano has determined that a regular review of the STRA is required and has created a procedure within the IMS to ensure the STRA is reviewed on a regular basis. The next STRA is scheduled to be completed in 2026.

3.12.4 Challenges

Orano does not have any challenges with this SCA.

3.12.5 Requests

Orano has no requests related to the security SCA, at this time.

In conclusion, Orano submits that it has the security measures in place for the safe operation of the McClean Lake Operation and support this Licence renewal request.

3.13 Safeguards and Non-Proliferation

The Safeguards and Non-Proliferation SCA covers the programs and activities required for the successful implementation of the obligations arising from the Canada/International Atomic Energy Agency (IAEA) safeguards agreements, as well as all other measures arising from the *Treaty on the Non-Proliferation of Nuclear Weapons*.

3.13.1 Relevance and management

The site maintains inventories for radioactive material (primarily uranium ore concentrate) where receipts and shipments are recorded.

Periodic audits of the inventory system are conducted by the IAEA and the CNSC. Uranium accountability controls and practices are in place through the system to be compliant with the applicable nuclear materials that safeguard requirements of the CNSC.

3.13.2 Past performance

The McClean Lake Operation maintains a uranium inventory system in which receipts and shipments are recorded as per the requirements of *REGDOC-2.13.1 Safeguards and Nuclear Material Accountancy*. CNSC Inventory Change Documents (ICD's) are submitted for each shipment of radioactive material. Annual reports are submitted to the CNSC International Safeguards Division to satisfy the requirements of the IAEA Protocol Reporting.

The McClean Lake Operation grants complimentary access to the IAEA as requested. The IMS describes the IAEA access to site and how it is to be handled. Periodic audits of the inventory system are conducted by the IAEA and the CNSC. The most recent audit completed by the IAEA and the CNSC was in May 2026. The McClean Lake Operation continues to work with both the CNSC and IAEA on continual improvement in this area.

3.13.3 Future plans

The McClean Lake Operation will continue to comply with IAEA requests and ensure that prompt access is granted to the IAEA at all reasonable times where access is required by the IAEA for purposes of carrying on an activity pursuant to the safeguards agreement.

3.13.4 Challenges

Orano does not have any challenges associated with this SCA.

3.13.5 Requests

Orano has no requests related to the safeguards and non-proliferation SCA, at this time.

In conclusion, Orano submits that it has the safeguards and non-proliferation measures in place for the safe operation of the McClean Lake Operation and in support of this Licence renewal request.

3.14 Packaging and Transport

The Packaging and Transport SCA includes programs that cover the safe packaging and transport of nuclear substances and radiation devices to and from the licensed facility.

3.14.1 Relevance and management

Orano has procedures and supporting documents related to the handling, storing, loading, transporting and receipt of nuclear substances and other dangerous goods.

Transport of nuclear substances to and from the McClean Lake Operation is done on public roadways, railways and via marine transport. Transportation is done in compliance with the *Transportation of Dangerous Goods Regulations* (TDGR), the P*ackaging and Transport of Nuclear Substances Regulations, 2015* (PTNSR) and the IAEA Regulations for the Safe Transport of Radioactive Materials, 2025. The responsibilities of the packaging and transportation of nuclear substances is managed by three groups: Mill Operations, Radiation Protection and Supply Chain Management. Generally, the Mill Operations Group is responsible for the packaging and loading of materials, the Radiation Protection Group is responsible for radiation assessments and monitoring of shipped radioactive materials and the Supply Chain Management Group is responsible for the shipping documentation. Employees involved in the radioactive shipment process are trained in the safe handling, packaging, marking, labelling, shipping and receipt of dangerous and/or radioactive goods commensurate with their responsibilities.

The McClean Lake Operation verifies that recipients of radioactive shipments from the McClean Lake Operation hold a valid licence to possess such prescribed substances prior to shipment. Additionally, if required by the *Nuclear Non-proliferation Import and Export Control Regulations*, an import or export licence is obtained from the CNSC and corresponding import or export permits are also obtained from Global Affairs Canada.

A condition of the *Transport of Dangerous Goods Regulations* requires Orano to have an approved Emergency Response Assistance Plan. The Orano *Emergency Response Assistance Plan* (ERAP) has received approval from Transport Canada for the transport of radioactive shipments. These shipments include, but are not limited to, shipments of uranium concentrate (U_3O_8), low grade naturally occurring uranium materials and mineralized drill cuttings

3.14.2 Past performance

Uranium concentrate, U_3O_8, is produced, packaged in IP-1 rated steel drums and transported by road in trailer vans and/or ISO sea containers from the McClean Lake Operation to a marshalling yard in Saskatoon where the shipments are inspected before furtherance to the consignee. The drums remain in the same trailer or container as they were packaged in at McClean Lake Operation until they reach their destination in North America or overseas. Shipments adhere to applicable acts and regulations.

The McClean Lake Operation receives shipments of ore slurry from the Cigar Lake Mine. The ore slurry is packaged in approved IP-2 ore slurry totes and adheres to applicable acts and regulations during transport.

During the current licence period the CNSC was notified, as per reporting requirements of PTNSR, of 7 transportation events involving ore slurry totes. Reportable events related to the shipment exceeding surface contamination limits prescribed by PTNSR. Each event was investigated, corrective actions put into place with no environmental or health impacts occurring as a result.

3.14.3 Future plans

McClean Lake Operation will continue to comply with applicable federal and international transportation regulations as appropriate.

3.14.4 Challenges

Orano does not have any challenges associated with this SCA.

3.14.5 Requests

Orano has no requests related to the packaging and transport SCA, at this time.

In conclusion, Orano submits that it has the appropriate safe packaging and transport of nuclear substances and radiation devices to and from the McClean Lake Operation as required.

4 Other Matters of Regulatory Interest

4.1 Environmental Assessment

Orano does not have any active projects in the environmental assessment process under the *Impact Assessment Act, 2019*. The environmental assessment history for the McClean Lake Operation is provided in Table 4-1.

Table 4-1: McClean Lake Operation – Environmental Assessment History

Project	Environmental Assessment	Subsequent Licensing Actions	Key Aspects
Midwest Project – Test Mine	Midwest Joint Venture EIS: May 1988	Ministerial Approval: Saskatchewan Ministry of Environment for the Midwest Joint Venture uranium test mine at McMahon Lake	An approval to proceed with an underground exploration program to assess the feasibility of underground mining. The program would include a development of an underground test mine to assess groundwater flow and quality conditions, structural integrity of the rock mass surrounding the deposit, application of the blindhole boring method of mining.
McClean Lake Operation	McClean Lake EIS: 1991 Joint Panel Approved: 1993 Subsequent assessment to confirm acceptability of JEB TMF (Cigar Lake Project 1995)	Construction Licence: Atomic Energy Control Board (AECB) Ministerial Approval: Saskatchewan Ministry of Environment Provincial Approval to Construct and Operate the McClean Lake Mine and Mill	Initial approval for the overall McClean Lake Project, which included one underground mine (McClean), four open pit mines (JEB and Sue), and the JEB mill, as well as the waste management system for the entire project. Subsequent approval for the JEB TMF facility Production Limit: 6 Mlbs U_3O_8 (licence)
McClean Lake Operation – Change in Mill	Change in Stripping Process in Mill Solvent Extraction Circuit: July 1994	Ministerial Approval change: Saskatchewan Ministry of Environment Construction Licence Amendment	Change the strong acid stripping process in the mill solvent extraction circuit to an ammonium sulphate stripping process. This change in the mill design based to reduce reagent consumption, reduce chemical loading on the environment and allow ammonium sulphate to be recovered and marketed as a byproduct: ammonium sulphate fertilizer.
McClean Lake Operation – Change in JEB pit	Change in Dewatering Procedures at JEB Pit: April 1995	Ministerial Approval change: Saskatchewan Ministry of Environment Construction Licence Amendment	Changed the JEB pit dewatering method from pumping and treating groundwater inflows from in-pit sumps with treatment of all waters prior to release into Sink Lake to dewatering the groundwater with a ring of dewatering wells around the JEB pit which would intercept groundwater prior to entry into the pit, separation of any groundwater which requires treatment and discharge to Sink Lake.

Project	Environmental Assessment	Subsequent Licensing Actions	Key Aspects
Midwest Project	Midwest EIS: 1995 Addenda submitted: 1996 (March, May, October) and May 1997 Joint Panel Approved: 1997	Have not proceeded with project yet	Adopted new underground mining method, jet-boring in frozen ground.
Cigar Lake Project	Cigar Lake EIS: 1995 Addenda submitted: 1996 (April, July, December) and May 1997 Joint Panel Approved: 1997	CNSC and Provincial Approval to *Construct* Cigar Lake Mine (December 2004) CNSC and Provincial Approval to Expand the JEB Mill to Process Cigar Lake Ore (2005)	Assessment and approval to process up to 24 Mlbs (10.9 million kg) of U_3O_8 annually and of that, process 18 million pounds (8.2 million kg) U_3O_8 from Cigar Lake high grade ore slurry through the mill expansion (including deposition of tails to the JEB TMF) Assessment and approval of the activity of transporting high grade ore slurry to McClean Lake Operation
Disposal of Cigar Lake Waste Rock	Disposal of Cigar Lake Waste Rock in the Mined-out Sue C Pit EIS: 2001 Addendum submitted: 2002 Joint Screening Report Approved: Province: • September 2003 • CNSC: August 2003	Have not proceeded with the project yet; project on indefinite hold	Transport and disposal of Cigar Lake waste rock in the McClean Lake Operation's mined out Sue C/A pit.

Project	Environmental Assessment	Subsequent Licensing Actions	Key Aspects
Sue E Project	Sue E EIS: 2004 Addendum submitted: 2005 Federal Screening Report Approved: Province: 2005 CNSC: 2005	CNSC and Provincial Approval to Construct and Operate the Sue E Project (2005)	Development of an open pit and the construction of a new clean waste stockpile and a temporary till stockpile. Use of existing facilities for the milling, tailings disposal and water treatment. Expected production of 8.3 million pounds U_3O_8. Subsequent assessments demonstrate that the past, current and planned future activities at the McClean Lake Operation continue to fall within the environmental effects envelope originally reviewed by the Joint Panel. These effects considered production levels from McClean Lake Operation to be up to 24 Mlbs (10.9 million kg) U_3O_8 through the mill, based on the processing of high grade ore.
Mining Equipment Development Program	Change in Mining Method at McClean Mining Site: December 2004	CNSC and Provincial Approval to proceed with Mining Equipment Development Program at McClean Mining Site (2005) Provincial Approval to construct facilities for Mining Equipment Development Program (2005)	A change from previously approved underground mining to a small-scale research program at Pod 1 East of McClean Mining Site. The program was designed to develop and test the mining of ore bodies from the surface using jet boring.
Ferric Sulphate Production at McClean Lake	Federal Screening Report Approved: CNSC: October 2006	CNSC and Provincial Approval to Construct and Operate a Ferric Sulphate Production Circuit (2006)	Addition of a ferric sulphate production circuit to JEB Mill.

Project	Environmental Assessment	Subsequent Licensing Actions	Key Aspects
Rabbit Lake Solution Processing Plant	Federal Screening Report Approved: Province: August 2008 CNSC: June 2008	Did not proceed with the project	Receipt of 18 Mlbs U_3O_8 from Cigar Lake Mine, sending equivalent of 10 Mlbs U_3O_8 to Rabbit Lake Operation as Uranium Solution and processing 8 Mlbs U_3O_8 of Cigar Lake ore through McClean Lake Mill with remaining capacity for McClean Lake source ores
Midwest Project	Midwest EIS: 2011 Comprehensive Study Level EA Approved: Provincial and Federal August 2012	Have not proceeded with project yet	Open pit mining method Includes a mill expansion: 27/16 Mlbs – base case 27/27 Mbs – cumulative case
Caribou Project	Federal and Provincial Screening Approved: Province of Saskatchewan 2009 Canadian Nuclear Safety Commission 2010	CNSC Approval to Construct and Operate the Caribou Project (future) Provincial Approval to Construct and Operate the Caribou Project (future)	Development of an open pit and the construction of a new clean waste stockpile. Use of existing facilities for the milling, tailings disposal and water treatment. Expected production of 2.6 Mlbs U_3O_8. Subsequent assessments demonstrate that the past, current and planned future activities at the McClean Lake Operation continue to fall within the environmental effects envelope originally reviewed by the Joint Panel. These effects considered production levels from McClean Lake to be up to 10.9 million kg (24 Mlbs) U_3O_8 through the McClean Lake Mill, based on the processing of high-grade ore.
Receipt and Processing of McArthur River Ore at the McClean Lake Operation	Proposal submitted: November 2009 DEIS submitted: January 2011 FEIS submitted: May 2011 Provincial approval: January 2012 Federal approval (CNSC): April 2012 Screening Level EA	Did not proceed with project	To transport ore slurry on existing public roads, from McArthur River Mine to the McClean Lake Mill for a three-year period.

Project	Environmental Assessment	Subsequent Licensing Actions	Key Aspects
McClean Mining Project	Change in Mining Method at McClean Mining Site: April 2025	Provincial Approval to proceed with McClean Mining Project (commenced in 2025)	Change from test mining of Pod 1 East to production mining at McClean North deposit using SABRE mining method.

4.2 Indigenous Engagement

Indigenous Nations, Communities, Organizations and Governments

The McClean Lake Operation is located in northern Saskatchewan, where over 80% of the people identify as Indigenous. Under section 35 of the *Constitution Act, 1982*, the CNSC has a legal duty, as an agent of the Crown, to consult and accommodate Indigenous groups when decisions may affect their Indigenous and/or treaty rights. Orano assists the CNSC in the discharge of Indigenous consultation and accommodation duties where they arise. Orano is dedicated to ensuring Indigenous communities, members, and leaders have opportunities to engage in meaningful and good-faith dialogue with Orano about the McClean Lake Operation throughout the licence period. This commitment is part of the Public Information and Disclosure Program (PIP) for the McClean Lake Operation, discussed further in Section 4.3.

Orano has developed long-standing relationships with residents and organizations in northern Saskatchewan through the construction and operation of the McClean Lake Operation. The McClean Lake Operation PIP outlines and prioritizes different rightsholders of whom Orano aims to engage based on proximity to, and expressed interest in, the McClean Lake Operation. For example, the primary engagement group includes people from the Athabasca Basin, which is home to three First Nations—Black Lake Denesųłiné, Fond du Lac Denesųłiné, and Hatchet Lake Denesųłiné—and four municipalities: Wollaston Lake, Camsell Portage, Uranium City, and Stony Rapids, where many Métis people live. The engagement process is described, in detail, within the McClean Lake Public Information and Disclosure Program.

There are historical and current traditional and treaty rightsholders and land users near the McClean Lake Operation with whom Orano has maintained communication during operations. For example, Orano has two trapper compensation agreements related to the McClean Lake Operation. Orano has also entered into a series of Collaboration Agreements, along with Cameco Corporation and several Indigenous communities, which establishes a process for collaboration on the McClean Lake Operation. The agreements outline a process for engagement between all parties and ensure a constant flow of information and feedback.

Ya’thi Néné

The Ya’thi Néné Collaboration Agreement (YTN CA) was signed in June 2016 between Orano, Cameco and the 7 communities of the Athabasca Basin. Those communities include the Fond du Lac Denesųłiné First Nation, Hatchet Lake Denesųłiné First Nation, Black Lake Denesųłiné First Nation, and the municipalities of Camsell Portage, Stony Rapids, Uranium City, and Wollaston Lake.

The YTN CA consists of several committees and subcommittees aimed at increasing the engagement and collaboration between all the parties. Those committees include the following:

- Joint Implementation Committee (JIC)
- Athabasca Joint Engagement and Environmental Stewardship Subcommittee (AJES)
- Business Advisory Committee (BAC)
- Athabasca Trust (as a non-voting member)

As a partner in the YTN CA, Orano meets with each committee at least quarterly, joins the annual Fall Basin Tour with other partners, and regularly engages with the Ya'thi Néné Lands and Resources Office (YNLR) to ensure communications and activities align with community needs. Orano keeps the collaboration agreement committees informed about our operations, including site activities, employment numbers, environmental oversight, and key issues like regulatory and licensing processes, as well as new operations like the SABRE mining method. Orano also shares reportable incidents with YTN CA communities through direct email updates to AJES and verbal reports at quarterly meetings.

Throughout the current licence period for the McClean Lake Operation, key topics of discussion for communities in the Athabasca Basin have included environmental monitoring, updates on McClean Lake Operations, business development, opportunities for training and scholarships, such as the Mill Operator Training Program and the Orano Northern Scholarship program.

We continue to explore better ways to engage with communities beyond regular committee meetings. For instance, during discussions about the licence renewal, we received feedback to hold a workshop with a variety of community members from across the Basin. Consequently, a workshop was organized on October 1, 2025, allowing a number of community representatives to participate in discussions in a safe and effective setting. We are committed to ongoing engagement with Basin communities, ensuring their involvement in relevant processes and discussions on topics of interest. This includes using agreed-upon engagement methods and striving to meet their needs through in-person meetings, hybrid meeting options, information and fact sheets and offering translations when possible.

Additional interest topics discussed during the licence period included:

- SABRE Mining Method and the restart of mining at the McClean Lake Operation;
- Regulatory updates and activities such as the Tailings Management Facility (TMF) Expansion Licence Amendment;
- Selenium management and continual improvement on tailings deposition at the McClean Lake Operation.

Métis Nation – Saskatchewan (MN-S)

Orano engages directly with representatives of Métis Nation–Saskatchewan (MN-S) regarding the McClean Lake Operation. We also work with representatives of Métis Local #79 (Camsell Portage), Métis Local #80 (Stony Rapids), and Métis Local #50 (Uranium City) as they are in close vicinity of the McClean Lake Operation. This engagement includes direct meetings, the Northern Saskatchewan Environmental Quality Committee (NSEQC) and meetings in the communities.

Throughout the McClean Lake Operation Licence period, Orano has shared regulatory updates such as notices of Hearings and information on the Licence Renewal Request with the MN-S. Orano continues to provide opportunities for participation and feedback on operations and in 2024 included MN-S representatives in a Stakeholder Mapping Project.

Orano continues to offer opportunities to engage with Provincial and regional leadership and Locals on the McClean Lake Operation and will work with Métis communities and their representatives to ensure effective and meaningful participation in Orano activities.

English River First Nation (ERFN)

In 2013, Orano and Cameco entered into a Collaboration Agreement with English River First Nation, known as the ERFN Collaboration Agreement. This agreement confirms the ongoing partnership between the parties for the development of specific uranium resources. Orano actively participates in annual leadership meetings and is involved in the subcommittees formed under the ERFN Collaboration Agreement including the Joint Implementation Engagement and Environment Subcommittee.

Within the Joint Implementation Engagement and Environment Subcommittee meetings, discussions are held regarding McClean Lake Operations, including updates on the SABRE mining method, mill operational updates, employment and training opportunities and regulatory process updates. Recently discussions included presentations on the mining method and the distribution of supporting materials such as videos and fact sheets. Key discussion topics revolve around training and employment opportunities for members of English River First Nation. Discussions with community leadership and representatives focus on exploring business opportunities with Orano for their community. Conversations with community contractors and leaders include evaluating the availability and capacity of service offerings and exploring alignment with Orano’s current and future operational needs.

Kineepik Métis Local and the Northern Village of Pinehouse

In 2012, Orano and Cameco Corporation entered into a Collaboration Agreement with the Northern Village of Pinehouse and Kineepik Métis Local #9, known as the Pinehouse

Collaboration Agreement. This agreement confirms the ongoing relationship between the communities, Cameco Corporation, and Orano for the development of specific uranium resources. Orano actively participates in meetings with committees established under the Pinehouse Collaboration Agreement including the Joint Implementation Engagement Subcommittee (JIES).

The Joint Implementation Engagement Subcommittee meetings involve discussions and updates on operations, including the SABRE mining method. A recent workshop included a fulsome discussion on the SABRE method, accompanied by shared materials such as videos and fact sheets. The JIES representatives and community leadership have shown significant interest in environmental monitoring and overall impacts of the SABRE method. Frequently, discussions focus on training and employment opportunities for community members along with a focus on exploring business opportunities for community businesses and local contractors.

Other Traditional and Treaty Rights Holders

While the focus for the McClean Lake Operation is on the rights-bearing Indigenous peoples and Métis communities in the Athabasca Basin, Orano recognizes that there are other Indigenous peoples and rights holders in the Northern Administrative District of Saskatchewan (NAD) that have an interest in our activities. This group of stakeholders is comprised of a broader area of interested Indigenous peoples, communities, municipalities and organizations within the NAD that Orano has had historical involvement with or has had an expressed interest in the McClean Lake Operation.

These communities include:

- Birch Narrows Dene Nation (BNDN);
- Buffalo River Dene Nation (BRDN);
- Canoe Lake Cree First Nation (CLCFN);
- Clearwater River Dene Nation (CRDN);
- Lac La Ronge Indian Band (LLRIB); and
- the Northern Settlement of Southend (Peter Ballantyne Cree Nation (PBCN)).

Through formal letters, meetings with leadership and community representatives, and ongoing email updates, Orano strives to keep communities updated on the operational and regulatory processes and is committed to being responsive to each community’s engagement needs.

4.3 Public Information and Disclosure Program

The McClean Lake Operation is located in northeastern Saskatchewan within the Northern Administrative District of Saskatchewan (NAD). The NAD is approximately half of the size of Saskatchewan but contains less than 3% of the population or approximately 36,000 people.

Orano has a Public Information and Disclosure Program (PIP) for the McClean Lake Operation. This program follows the rules set by the *Nuclear Safety Control Act* and the *Uranium Mines and Mills Regulations*, and in accordance with REGDOC 3.2.1: Public Information and Disclosure. The McClean Lake PIP explains how Orano ensures that local target audiences and the public, who have interest in the McClean Lake Operation, get important information about health, safety, security, and environmental issues related to the facility.

The PIP was created with these main goals:

- Reaffirm Orano’s commitment to engagement and dialogue with Indigenous peoples and groups regarding our activities on traditional and treaty lands,
- Share information early about the McClean Lake Operation to address any worries about health, safety, or the environment,
- Inform people about important Orano business decisions related to the McClean Lake Operation,
- Give stakeholders the chance to engage with Orano about any issues, comments, or questions they have about ongoing or planned activities at the McClean Lake Operation,
- Provide Orano an opportunity to address concerns directly or through its grievance mechanism to strengthen trust-based relationships with Indigenous Peoples, communities and interested parties.

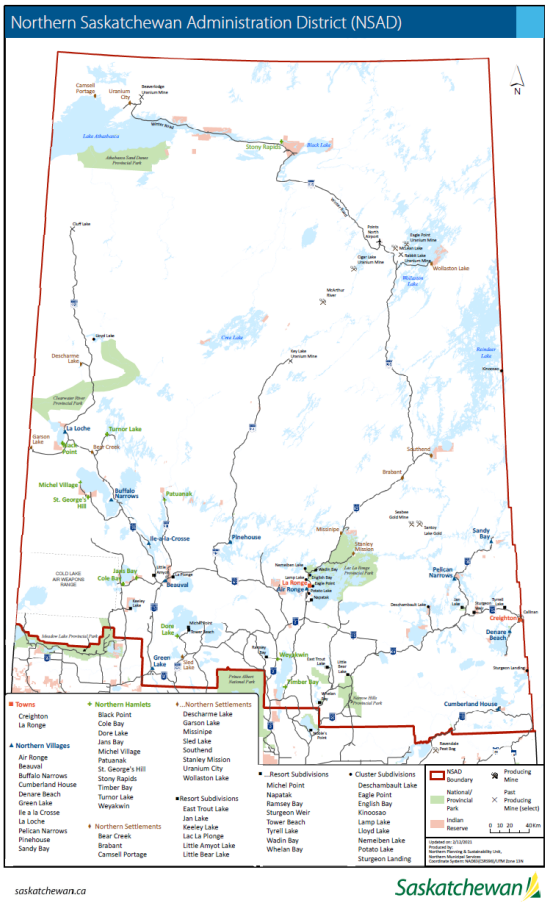
Because the NAD area is very large (as shown in Figure 4-1) and the McClean Lake Operation is in a remote location, Orano's PIP activities generally includes rights-bearing First Nation and Métis communities within the NAD. However, Orano prioritizes the communities that are closer to the McClean Lake Operation and have a historical connection with it including:

- Black Lake Denesųłiné First Nation (BLDFN);
- Fond du Lac Denesųłiné First Nation (FDLDFN);
- Hatchet Lake Denesųłiné First Nation (HLDFN);
- Northern Settlement of Camsell Portage, including Métis Local #79;
- Northern Hamlet of Stony Rapids, including Métis Local #80;
- Northern Settlement of Uranium City, including Métis Local #50; and

- Northern Settlement of Wollaston Lake.

The PIP outlines several ways to share information about the activities at the McClean Lake Operation and address concerns about environmental, health, and safety risks. No single method meets everyone's information needs, so a mix of different communication tools is needed. Common tools include brochures, newsletters, videos, targeted information on websites, and blogs. Wherever possible, Orano tries to make this information available online, on their website, and through social media. Meetings in person and taking part in community events are also key parts of the PIP.

In all, approximately 150 engagements were held throughout the current licence term with target audiences and northern Saskatchewan communities in relation to the McClean Lake Operation activities, regulatory updates and other matters. A summary of these events is provided each year in the operation's annual reports.



Source: https://pubsaskdev.blob.core.windows.net/pubsask-prod/117669/2021-Dec-NSAD-Map.pdf

Figure 4-1: Northern Saskatchewan Administrative District (NSAD)

Public Information Program Evaluation and Improvement

Orano is committed to conducting our operations safely and responsibly, in accordance with a well-established quality program outlined in the Public Information Program (PIP). Orano regularly reviews the Public Information Program to ensure that the language and approaches are modernized and aligned with current policies and practices. Its effectiveness is assessed based on public input and other factors. Revisions to the program may be necessary to incorporate feedback from the public, adapt to changing business needs or circumstances, accommodate the latest information, or respond to other factors.

Orano has made concerted efforts to engage with Indigenous groups that were not identified as engagement groups in previous versions of the Program. Additionally, Orano conducted a Stakeholder Mapping Project in 2024, where 32 stakeholders and/or Indigenous rights holders were interviewed by an external third party about their perceptions of Orano's operations and activities. In response to the feedback provided during these initiatives and through other engagements, Orano has updated the engagement groups listed in the Program to better reflect the interests of various groups so their possible concerns can be adequately addressed.

Public Disclosure Protocol

Orano Canada maintains a Public Disclosure Protocol compliant with guidance from the CNSC. This protocol is designed to ensure transparency and openly notifies the public of events which may be important to them, remedial actions undertaken, and their potential effect on health, safety, and the environment. The Public Disclosure Protocol is available on Orano Canada's website, reinforcing its commitment to open communication and community engagement (Public Disclosure Protocol Orano Canada (2026)).

Engagement Activities on the Licence Renewal Process

For the McClean Lake Operations licence application, Orano began in 2024 to connect with key audiences to inform them about the licensing process and address their questions and concerns. Our goal is to maintain open and clear communication with everyone involved, as outlined in the McClean Lake Operation PIP.

We primarily informed audiences through updates during quarterly AJES, JIES, and Joint Implementation engagement and environment subcommittee (JIEES) meetings, in line with the PIP. Formal letters explaining regulatory procedures, submissions, and timelines have been sent to all listed audiences, ensuring timely receipt of essential information and inviting further discussions tailored to community interests and needs.

Additionally, we have used opportunities like NSEQC meetings and the annual fall Basin Tour and other scheduled events with key groups, including the Lac La Ronge Indian Band (LLRIB) Lands and Resources meetings, to discuss license renewal with community members, leaders, and land users.

During these engagements, community members expressed interest through general inquiries about the regulatory process and the rationale behind requesting a 2-year renewal. Further discussions focused on the potential duration of future licence applications, with community members voicing concerns about terms of 20 years or longer. The following is a list of the engagement activities related to this Licence Renewal:

- November 25, 2024 - Formal letter sent to Ya'thi Néné Lands and Resource Office explaining the upcoming McClean Lake Operation licence renewal and requesting input from the Ya'thi Néné Lands and Resource Office.
- January 24, 2025 – February 25, 2025 – Input from YNLR Office on licence term.
- February 24, 2025 – Regular AJES meeting presented Licencing Process.
- April 4, 2025 – Formal Letter notification with information sheet on Orano Canada's McClean Lake Operation Licence Renewal to all communities listed in McClean Lake PIP.
- May 2, 2025 – LLRIB Traditional Lands & Resources Advisory Committee to present McClean Lake Operation update, Licence Renewal, SABRE mining method, and other topics including exploration and business opportunities.
- May 6, 2025 – meeting with MN-S to present McClean Lake Operation update, licence renewal process, and SABRE mining method.
- May 21-22, 2025 – NSEQC regular meeting – presented McClean Lake Operation update and licence renewal process.
- August 14, 2025 – Formal Letter notification with information sheet on Orano Canada's McClean Lake Operation CNSC Licence Renewal request for 2-Year Term delivered to all communities listed in McClean Lake PIP.
- August 15, 2025 – McClean Lake Mining Tour and AJES Meeting – discussed SABRE method, licence process updates and McClean Lake Operations Updates.
- September 9, 2025 – AJES meeting – updates on changes of Sue F mining method to SABRE, updates provided on haul road and the scheduled workshop, and a discussion on the licence renewal process.

- October 1, 2025 – Ya’thi Néné Midwest, Sue F and Proposed Haul Road Workshop included a discussion on licence process.

- October 6-9, 2025 – Annual Basin Community Tour – shared SABRE method, licence process updates and McClean Lake Operations Updates.

- November 12, 2025 – JIC meeting – site update and high-level information on the Midwest Mining project and engagement plan, and a discussion on the licence renewal process.

- November 21, 2025 – Orano distributed the Notice of Hearing in Writing to all communities listed in McClean Lake PIP.

- November 25, 2024 - Formal letter sent to Ya’thi Néné Lands and Resource Office (YNLR) explaining the upcoming McClean Lake Operation licence renewal and requesting input from the Ya'thi Néné Lands and Resource Office.

- November 28, 2025 – JIEES meeting – Provided information and regulatory updates on mining at Midwest/McLean as well as the proposed haul road between Midwest and McClean, and a discussion on the licence renewal process.

- December 12, 2025 – JIES Meeting – Provided information and regulatory updates on mining at Midwest/McLean as well as the proposed haul road between Midwest and McClean, and a discussion on the licence renewal process.

- December 18, 2025 – Virtual Annual Basin Community Tour Updates with Camsell Portage– shared SABRE method, licence renewal updates and McClean Lake Operations Updates.

- January 12, 2026 – LLRIB Lands and Resources Meeting – Presented mining and Midwest project history information and regulatory updates on mining at Midwest/McClean as well as the proposed haul road between Midwest and McClean, and a discussion on the licence renewal process.

- January 28, 2026 – NSEQC Meeting – presented McClean Lake Operation update and licence renewal process.

- February 12, 2026 – JIES Meeting – presented McClean Lake Operation update and licence renewal process.

- February 24, 2026 – AJES Meeting in Uranium City -- shared updates on the regulatory process for McClean Lake Operating licence renewals.

- March 5, 2026 – JIES Meeting - Midwest, Sue F and Proposed Haul Road Workshop included a discussion on licence process.

- April 8, 2026 – JIEES Meeting – Provided McClean Lake Operations updates and regulatory updates on mining at Midwest/McClean as well as the proposed haul road between Midwest and McClean, and a discussion on the licence renewal process.

- April 16, 2026 – MN-S Meeting - Provided mining and Midwest project history information and regulatory updates on mining at Midwest/McClean as well as the proposed haul road between Midwest and McClean, and a discussion on the licence renewal process.

- May 5, 2026 – AJES meeting -- shared updates on the regulatory process for McClean Lake Operating licence renewals.

- June 3, 2026 – Northern Labour Market Committee meeting – presented McClean Lake Operation, Midwest, Sue F, and Haul Road update and licence renewal process.

- June 3, 2026 – Update on Midwest Project timeline and licence renewal provided to all communities listed in McClean Lake PIP.

- June 8, 2026 – JIES Meeting – presented McClean Lake Operation, Midwest, Sue F, and Haul Road project update and licence renewal process.

- June 25, 2026 – NSEQC meeting – presented McClean Lake Operation update and licence renewal process.

Future Engagement Activities Planned

Orano is dedicated to strengthening the relationships that have been established over the years at the McClean Lake Operation in Northern Saskatchewan. Our partnerships through collaboration agreements are vital, and Orano is committed to upholding the promises made to the communities near our operations and throughout Saskatchewan’s Northern Administrative District.

This commitment involves actively engaging in committees and community meetings, offering updates to communities during our annual fall Basin Tour, informing on licence and engagement updates, and addressing community interests. We strive to ensure that anyone interested in participating in dialogue is given the opportunity to fully engage in discussions.

4.4 Eastern Athabasca Regional Monitoring Program

In addition to the environmental stewardship pillar created within the Collaboration Agreements, Orano, in partnership with Cameco Corporation, the Government of Saskatchewan and the CNSC established the Eastern Athabasca Regional Monitoring Program (EARMP) in 2011. The program assesses the ecological integrity of Saskatchewan’s northern watersheds in order to address

potential environmental concerns, to review potential environmental effects from uranium mining and milling and to identify sustainable management practices in the region.

The goal of the EARMP is to monitor for potential effects on the water, fish, berries, and wildlife in the Athabasca region downstream of uranium mining operations. The EARMP was developed to address potential concerns about the safety of traditional country foods. EARMP's sampling program collects traditional country foods, which are currently tested by CanNorth Environmental Services, a 100% Indigenous-owned company, which then publishes an annual report.

Since the EARMP began, more than 1,200 samples have been collected. Results have consistently shown that traditional foods from communities in the Athabasca Basin remain a safe and healthy dietary choice for residents. The EARMP results continue to show that concentrations of chemicals of interest measured in water, fish, small mammal, and bird samples collected through the 2024-2025 community monitoring program were comparable to baseline and regional levels. These concentrations were also consistent with those used in the most recent human health risk assessment completed in 2018, as well as those discussed in the 10-year summary report. Based on the findings, the sampled traditional foods are considered safe for consumption.

4.5 Community Based Environmental Monitoring Program

In 1999, Athabasca communities and industry entered into an Impact Management Agreement that established the Athabasca Working Group (AWG) and an Environmental Monitoring Program designed to involve communities in monitoring downstream environmental conditions associated with uranium development.

In June 2016, the Ya'thi Néné Collaboration Agreement (YTN CA) entered into by the Fond du Lac Denesųłiné First Nation, the Hatchet Lake Denesųłiné First Nation, the Black Lake Denesųłiné First Nation, the Northern Settlement of Camsell Portage, the Northern Hamlet of Stony Rapids, the Northern Settlement of Uranium City, the Northern Settlement of Wollaston Lake, Cameco and Orano came into effect. The YTN CA updated and modernized the provisions in the original Impact Management Agreement of 1999.

The YTN CA established the Athabasca Joint Engagement and Environment Sub-committee (AJES). AJES is responsible for providing direction to the companies regarding engagement activities, environmental protection, and stewardship initiatives, while also serving as a conduit for communicating information on these matters back to the communities. In 2017-2018, AJES reviewed the Environmental Monitoring Program and determined that the program should be enhanced by focusing on traditional food consumption patterns with the communities and by collecting samples from community harvesting locations.

In 2018, the Community Based Environmental Monitoring Program (CBEMP) was established building on 18 years of data collected through the AWG Environmental Monitoring Program. The fundamental goal of the CBEMP the involvement of community members, with the following objectives:

- Through interviews/mapping gain a better understanding of the traditional foods that community members are consuming and the importance of these foods in their diet;
- Provide training and employment to community members to conduct interviews to map current traditional foods and harvesting locations and document the quantities and types of foods consumed (dietary survey);
- Conduct a sampling program that targets the traditional food types and harvesting locations identified by community membership as being important for testing;
- Identify and assess constituents of potential concern that may affect traditionally harvested foods in the study area; and
- Communicate results to community members through brochures, reports, and meetings with community leadership.

The CBEMP focuses on a different community each year. The program began with the communities of Black Lake and Stony Rapids in 2018, followed by Fond du Lac in 2019, Wollaston Lake and Hatchet Lake in 2020, and Uranium City and Camsell Portage in 2021.

The YTN CA also led to the establishment of the Yá'thi Néné Lands and Resources Office (YNLR), an independently run organization registered as a non-profit corporation and owned by the Athabasca Basin Dene Nations and communities. YNLR provides technical support in environmental, resource and lands matters. In 2021, the YNLR began collaborating with Canada North Environmental Services on the CBEMP, supporting completion of interviews and co-authoring the final reports.

In 2023, CBEMP data was used to assess potential risks to human health associated with traditional food consumption. The risk assessment demonstrated that the risks associated with consuming traditional foods harvested in the area are negligible. In fall 2023, the second round of CBEMP began, which involves revisiting all participating communities and will allow the program to evaluate changes in traditional food consumption over time, the most recent being Wollaston and Hatchet Lake in 2025.

4.6 Cost Recovery

Orano is in good standing with the CSNC regarding licensing fees for the McClean Lake Operation.

4.7 Financial Guarantees

Uranium mining companies in Saskatchewan are required by the Saskatchewan Ministry of Environment and the Canadian Nuclear Safety Commission to develop decommissioning and reclamation plans, including financial surety. These requirements are stated in Section 12 of the *Mineral Industry Environmental Protection Regulations, 1996* and Section 3 of the *General Nuclear Safety and Control Regulations* (Section 3(1)(l) requires a description of proposed financial guarantee).

The CNSC and the Saskatchewan Ministry of Environment have entered into a Memorandum of Understanding (MOU), dated May 2024, to collaborate on the implementation, application and administration of regulations and requirements related to decommissioning and reclamation, including the provision of financial assurances, for uranium mining and milling facilities in Saskatchewan. Orano provides a single Preliminary Decommissioning Plan and Financial Assurance, subject to mutual acceptance by the Saskatchewan Ministry of Environment and CNSC, with the Ministry, as owner of land, identified as beneficiary to the Financial Assurance. Letters of credit and surety bonds (split in accordance to share of ownership between Orano (77.5%) and Denison (22.5%)) are the utilized and accepted forms of financial instruments for the McClean Lake Operation (including the Midwest Project); of which the Saskatchewan Ministry of Environment holds the original and CNSC has been provided copies of, for review.

In accordance with Section 16 of *The Mineral Industry Environmental Protection Regulations*, Orano is required to review the approved preliminary decommissioning plan and financial assurance fund at least once every five years.

The previously held financial assurance value for the Preliminary Decommissioning Plan was $102,098,000 (CAD). Funds were secured by the Province of Saskatchewan by way of irrevocable letters of credit or surety bonds that cover the estimated cost of decommissioning activities described in the Preliminary Decommissioning Plan. The Preliminary Decommissioning Plan and Financial Assurance were accepted by the Saskatchewan Ministry of Environment and CNSC staff. A hearing with the CNSC Commission was held in October 2021 for acceptance of the Preliminary Decommissioning Plan and Financial Assurance by the CNSC and acceptance was issued January 17, 2022.

The Preliminary Decommissioning Plan was most recently updated in 2025, with a revised financial assurance value of $122,557,378 (Orano, 2025c). The update incorporated rates for

materials, equipment, and labour to support the development of decommissioning cost estimates. It also included revisions related to the JEB TMF and expansion of the McClean Mining area. The JEB TMF closure strategy was updated to include an engineered soil-bentonite cover and landform design. Major costs associated with bentonite and material production were incorporated into the cost estimate, resulting in an increase in the estimated JEB TMF decommissioning cost from approximately $35M to $56M. The Preliminary Decommissioning Plan was further revised to include the expansion of the McClean Mining site infrastructure, including the construction of an extension to the existing mining pad in 2025.

5 Conclusions

In conclusion, Orano submits that it has demonstrated strong performance in all Safety and Control Areas throughout the licence term and is qualified to continue to operate the McClean Lake Operation and perform the activities requested in this Licence Renewal and that the necessary measures are in place to ensure Orano continues to conduct its operations in a manner:

- to limit the risks to the health and safety of workers and the public;
- to limit the risks to the environment;
- to limit the risks to national security; and
- consistent with Canada's international obligations.

6 References

[1] Orano. (2023). Waste Rock Management Technical Information Document Version 3 Revision 1. Orano Canada Inc.

[2] Orano. (2025a). McClean Lake Operation Environmental Performance Technical Information Document - Volume 1 of 2 - Environmental Performance Assessment. Orano Canada Inc.

[3] Orano. (2025b). McClean Lake Operation Environmental Performance Technical Information Document - Volume 2 of 2 - Environmental Risk Assessment Version 1 Revision 0. Orano Canada Inc.

[4] Orano. (2025c). McClean Lake Operation Preliminary Decommissioning Plan and Financial Assurance Version 10. Orano Canada Inc.

[5] Orano. (2025d). McClean Lake Operation Tailings Management Technical Information Document Version 4 Revision 0. Orano Canada Inc.

7 List of Acronyms

Term	Definitions
% U	Percent of the ore that is uranium. A measure of the purity of the ore.
ACEB	Atomic Energy Control Board
AJES	Athabasca Joint Engagement and Environmental Stewardship Subcommittee
ALARA	As Low As Reasonably Achievable
AWG	Athabasca Working Group
BAC	Business Advisory Committee
BBO	Behavior Based Observation
BRM	Business Risk Model
CBEMP	Community Based Environmental Monitoring Program
CCD	Counter Current Decantation Circuit
CEO	Chief Executive Officer
CMD	Commission Member Document
CMMS	Computerized Maintenance Management System
CNSC	Canadian Nuclear Safety Commission
COPCs	Constituents of Potential Concern
CSA	Canadian Standardization Association
CX	Ammonium Sulphate Crystallization
EA	Environmental Assessment
EBRL	Effects Based Release Limit
EARMP	Eastern Athabasca Regional Monitoring Program
EC	Environment Canada
ECCC	Environment and Climate Change Canada
ECOP	Environmental Protection Code of Practice
EIS	Environmental Impact Statement
EMP	Environmental Monitoring Program
EMS	Environmental Management System
EP	Environmental Protection
EPTID	Environmental Protection Technical Information Document
ERAP	Emergency Response Assistance Plan
ERFN	English River First Nation

Term	Definitions
ERT	Emergency Response Team
FA	Financial Assurance
FPP	Fire Protection Program
GNSCR	General Nuclear Safety and Control Regulations
HAZMAT	Hazardous Material
HIPO	High Potential Events
IAEA	Canada/International Atomic Energy Agency
ICD	Inventory Change Documents
IDLH	Immediate Danger to Life and Health
IMS	Integrated Quality Management System
ISO	International Organization for Standardization
JEB Site	The Area Containing the JEB TMF, JEB waste stockpile, ore pad, mill and office complex and the associated outbuildings
JEB WTP	JEB water treatment plant
JIC	Joint Implementation Committee
JIEES	Joint Implementation Engagement and Environment Subcommittee
JIES	Joint Implementation Engagement Subcommittee
KPI	Key Performance Indicators
LCH	Licence Conditions Handbook
LLRD	Long Lived Radioactive Dust
LLRIB	Lac La Ronge Indian Band
LTI	Lost Time Injury
mASL	Meters above sea level
MDMR	Metal and Diamond Mining Effluent Regulations
MED	Mining Equipment Development
MIF	Manager in the Field
Mlbs	Million Pounds
MN-S	Metis Nation Saskatchewan
MOC	Management of Change
MOTP	Mill Oporator Training Program
MOU	Memorandum of Understanding

Term	Definitions
mSv	Millisievert
NAD	Northern Administrative District of Saskatchewan
NFPA	National Fire Protection Association
NSAD	Northern Saskatchewan Administrative District
NSCA	Nuclear Safety Control Act
NSEQC	Northern Saskatchewan Environmental Quality Committee
OHC	Occupational Health and Safety Committee
OH&S	Occupational Health and Safety
ORANO	Orano Canada Inc.
PDP	Preliminary decommissioning plan
PHA	Process Hazard Analysis
PIP	Public Information and Disclosure Program
PME	Powered Mobile Equipment
PM	Preventative Maintenance
PPE	Personal Protective Equipment
PSM	Process Safety Management
PTNSR	Packing and Transport of Nuclear Substances Regulations
RCOP	Radiation Protection Code of Practice
REGDOC	Regulatory Document
RnP	Radon Progeny
RPP	Radiation Protection Program
RSN	Residents of Saskatchewan's North
S/V TEMS	Sink/Vulture Treated Effluent Management System
SAAQS	Saskatchewan Ambient Air Quality Standards
SABRE	Surface Access Borehole Resource Extraction
SAG	Semi-Autogenous Grinding
SAP	Computerized PM System
SAT	Systematic Approach to Training
SATCC	Saskatchewan Apprenticeship and Trade Certification Commission
SCA	Safety and control areas
SCBA	Self-Contained Breathing Apparatus

Term	Definitions
SEQG	Saskatchewan Environment Quality Guidelines
SHER	Safety, Health, Environment, and Regulatory
SMOE	Saskatchewan Ministry of Environment
STRA	Security Threat and Risk Assessments
Sue WTP	Sue Water Treatment Plant
TDGR	Transportation of Dangerous Goods Regulations
TID	technical information document
TMF	tailings management facility
TOVP	Tailings Optimization and Validation Program
TOWES	Test of Workplace Essential Skills
TSASK	Technical Safety Authority of Saskatchewan
U in U	Uranium in Urine
WHMIS	Workplace Hazardous Materials Information System
WTP	Water Treatment Plant
YNLR	Ya’thi Néné Lands and Resources Office
YTN CA	Ya’thi Néné