



Supplementary Information

Written submission from Cameco Corporation

In the Matter of

**Request for 2-Year Licence Renewal for
Cameco Corporation's Beaverlodge Project**

Public Hearing - Hearing in writing based on
written submissions

March 2023

Renseignements supplémentaires

Mémoire de Cameco Corporation

À l'égard de

**Demande de renouvellement, pour 2 ans, du
permis de Cameco Corporation pour le projet
de Beaverlodge**

Audience publique - Audience fondée sur des
mémoires

Mars 2023

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Executive Summary

Cameco Corporation (Cameco) was granted renewal of the Canadian Nuclear Safety Commission (CNSC) licence for the decommissioned Beaverlodge properties following public Commission hearings on April 3-4, 2013. The current licence (WFOL-W5-2120.2/2023) is valid until May 31, 2023. This Commission Member Document provides a high-level summary of the licensing basis and supports Cameco's request for a short-term renewal of the Beaverlodge licence for a 24-month term.

Following the implementation of the Province of Saskatchewan's Institutional Control (IC) Program, the Beaverlodge Management Framework (the Framework) was developed to provide a clear scope for the management of the decommissioned Beaverlodge properties and a systematic process for assessing potential site-specific risks to facilitate the transfer of Beaverlodge properties to the IC program. The Framework was developed cooperatively between Cameco Corporation (Cameco) and the Joint Regulatory Group (JRG) consisting of the CNSC, the Saskatchewan Ministry of Environment (SkMOE), Department of Fisheries and Oceans (DFO) and Environment and Climate Change Canada (ECCC). The Framework has also been reviewed with public stakeholders, including the Northern Saskatchewan Environmental Quality Committee (EQC), as well as residents and leaders of the Uranium City community.

Cameco has continued to follow the accepted Beaverlodge Management Framework to prepare decommissioned properties for transfer to the IC Program. Since 2009, 25 properties have demonstrated that they meet performance objectives of safe, secure and stable/improving and have been released from CNSC licensing and transferred to the IC Program or free-released. An additional 18 properties were recently released from CNSC licensing in September 2022 and will be transferred into the IC program.

The current Beaverlodge licence applies to the 27 remaining decommissioned Beaverlodge properties. Cameco is requesting a short-term renewal to provide adequate time for regulatory processes, public engagement, and document preparation to support the final release of the remaining decommissioned Beaverlodge properties from CNSC licensing and transfer to the IC program.

On-site activities to prepare the final set of properties for release from CNSC licensing will be completed prior to the expiration of the current licence. No changes to existing terms and conditions of the existing licence or associated Licence Conditions Handbook are being requested, except to the proposed licence expiry date. As such, the request does not involve a change to the authorized activities of the current licensing basis.

Engagement activities pertaining to the decommissioned properties have been ongoing throughout the current licence term, in accordance with the approved Beaverlodge *Public Information Program* (BVL-PIP). While not specified in the Beaverlodge Licence Condition Handbook (LCH), engagement activities conducted for the decommissioned properties have generally followed guidance contained in CNSC REGDOC-3.2.2, *Indigenous Engagement*.

Cameco believes that the requested renewal will provide adequate time for regulatory processes, public and Indigenous engagement, and document preparation to support the final release of the decommissioned Beaverlodge properties and transfer to the IC program. Cameco will continue to be qualified to carry on the activity that the licence will authorize and will, in carryout that activity, make adequate provision for the protection of the environment as well as the health and safety of persons.

1.0 Introduction

1.1 Background

1.1.1 Location

The decommissioned Beaverlodge uranium mine/mill site and associated properties are located in the northwest corner of Saskatchewan approximately 840 km north of Saskatoon (Figure 1-1). The current licensed Beaverlodge properties are divided into three main areas: the Bolger/Verna Area; the Lower Ace Creek Area; and the Tailings Management Area. Each of these main areas are made up of a number of smaller decommissioned properties.

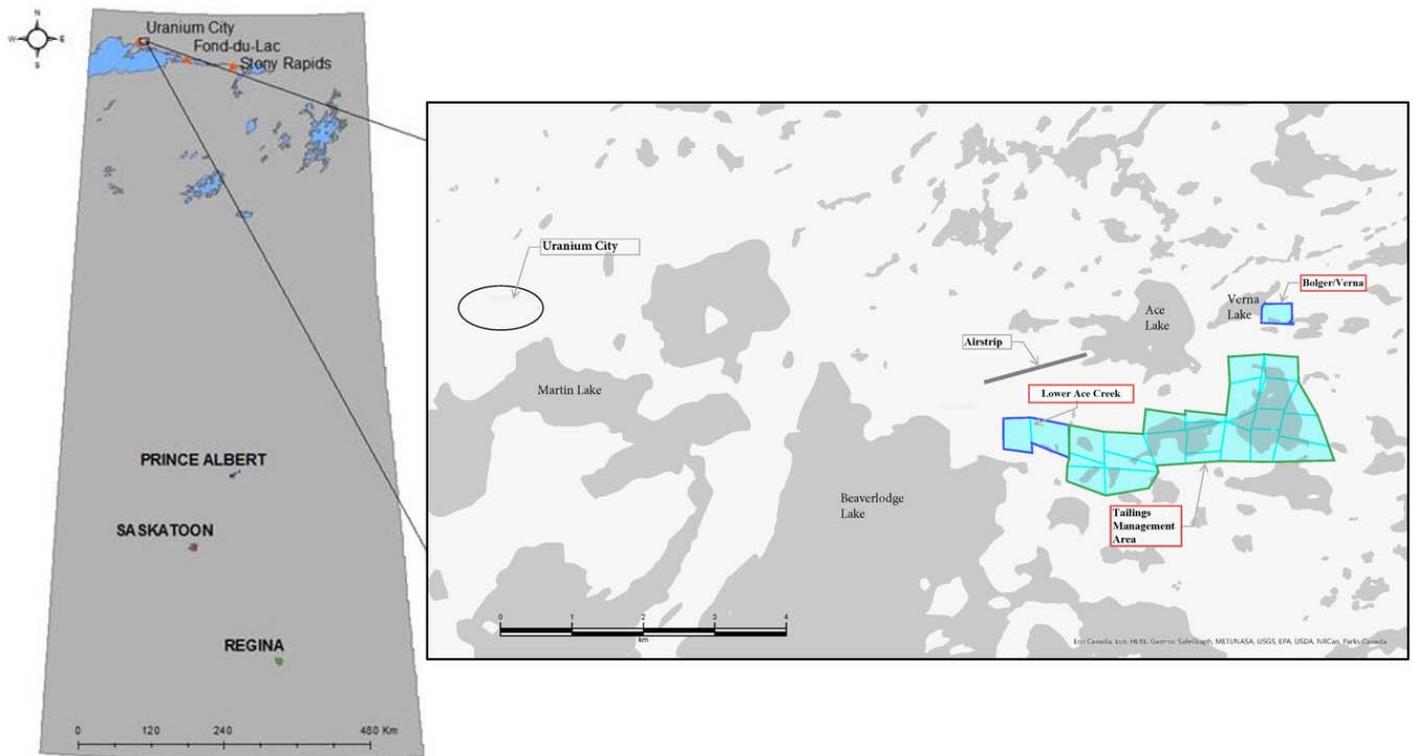


Figure 1-1: Location of the licensed decommissioned Beaverlodge mine and mill site

Uranium City, with a population of 73¹, is the only community with year-round access to the decommissioned properties and is located approximately 8 km to the west. The closest First Nation community is Fond-du-Lac, approximately 80 km east of Uranium City. Fort Chipewyan is situated approximately 179 km to the south-west, across Lake Athabasca.

External access to Uranium City is primarily via aircraft, although a winter ice road is established and maintained by the provincial Department of Highways. Ice conditions permitting, the road is typically open for a period of two to five weeks in February and March.

¹ Based on the 2016 Census, although the actual number of year-round residents is estimated to be closer to 60.

1.2 History

The decommissioned Beaverlodge uranium mine/mill site and associated properties were operated by Eldorado Mining and Refining Limited (Eldorado) between 1952 and 1982. During active mining, the primary focus of activity was on an area northeast of Beaverlodge Lake where the Fay, Ace and Verna shafts were developed to access the underground ore body. Over the 30-year production period, most of the ore used to feed the mill came from these areas. A smaller portion of ore (about 5%) was mined from satellite mines that were developed and operated for shorter periods of time.

Production from these areas continued until 1982 when the operation was shut down in preparation for decommissioning and while Eldorado developed a decommissioning plan. Following approval of the plan by the provincial and federal regulators, decommissioning activities were initiated in 1982 and completed in 1985.

To meet the accepted decommissioning objective (i.e., safe, and stable condition, with activities based on good engineering practice of the day), buildings and structures were removed or dismantled, and all mine openings were permanently sealed. Eldorado left the decommissioned Beaverlodge properties in a safe and secure condition with the expectation that environmental conditions on and downstream of the properties would naturally recover over an extended period. Since then, environmental monitoring has been ongoing to ensure the area remains safe and that environmental conditions continue to improve.

In 1988, Eldorado Nuclear Limited (the federal Crown Corporation formerly known as Eldorado Mining and Refining Ltd.) merged with the Saskatchewan Mining Development Corporation to form Cameco. At that time, the management of the decommissioned Beaverlodge properties became the responsibility of Cameco, while the Government of Canada, through Canada Eldor Inc. (CEI) retained responsibility for the financial liabilities associated with the properties. Since 1988, Cameco has carried out routine environmental monitoring, targeted environmental investigations, maintenance work, targeted remediation and engagement activities.

1.3 Business Plan

Cameco's objective in managing the decommissioned Beaverlodge properties is to protect the health and safety of the public and environment, and to meet the requirements for transfer of the properties to the Province of Saskatchewan's Institutional Control (IC) Program. Thus far, twenty-four decommissioned Beaverlodge properties have been transferred into the IC program and one property, as well as portions of others that were undisturbed by mining activities, have been free released. An additional 18 properties were released from CNSC licensing on September 7, 2022 and will be transferred into the IC program. For the remaining 27 decommissioned Beaverlodge properties, Cameco will be seeking a release from CNSC licensing and to either transfer them to the IC program or facilitate their free release, as soon as feasible.

1.4 Saskatchewan Institutional Control Program

As part of the promulgation of the *Reclaimed Industrial Sites Act* (RISA) and the *Reclaimed Industrial Sites Regulations* (RISR) in 2007, the Government of Saskatchewan implemented the *IC Program for the Post Closure Management of Decommissioned Mine/Mill Properties Located on Crown Land in Saskatchewan* (SkMER 2018). The intention of RISA was to set out the

conditions by which the Government of Saskatchewan would accept responsibility for lands that; as a consequence of development and use, require long-term monitoring and, in certain circumstances, maintenance.

In Saskatchewan, the responsible custodian under the IC program is the Ministry or Ministries assigned responsibility for implementing and managing the IC program. The legislative authority to implement and enforce the IC program is the RISA and RISR. To date, the Saskatchewan Ministry of Energy and Resources is the provincial Ministry that has been assigned the responsibility for managing the IC program (i.e., the Custodian).

Activities undertaken by the Custodian under the IC program can range from permanently recording the location of a remediated site to conducting regular inspections, sampling, and maintaining the property. The Custodian also has the authority to address unforeseen events that could potentially arise at a particular site.

The Saskatchewan IC program addresses all aspects of conventional closed mines as well as the uranium-specific issues of radioactive waste management. This includes those defined in the articles of the International Atomic Energy Agency's (IAEA) Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, all applicable provincial acts and regulations, and the federal *Nuclear Safety and Control Act* (NSCA). The program includes a formal, publicly accessible registry and document repository.

A site cannot be accepted into the IC program until remediation activities have been completed and the relevant regulatory authorities have issued a release.

1.5 Beaverlodge Management Framework

In response to the implementation of the IC program, the Beaverlodge Management Framework was developed cooperatively between Cameco and the Joint Regulatory Group (JRG).

The Framework provides a clear scope for the management of the decommissioned Beaverlodge properties and a systematic process for assessing potential residual site-specific risks to allow decisions to be made regarding the transfer of properties to the IC program. The accepted Framework has been reviewed by public stakeholders, including the Northern Saskatchewan Environmental Quality Committee (including representatives of the Athabasca Basin communities), as well as residents and leaders of Uranium City. Using the Framework, the following five general stages (Figure) are applied to each property:

- Establish a comprehensive foundation of information upon which residual risks can be assessed.
- Assess the residual risk posed by the properties.
- If necessary, develop and assess reasonable remedial options that could mitigate residual risk on or immediately downstream of the properties.
- Implement selected remedial option(s) and monitor results.
- If implemented options are successful in achieving the expected benefit or if it is determined that nothing more could reasonably be done to mitigate the residual risk(s) beyond natural recovery, then an application will be made to transfer the property to the IC program.

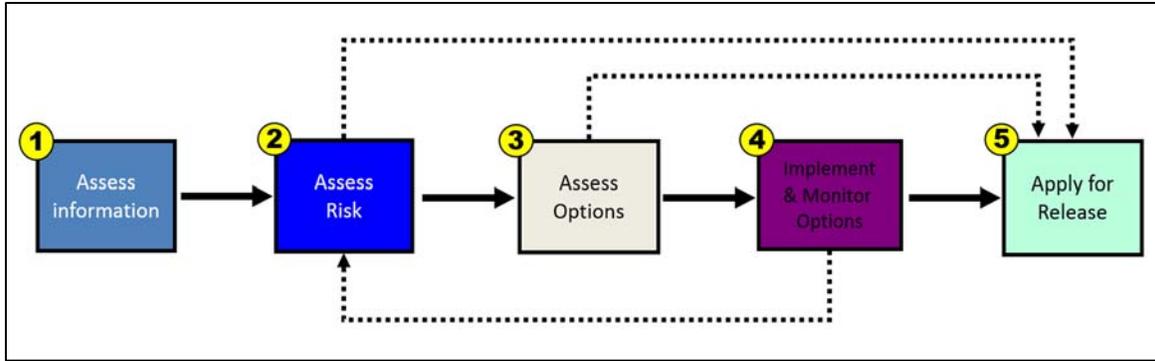


Figure 1-2: Simplified Beaverlodge Management Framework.

In progressing through the Framework, Cameco has gathered extensive information regarding environmental conditions and land use on the decommissioned properties through a combination of routine monitoring and special investigative studies. Results from routine monitoring and 20 special investigative studies completed between 2009 and 2012, combined with historical information, were used to develop the Beaverlodge Quantitative Site Model (QSM; SENES 2012a and 2012b).

The QSM was built as a tool to assess the effectiveness of potential remediation options for the decommissioned Beaverlodge properties and to predict the natural recovery in Beaverlodge area water bodies based on information gathered in the first phase of the Framework. Once the QSM was developed, a Remedial Options Workshop was conducted in 2012, which included participants from Uranium City, including elders, youth and local leadership, as well as representatives of the Northern Saskatchewan Environmental Quality Committee (Athabasca Sub-committee) representing six Athabasca communities. Also in attendance at this workshop were representatives from the JRG, Cameco, and a variety of third-party subject matter experts. This workshop presented various remedial options, their implementation costs, as well as their expected environmental benefits as evaluated in the QSM. Workshop results informed the assessment of potential remedial options and were instrumental in development of the Beaverlodge Path Forward Report (Cameco 2012).

1.6 Beaverlodge Path Forward Report

The Path Forward Report provides a checklist and schedule of additional remedial activities to be implemented on the decommissioned Beaverlodge properties to address residual risk on the properties and prepare them for release from CNSC licensing and transfer to the IC program. In addition, the Path Forward Report also describes the performance objectives by which to assess the effectiveness of the implemented remedial activities.

Once the remedial activities have been implemented, and the properties are shown to meet the site performance objectives set out in the Path Forward Report, an application can then be made for a Release from Decommissioning and Reclamation from SkMOE, release from CNSC licensing and, where applicable, transfer to the Province of Saskatchewan's IC program for long-term monitoring and stewardship or free release depending on the presence of historical mining/milling activities.

The Framework and the Path Forward Report were presented to the CNSC during the Beaverlodge re-licensing hearing in 2013 and help form the licensing basis. In support of the

hearing, a proposed schedule was provided that outlined the transfer of all Beaverlodge properties into either the IC program or for free-releasing properties, or portions thereof, from CNSC licensing over the proposed 10-year licence period.

1.7 Performance Objectives and Indicators

Criteria to determine the eligibility for release from CNSC licensing were presented to the Commission with the intent that each of the decommissioned Beaverlodge properties would be assessed through the Framework. The performance objectives for the decommissioned Beaverlodge properties of “safe, secure, and stable/improving” are defined as follows:

- Safe – The site is safe for unrestricted public access. This objective is to ensure that the long-term safety is maintained.
- Secure – There must be confidence that long-term risks to public health and safety have been assessed by a qualified person and are acceptable.
- Stable/Improving – Environmental conditions (e.g., water quality) on and downstream of the decommissioned properties are stable and continue to naturally recover as predicted.

To determine if a property is meeting the performance objectives, site specific performance indicators were established (Figure). Table 1- provides an overview of the performance indicators as presented to the Commission by CNSC staff during the 2014 update meeting. The applicable indicators vary depending on the nature of the property, but generally include ensuring that: risks associated with residual gamma radiation and crown pillars are acceptable; mine openings to surface are closed and stable; boreholes (if present) are plugged; and the property is free from historical mining debris. The stable/improving objective is also related to these performance indicators but is more relevant to monitoring water quality. To verify that conditions on and downstream of the properties are stable/improving, Cameco has continued to monitor the progress of natural recovery and the expected localized improvements from the additional remedial measures implemented at the properties. Meeting these objectives will ensure that residual human health and ecological risks are managed to acceptable levels to allow for a release from licensing.

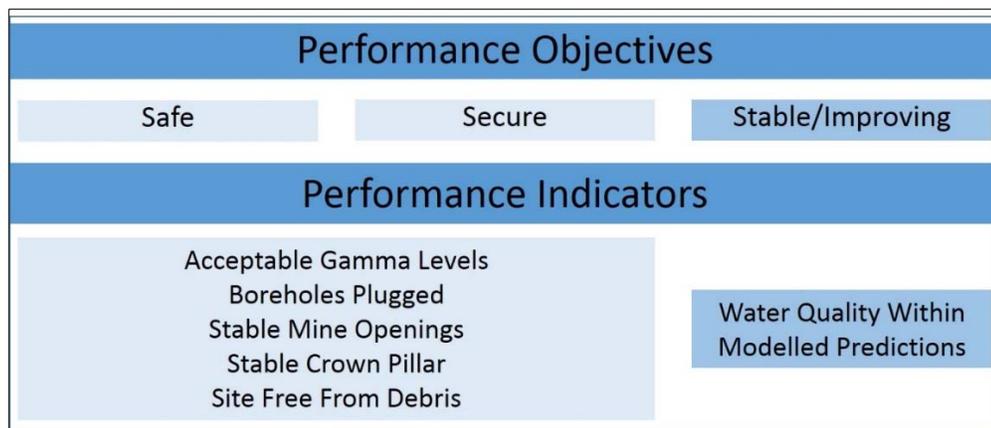


Figure 1-3: Performance objectives and underlying indicators.

Table 1-1: Description and acceptable criteria related to the Beaverlodge performance indicators.

Performance Indicators	Description	Acceptance Criteria
Acceptable Gamma Levels	Cameco will complete a site-wide gamma survey that will indicate where additional material may need to be applied to cover existing waste rock or tailings. Following the application of the cover material, a final survey will be completed of the remediated areas verifying that the cover was adequate.	Reasonable use scenario demonstrating gamma levels at the site are acceptable.
Boreholes Plugged	Cameco will plug all identified boreholes on the site to prevent groundwater outflow to the surface.	All boreholes have been sealed.
Stable Mine Openings*	The current concrete caps on the vertical mine openings will be replaced with new engineered caps with established designs to improve the long-term safety of the site, where applicable.	Mine openings have been secured and signed off by a qualified person, where applicable
Stable Crown Pillar	Based on the surface subsidence in the Lower Ace Creek area, a crown pillar assessment will be completed for the four areas that have mine workings close to surface, specifically Hab, Dubyna, Bolger/Verna, and Lower Ace Creek.	Crown pillar assessed, remediated (if required), and signed off by a qualified person.
Site Free From Debris	Inspection and removal of any residual debris will be completed prior to exempting the properties from CNSC licensing and accepting them into the provincial IC program.	Site free of former mining debris at the time of transfer to IC program.
Water Quality Within Modelled Predictions	Trends established from past and future water monitoring will be compared to modelled predictions to verify: <ol style="list-style-type: none"> 1. That remedial options expected to result in localized improvements are having the desired effects; and 2. That natural recovery on and downstream of the decommissioned properties is continuing as predicted. 	Water quality data is stable/improving.

*Note: The performance indicator identified above as “Stable Mine Openings” was originally labelled as “Stable Caps on Vertical Mine Openings”. The scope of this performance indicator was expanded to include all mine openings.

1.8 Summary of Application

On behalf of CEI, Cameco holds the Beaverlodge Waste Facility Operating Licence (WFOL-W5-2120.2/2023), which expires May 31, 2023. The licence authorizes Cameco to possess, manage, and store the nuclear substances that are associated with the decommissioned Beaverlodge properties located in the Province of Saskatchewan, as shown in Figure 1-1 contained in Appendix A of the licence.

As the current Beaverlodge licence expires May 31, 2023, Cameco is requesting that the licence be renewed for a period of 24 months, to May 31, 2025, to provide adequate time for regulatory processes, public engagement, and document preparation to support the final release of the decommissioned Beaverlodge properties and transfer to the IC program. It is anticipated the final formal request to release the remaining 27 properties from CNSC licensing will be made in 2024.

Cameco anticipates that on-site activities required to prepare the final set of properties for release from CNSC licensing will be completed prior to the expiration of the current licence. No changes to existing terms and conditions of the existing licence or associated Licence Conditions Handbook are being requested, except to the proposed licence expiry date. As such, the request does not involve a change to the authorized activities or the current licensing basis, and there will be no changes to the condition of the decommissioned properties or associated residual risks.

2.0 Performance Indicators and Evaluation

The current condition of the decommissioned properties demonstrates that the properties meet the established performance objectives of safe, secure, stable/improving and pose minimal risk to public safety or the environment. As such, it is anticipated that the properties will support traditional activities, such as hunting/gathering of country foods and collection of firewood.

A summary of the activities completed during the licence term and the current status of the decommissioned properties, with respect to the performance indicators, is provided below.

2.1 Acceptable Gamma Levels

During the licence term, a site-wide gamma survey was completed to inform a risk assessment based on a reasonable use scenario, which demonstrated that gamma levels on the properties are acceptable. The survey was completed in 2014 and focused on reasonably accessible and disturbed areas of the decommissioned Beaverlodge properties. The survey was completed by personnel on foot or utilizing all-terrain vehicles (ATV), depending on terrain and vegetative cover, using Global Positioning System (GPS) based measurement equipment. Measurement data was averaged on a 10 m by 10 m grid, mapped and summarized to characterize residual gamma levels present on the properties.

Properties that were not disturbed by previous mining/milling activities were not included in the survey as existing gamma levels were considered to be at natural background, meeting the performance criteria.

Results of the survey were compared to the Saskatchewan *Guidelines for Northern Mine Decommissioning and Reclamation, EPB 381* (EPB-381; SkMOE 2008), which suggests that residual gamma levels on reclaimed sites should not be greater than 1 $\mu\text{Sv/hr}$ above background averaged over a 1 hectare (ha) area. Where measured gamma levels met those guidelines, those properties were considered to have met the performance indicator and to be acceptable for transfer to the IC program, from a gamma radiation perspective. Where gamma levels were above the EPB 381 guideline, the properties were subject to a regulatory approved risk-based assessment to determine the potential risks to the public.

Thirty-eight properties were released from CNSC licensing during the licence term. Of those released properties, 24 met the criteria for the EPB 381 guideline, while 6 properties were at background values due to lack of disturbance. Eight properties underwent a risk-based

assessment, which demonstrated that gamma radiation levels are acceptable and that additional remedial actions were not required.

Of the remaining 27 remaining properties, 16 properties met the criteria for the EPB 381 guideline while 9 properties were at background values due to lack of disturbance. Two properties underwent a risk-based assessment, demonstrating that gamma radiation levels were acceptable and that additional remedial actions were not required.

The Acceptable Gamma Level performance indicator has been met on all properties.

2.2 Boreholes Plugged

During the licence term, 214 exploration boreholes were located and sealed following regulatory approved methods. An inflatable plug was lowered down each borehole to a depth of 30 metres, or refusal, then a 96% cement to 4% bentonite grout mixture was pumped into the borehole, filling it to surface level. Once complete, the standpipes were then cut off at ground level.

In response to a Commission question during the 2019 hearing, Cameco canvassed membership of the Saskatchewan Mining Association (SMA) regarding the effectiveness of this methodology. This method is commonly used and has proven to be robust with no degradation observed over time.

As properties are transferred to the IC program, a permanent record of borehole locations associated with the Beaverlodge properties (e.g., GPS coordinates and closure methods) will be transferred to the Province of Saskatchewan.

All boreholes identified on the Beaverlodge properties have been sealed and this performance indicator has been met.

2.3 Stable Mine Openings

During the licence term, 48 mine openings on 20 properties were assessed. Twenty-two of the openings were sealed with Type 316 stainless steel caps. While the certifiable usable lifespan of the stainless-steel cap is estimated to be in the order of 1,200 years, an inspection and maintenance schedule has been established as part of the long-term IC monitoring plan.

Of the remaining 26 of the mine openings assessed, 16 were backfilled during original decommissioning activities and remain stable, while 10 were excavated and re-sealed during the licence term following a regulatory accepted methodology.

The URA 7 property is included in the current licence and contains four mine openings, all of which have all been sealed. Two of the mine openings were excavated and resealed with waste rock following a regulatory approved method, while the other two openings were sealed with waste rock at decommissioning.

Monitoring has confirmed that the sealed openings have shown no sign of degradation or subsidence. Periodic assessments of stable mine openings will continue under the IC program's management framework and has been accounted for in the required provision of long-term monitoring and maintenance funds.

All mine openings on the Beaverlodge properties have been sealed and meet the performance objective for Stable Mine Openings.

2.4 Stable Crown Pillar

This performance indicator was applicable to properties that have been released from CNSC licensing during the licence term and is not applicable to any of the remaining licensed properties.

Prior to the release of those properties, a site-wide geotechnical assessment of crown pillar stability on the decommissioned Beaverlodge properties was completed by a third-party subject matter expert in 2015. The goal of this work was to assess the potential for long-term ground surface subsidence above the crown pillars and to investigate potential associated safety risks.

The initial phase of this work involved a desktop assessment, which considered open voids below the ground surface, including raises/shafts, declines/adits, and stopes. This desktop assessment was completed primarily by reviewing available historic plans, sections, and geological information related to each mining area. Based on this assessment, crown pillar collapse was not considered to be a risk for the Fay, Verna and Martin Lake mine areas. Therefore, additional field investigation /characterization work was not required for these sites.

From the review and evaluation of historic records, the Ace site was determined to present the most notable potential for subsidence to occur in the future. Further, the Dubyna and Hab sites were found to have crown pillars that were relatively near surface, and thus were determined to be worthy of further review.

Following the desktop assessment, properties located in the former Hab, Dubyna, and Ace mining areas were the subject of further geophysical assessment utilizing ground penetrating radar and targeted diamond drilling field work

Remedial actions, followed by monitoring, were recommended for locations in the Ace mining area that had been subject to previous surface subsidence. In 2016, areas at risk of additional crown pillar subsidence were backfilled with approximately two metres of sorted waste rock and broken concrete and then capped with a cover of clean waste rock. An as-built report was submitted to and accepted by the regulatory agencies in 2017.

The suitable option for the Dubyna and Hab 039 Zone area was visual monitoring, looking for the development of tension cracks and or any observable changes in ground elevation. SRK recommended this monitoring be completed on a five-year basis. If signs of subsidence, general changes in ground elevation, or tension cracking were not apparent in the following ten years, then a less frequent monitoring schedule was to be considered.

Inspections of the Hab, Dubyna, and Ace mining areas have been completed by a third-party expert in 2015 and 2020 with no observable changes to the landform and no concerns identified. In addition, Cameco personnel initiated annual monitoring in 2016 using a geotechnical inspection checklist developed by an engineering professional.

As noted, this performance indicator is not applicable to any of the remaining licensed properties.

2.5 Site Free From Debris

During the current licence term, all remaining residual debris was identified and collected from the Beaverlodge properties. The activities were completed over 40 days during 5 separate campaigns in the spring or fall from 2015-2017. GPS tracking was utilized to ensure adequate coverage of the properties. Where safe and feasible, debris was removed from the properties and disposed of in the Bolger pit, which had been used by Eldorado during decommissioning as a disposal location, or in the Lower Fay Pit, which was used historically as a disposal location and is still being used as an active disposal location for residual debris in accordance with regulatory approval.

In addition to this work, members of the JRG have also conducted follow-up inspections of each property as they are prepared for release from CNSC licencing to confirm they meet the relevant performance indicators. Where additional debris has been identified, a local contractor was hired to collect and dispose of the debris.

All debris on the Beaverlodge properties collected during the 2015-2017 campaigns was disposed of in Lower Fay Pit. At present, the Government of Saskatchewan is evaluating disposal alternatives and may seek to dispose additional non-Beaverlodge related material in the Lower Fay Pit in early 2023. Following that, Lower Fay Pit will be covered and the performance indicator will have been met for all properties. It is anticipated this work will be completed by May 31, 2023.

2.6 Water Quality within Modelled Predictions

A performance indicator with respect to water quality conditions at ten monitoring stations in the Beaverlodge area was incorporated into the path forward plan to verify that implemented remedial options were having the desired effect in assisting the continued natural recovery on and downstream of the decommissioned properties. This performance indicator only applies to properties that have aspects or features (e.g., artesian boreholes, tailings, waste rock), which have the potential to influence downstream water quality.

The Quantitative Site Model (QSM) was used to predict long-term water quality trends for radium-226, uranium and selenium, to establish the performance indicators at each of these monitoring stations. If existing water quality conditions are shown to be within the range predicted by the model, then the performance indicator is met for that station and for the associated decommissioned properties.

In 2020, Cameco completed an updated environmental risk assessment (ERA), which utilized a probabilistic modelling approach that included updated environmental monitoring data and allowed for inclusion of a wider range of environmental variability, including potential variables influenced by climate change. The model was used to update the performance indicators at the applicable water quality monitoring stations.

Beaverlodge Lake is the receiving environment for water from the decommissioned Beaverlodge properties, as well as other, non-Eldorado, former uranium mine sites and one former uranium mill tailings area (Lorado Uranium Mining Ltd. mill site).

While performance indicators are not applicable to Beaverlodge Lake, water quality is monitored at several locations, including BL-3 (Fulton Bay), BL-4 (Beaverlodge Lake, centre) and BL-5

(Outlet of Beaverlodge Lake). Water quality predictions have been developed for Station BL-5 to assess natural recovery over time.

While performance indicators are not applicable to the stations monitored in Beaverlodge Lake, the 2020 ERA included updated modelled predictions for Station BL-5. As shown below in Table 2-1, measured results are within modelled predictions.

Table 2-1: Water Quality at BL-5 (Outlet of Beaverlodge Lake)

Station	Water Quality Within Modelled Predictions			Comments
	Uranium	Radium-226	Selenium	
BL-5 (Outlet of Beaverlodge Lake)	✓	✓	✓	Ra-226 below Saskatchewan Environmental Quality Guidelines (SEQG)

3.0 Safety and Control Areas

Safety and Control Areas (SCAs) applicable to the decommissioned Beaverlodge properties are used by CNSC staff to evaluate and report on regulatory requirements and performance. Regular updates regarding SCA performance have been provided in the Regulatory Oversight Report (ROR), where CNSC staff provide ratings for radiation protection, environmental protection, and conventional health and safety.

During the licence term, CNSC staff have rated the Beaverlodge site performance as “satisfactory” for all applicable SCAs.

The sections below outline additional information related to the specific SCAs applicable to the decommissioned Beaverlodge properties.

3.1 Management System

Cameco has developed a management system to provide a framework for its safety, health, environment, and quality programs. Cameco’s corporate-wide management system is based on the corporate safety, health, environment, and quality (SHEQ) policy, which applies to all of Cameco’s business units including divisions, departments, operations, subsidiaries, and joint ventures where Cameco has sole operational control, or more than a 50% interest including the Beaverlodge properties.

The Beaverlodge *Quality Management Program* (BVL-QMP) provides a systematic framework to align and integrate site processes with the principles set out in Cameco’s SHEQ policy. The BVL-QMP provides a description of the management system components for the development, application, auditing, and continual improvement of the programs, procedures, and work instructions that manage activities at the licensed facility. CNSC staff reviewed and accepted the BVL-QMP in March 2022.

The Management System SCA has been rated by CNSC staff as satisfactory throughout the current licence term.

3.2 Operating Performance

All activities related to the decommissioned Beaverlodge properties are implemented in accordance with the Beaverlodge Management Framework to ensure the purpose of activities are consistent with the goals of ensuring the decommissioned properties are safe and facilitating their transfer to the IC program. As per REGDOC-3.1.2, *Reporting Requirements, Volume I: Non-Power Reactor Class I Nuclear Facilities and Uranium Mines and Mills*, an annual compliance report is submitted to the CNSC each year. Additionally, regulatory inspections are completed annually by the JRG pursuant to the *Nuclear Safety and Control Act* and *The Environmental Management and Protection Act, 2010*.

An overall review of the conduct of the licensed activities and the activities that enable effective performance are discussed in the Path Forward Report, BVL-QMP and the Beaverlodge *Environmental Monitoring Program (BVL-EMP)*.

During the licence term there were 2 reportable events at the Beaverlodge site:

- October 2013 – ground surface subsidence above the crown pillar at ACE 1
- August 2015 – release of water with elevated turbidity and total suspended solids during the Bolger flow path reconstruction project.

These events are discussed in sections 3.3 and 3.7.

In addition to the performance indicator related work discussed in Section 2, other activities were completed during the licence period in accordance with the Beaverlodge Management Framework, with the goal of meeting the performance objectives of safe, secure and stable, to facilitate a release of the decommissioned properties from CNSC licensing and transfer to the IC program. These projects included:

- The Bolger flow path reconstruction, which saw the relocation of approximately 225,000 m³ of waste rock to re-establish unobstructed flow between Zora and Verna Lake. It is anticipated that this project will result in a local benefit to Verna Lake water quality.
- Removal of the Ace Lake weir, the Meadow Fen weir, and the Lower Ace Creek culvert. The concrete and steel structures were removed to allow for unimpeded natural drainage to occur.

CNSC staff have concluded that the Operating Performance SCA has been maintained and satisfactorily implemented.

3.3 Safety Analysis

Site-specific risk assessments (e.g., Quantitative Site Model and the 2020 Environmental Risk Assessment), regulatory inspections and community engagement activities are the primary method of identifying potential hazards on the licensed properties. In addition, the BVL-EMP has been developed as part of the process demonstrating that the licensed properties are safe, secure and stable/improving.

During the licence term, there was one event related to this SCA, which was the ground surface subsidence above the crown pillar at the ACE 1 property in October 2013. This significance of this event was considered low as there were no injuries associated with the event, and the affected area was remote and of limited extent. The remediation of the crown pillar associated with the ACE 1 property was reviewed and approved by CNSC staff.

A geotechnical assessment of the crown pillar stability was completed in 2014 to 2015 to assess the potential for long-term ground surface subsidence above the crown pillars, and to investigate associated potential safety risks. Corrective actions and preventative measures were implemented, which were reviewed and approved by CNSC staff. Following this assessment, inspections of Dubyna, Hab and ACE 1 crown pillars have been completed annually.

The Safety Analysis SCA has been rated by CNSC staff as satisfactory throughout the current licence term.

3.4 Physical Design

As described in the BVL-QMP, the physical design process is planned, documented and controlled. As-built plans are developed by engineers for any remedial projects, for example stainless steel caps, Bolger flow path reconstruction, and remediating crown pillar subsidence. The Property Description Manual (BVL-FLM.A) details applicable structures, systems and components located on the remaining decommissioned Beaverlodge properties.

The Physical Design SCA has been rated by CNSC staff as satisfactory throughout the current licence term.

3.5 Radiation Protection

Cameco completed a site-wide gamma survey and subsequent risk assessments to demonstrate gamma levels at the site are acceptable, and that the performance indicator has been met. Follow-up gamma surveys have been completed where areas are disturbed during remediation activities to confirm that results are consistent with previous gamma surveys and risk assessments.

Results from the site-wide gamma survey have shown radiation risks for those accessing the properties are low, and that members of the public accessing the properties to perform traditional activities and contractors performing routine activities are not at risk of exceeding the public dose limit. As a result, a formal radiation monitoring program is not required for Beaverlodge. However, when non-routine work is occurring and there is a potential for elevated radiation exposure, Cameco has and will develop a project specific radiation monitoring program.

During the licence term there was one project that had potential for elevated radiation exposure to workers. A project specific radiation monitoring program was implemented for the Bolger flow path reconstruction project conducted. Most of the work was completed in 2014 and 2015, with only minor finishing work required in 2016.

The Radiation Protection Plan was implemented to ensure the safety of all personnel from effects of ionizing radiation in the form of gamma radiation, long lived radioactive dust (LLRD), radon, and radon progeny. Radon and its progeny are not significant in the outdoor setting where the work occurred and LLRD was measured in 2014 to confirm the expected low levels and was not included in the 2015 monitoring. Therefore, gamma radiation was the only dose component considered to be non-negligible. The following controls were implemented as part of this program in order to monitor and control radiation received by personnel and to ensure no off-site release of radioactive materials above regulatory limits:

- Personnel were designated as Nuclear Energy Workers (NEW) and given training in basic radiation protection principles,
- LLRD was measured at the outset of the project,

- Gamma radiation was individually measured for the duration of the project through the use of badges assigned to each worker,
- Gamma radiation was tracked daily through the use of Direct Read Dosimeters (DRD),
- Vehicles were scanned for contamination before leaving site, and
- Eating areas were scanned for contamination periodically.

Gamma dose was measured through the use of Optically Stimulated Luminescent Dosimeter (OSLD) badges that were worn by all personnel and sent in for analysis at the completion of the working term. In addition to OSLD badges, potential gamma exposure was also tracked in the short-term using DRDs to ensure doses were kept As Low As Reasonably Achievable (ALARA). The resultant gamma doses were within expected ranges for the various eleven workers (engineer, contractor supervisor, and operators) involved with the project. No worker exceeded the public dose limit.

The Radiation Protection SCA has been rated by CNSC staff as satisfactory throughout the current licence term.

3.6 Conventional Health and Safety

The Conventional Health and Safety SCA considers the management of workplace safety hazards and protecting personnel and equipment. At the Beaverlodge properties, there are no full-time workers, and the majority of the maintenance and monitoring is conducted by contractors. Contractors are required to comply with Cameco's health and safety program.

Where applicable, Cameco has installed signs at property boundaries advising of a licensed nuclear facility, as well as placed gates where remediation work may be actively occurring. It is acknowledged that casual access users periodically utilize the properties for recreational or traditional activities. With minimal safety risks on the properties combined with the remote location and limited population, security of the properties is being managed appropriately.

Ongoing monitoring and maintenance activities conducted on the decommissioned Beaverlodge properties provide an opportunity to identify and address any potential safety issues that arise. Occasionally tasks being performed under the approved licence activities will require non-routine work to be completed, which will undergo job specific hazard assessment (i.e., JHA). These activities are analyzed for safety and health hazards, considerations, and controls. The JHA process for the decommissioned Beaverlodge properties follows the Cameco JHA Standard, where applicable.

The Conventional Health and Safety SCA has been rated by CNSC staff as satisfactory throughout the current licence term.

3.7 Environmental Protection

The BVL-EMP has been developed in consideration of the Beaverlodge Management Framework and the Path Forward Report, as part of the process demonstrating that the licensed properties are safe, stable and/or continually improving.

The monitoring described in the BVL-EMP is a continuation of the transition phase monitoring that has been occurring since decommissioning was completed and aligns with the Canadian Standards Association (CSA) CSA N288.4 standard for environmental monitoring programs.

Throughout the transition phase monitoring period, the BVL-EMP has systematically evolved; evaluating monitoring locations and sample frequency to ensure a robust monitoring program. Changes to the monitoring program have been proposed and accepted throughout the current licence term, and the EMP will continue to evolve to facilitate the transition of decommissioned Beaverlodge properties into the long-term monitoring phase of the IC program. As additional modifications are made to the program, the BVL-EMP will be revised to reflect the changes.

Current core activities within this program include water sampling, geotechnical inspections, radon monitoring, borehole monitoring, compliance with all regulatory requirements and tracking and interpretation of environmental data.

The results of this monitoring follow a quality assurance process to ensure the data are scientifically sound and accurate. Monitoring results are routinely presented to regulatory agencies and are compared to performance indicators, not only through the annual report, but also through the Environmental Performance Report, which is required by the Saskatchewan Ministry of Environment (SMOE) every five years.

One unplanned event related to this SCA occurred during the licence term. In August 2015, a release of turbid water from the Bolger flow path reconstruction project occurred when the excavation of frozen waste rock resulted in the release of water stored within the waste rock pile. The water released exceeded the capacity of the constructed downstream settling basin and sediment fences, leading to turbid water overtopping the silt curtain in downstream Verna Lake.

Cameco temporarily suspended the project while corrective actions were implemented to prevent a recurrence. These corrective actions consisted of ensuring a water pump was available to allow water to be diverted around the channel, if required, and the installation of a larger silt curtain outside the existing silt curtain should the first silt curtain overtop. Sandbags were installed along the channel as check dams to provide additional capacity for the settling pond. Cameco had additional corrective actions implemented, which included identifying the risk of ice dams forming within waste rock piles and the consideration of extreme events when sizing control measures.

The event was considered to be of low safety and environmental consequence. The corrective actions were reviewed by the CNSC and considered to be acceptable.

The Environmental Protection SCA has been rated by CNSC staff as satisfactory throughout the current licence term.

3.8 Emergency Management and Fire Protection

The facilities associated with the former Eldorado Beaverlodge Mine and Mill were decommissioned between 1982 and 1985. Therefore, site specific emergency plans are limited to the Wildfire Prevention and Preparedness (WPP) Plan discussed below. Reporting of emergency events/incidents will follow Nuclear Emergency Preparedness and Response, Volume 2 (REGDOC-2.10.1) and off-site reporting timelines accepted by CNSC.

Given provincial jurisdiction related to wildfire preparedness and fire suppression, Cameco has prepared a WPP Plan in accordance with the Province of Saskatchewan's *Wildfire Act* and Section 9 of the *Wildfire Regulations*. The WPP plan identifies relevant site features (mine openings, powerlines, locked gates) as well as relevant contact information for responsible Cameco employees and local contractors. Also provided in the WPP Plan are the expected work

locations and the on-site precautions in place, including firefighting equipment to be available during site activities. This plan is updated annually and submitted to SkMOE.

The Emergency Management and Fire Protection SCA has been rated by CNSC staff as satisfactory throughout the current licence term.

3.9 Safeguards and Non-Proliferation

The decommissioned Beaverlodge properties are subject to the international safeguards regime under the International Atomic Energy Agency (IAEA), where applicable. Cameco staff provide information and provide IAEA inspectors access to our sites as requested. As outlined in the July 24, 2018 letter from Cameco to the CNSC (L. Mooney to H. Tadros, e-doc 5614635), Safeguards and Nuclear Material Accountancy (REGDOC-2.13.1) will be followed, where applicable.

The Safeguards and Non-Proliferation SCA has been rated by CNSC staff as satisfactory throughout the current licence term.

4.0 Other Matters of Regulatory Interest

4.1 Indigenous and Community Engagement

Canadian caselaw has established that Indigenous groups have the right to be consulted and, where applicable, to have their interests accommodated by the Crown with respect to activities associated with CNSC-licensed operations and projects that could potentially adversely impact the exercise of Indigenous or treaty rights. Cameco's engagement activities assist the CNSC in the aggregate discharge of its duty to consult and accommodate, if applicable. The Crown's duty to consult and accommodate aligns with Cameco's corporate values, commitments, and measures of success, and as such constitutes sound business practice.

As the majority of northern Saskatchewan residents are of Indigenous origin, including First Nations and Métis, Cameco's public engagement activities relating to the decommissioned Beaverlodge properties provide opportunities for Cameco to effectively engage with Indigenous groups with an interest in the decommissioned Beaverlodge properties, and such engagement activities may be relied on by the CNSC in discharging its duty to consult. Cameco's engagement process is described, in detail, within the approved Beaverlodge *Public Information Program* (BVL-PIP).

While not specified in the Beaverlodge LCH, engagement activities conducted for the decommissioned properties have generally followed guidance contained in CNSC REGDOC-3.2.2, Indigenous Engagement.

4.2 Public Information Program

Consistent with Cameco's vision, mission and values and measures of success, the objective of the BVL-PIP is to ensure target audiences with an interest in the decommissioned Beaverlodge properties are informed on a timely basis about activities and potential effects on the environment and the health and safety of persons, and thereby build the trust and support of stakeholders.

The primary audience for the Beaverlodge *Public Information Program* (BVL-PIP) are the rights-bearing First Nation and Métis communities, which are located in the vicinity of the decommissioned properties. Specifically, these are the northern settlement of Uranium City, which includes as one of its residents, the Uranium City Métis Local #50 President. Contractors based in Uranium City, near the decommissioned Beaverlodge properties, are also part of the primary audience.

Under the Collaboration Agreement signed in 2016 with the seven Athabasca Basin communities, engagement occurs primarily through the Athabasca Joint Engagement and Environment Subcommittee (AJES). AJES is a joint committee of community and industry representatives that meets regularly to discuss operational and environmental-related matters of importance to the communities and provides a channel for the communities to share traditional knowledge. While the rights-bearing First Nation and Métis communities of the Athabasca Basin are the primary audience for the BVL-PIP, Cameco considers the general public of the Northern Administrative District (NAD) and the province of Saskatchewan generally to be a secondary audience. The NAD is a large region with a dispersed population and many traditional and resource-based land users. The population of the NAD is approximately 36,500, including people of First Nation (Cree and Dene), Métis and non-Indigenous origin spread over a region roughly the size of Germany.

Cameco provides information and responds to inquiries from the NAD communities, the Métis Nation of Saskatchewan (MN-S), organizations such as the Prince Albert Grand Council, non-government organizations and other groups that may express interest in the decommissioned Beaverlodge properties, such as ACFN through our websites and social media channels and direct engagement when appropriate.

In addition, Cameco engages with the NSEQC, which consists of representatives from 32 northern municipal and First Nations communities. Members of the NSEQC are appointed by the provincial government, based on recommendations from community leaders. The Saskatchewan Northern Mines Monitoring Secretariat (NMMS) coordinates the activities of the NSEQC, which may include site visits, workshops, and liaisons with other jurisdictions.

Cameco's overall public engagement process is guided by a set of principles that were developed through roundtable consultation with northern opinion leaders. These principles are:

- Open Channels for Communication
- Make it Simple
- Build Capacity for Understanding
- Hear the Elders
- Include Youth
- Speak and Hear our Languages

Cameco maintains a presence in northern Saskatchewan through Cameco's Sustainability and Stakeholder Relations Department. In the Athabasca Basin, satellite offices employ local liaisons in the Fond du Lac Denesų́liné First Nation, Black Lake Denesų́liné First Nation, and the Hatchet Lake Denesų́liné First Nation.

Cameco also maintains a Public Disclosure Protocol for Beaverlodge, developed in accordance with guidance provided by CNSC REGDOC-3.2.1, *Public Information and Disclosure*. The Public Disclosure Protocol is posted on the Beaverlodge website at www.beaverlodgesites.com.

4.3 Community Related Monitoring

4.3.1 Country Foods Assessment

In 2010, Cameco contracted Canada North Environmental Services (CanNorth) a third party First Nations-owned company to complete a two-year Country Foods assessment with a primary objective of determining whether there were any potential human health risks associated with the consumption of country foods gathered in the Uranium City area by local residents. Information regarding country food consumption habits and locations of country food harvesting were gathered during Year 1. The focus of the Year 2 study was to complete the gathering of samples to determine if locally harvested country foods were safe to consume. Vegetation and animal samples were collected over a two-year period from the Beaverlodge properties, Camsell Portage, and areas around Uranium City by researchers and local land users and sent to Saskatchewan Research Council laboratory for chemical analysis. Maps of the sampling locations were also provided at a public meeting to provide the attendees with a visual aid to see exactly what areas had been sampled. After the tissue sample results were provided by the lab, a risk assessment was conducted, and it was concluded that consumption of country foods does not present health risks to Uranium City residents provided the fish consumption advisories in place are followed (CanNorth and SENES 2012). This report has been submitted and accepted by regulators.

4.3.2 Eastern Athabasca Regional Monitoring Program

The Eastern Athabasca Regional Monitoring Program (EARMP) was established in 2011 under the Province of Saskatchewan's Boreal Watershed Initiative and is currently supported by funding contributions from Saskatchewan Ministry of Environment, CNSC, Cameco and Orano. The EARMP was designed to identify potential cumulative effects downstream of uranium mining and milling operations in the Eastern Athabasca region of northern Saskatchewan. The community-based component of the program partners with communities annually to monitor the safety of traditionally harvested country foods by collecting and testing representative water, fish, berry, and mammal tissue samples from the seven communities located in the region. Harvesting and consuming traditional foods are an important part of the culture in northern Saskatchewan, which contributes to an overall healthy lifestyle through physical activity and healthy eating.

Community members collected and submitted samples of water, fish, berry, and mammals for testing. The 2021 program results continue to show that country foods are safe for consumption with chemical profiles for water, fish, berry, and mammal tissue samples similar to natural background. The reports and data from the program are publicly available at www.earmp.ca.

4.3.3 Community Based Environmental Monitoring Program

Building off eighteen years of data collected through the Athabasca Working Group (AWG) Environmental Monitoring Program (which was a product of Cameco's original Impact Management Agreement signed in 1999), the program was enhanced in 2018 to create a Community Based Environmental Monitoring Program (CBEMP) for the Athabasca region. The new CBEMP allows community members to become more involved and provide input to steer the

direction of the program in their particular community. The program focuses on individual communities within the region on a rotating basis.

The overall study objective of the CBEMP is to gain an understanding of traditional food use by community members and to assess if these foods remained safe for consumption. The involvement of community members is one of the fundamental goals of the study. The study obtained information regarding the quantity, type, and harvest location of traditional foods through community interviews. To accomplish these objectives, a Traditional Food Frequency Questionnaire is developed in collaboration with community leadership and band members are hired and trained to conduct interviews with community residents.

To date, CBEMP studies have been completed in Black Lake Denesųłiné First Nation /Stony Rapids, Hatchet Lake Denesųłiné First Nation/Wollaston Lake, and the Fond du Lac Denesųłiné First Nation. The results of the CBEMP studies have indicated that country foods identified and harvested by members of the communities remain safe and that regular consumption of locally collected fish, meat, berries and vegetation is encouraged. The results of these studies have been shared with local leadership and community members and a publicly available document summarizing the findings is posted on Cameco's northern website.

The 2021/2022 CBEMP program took place in Uranium City and Camsell Portage. The program was funded by Cameco and Orano through the Ya'thi Nèné Collaboration Agreement with support from CanNorth as the consultant. In an effort to build capacity and understanding, the 2021/2022 program involved the Ya'thi Nèné Land and Resource Office taking an active role in the design and execution. The Ya'thi Nèné Land and Resource Office Community Land Technicians and the Cameco/Orano Community Relations Liaison conducted interviews of residents in Uranium City and Camsell Portage about the traditional foods that they harvest and eat. This information was then used to determine which food and water samples to collect. The samples were collected by community members and sent to an independent lab for analysis. Once completed, the results from the study will be shared with community leaders and members in a report/brochure at a community meeting hosted by AJES – owners of CBEMP under the agreement.

4.3.4 Environmental Risk Assessment

In 2020, Cameco submitted an ERA for the decommissioned Beaverlodge properties (CanNorth 2020) as an update to the previous QSM. This assessment was completed in accordance with the CSA N288.6 standard for ERAs and consisted of watershed dispersion modelling, and a pathways assessment to evaluate potential risks to ecological and human receptors on and downstream of the decommissioned properties. The model assumptions were revisited based on the current understanding of the environmental conditions informed by almost 40 years of monitoring results and the environmental performance indicators related to the assessment of water quality at various monitoring stations were also updated.

The ERA utilized an updated probabilistic modelling approach to account for the range of natural variability seen in model input parameters and more accurately represent expected water quality results. As part of the performance indicator update, a sensitivity analysis was completed by including a wider range of environmental variability, such as that expected from climate change, to assess the potential impact on the performance indicators. Overall, it was found that the climate change scenario did not have a significant effect on the expected recovery of the properties and the updated performance indicators are applicable.

Consistent with previously accepted assessments, the 2020 ERA concluded that the immediate and downstream environments will continue to gradually recover over time. As shown previously, based on reported use of the land, there are not expected to be risks to humans residing near, or consuming food harvested from properties related to the decommissioned Beaverlodge properties. Therefore, living a traditional lifestyle and consuming country foods from the area, while respecting the water and fish advisories, can continue to be done safely (CanNorth 2020).

5.0 Cost Recovery

Cameco is in good standing with the CNSC with respect to the payment of licensing fees for the Beaverlodge properties.

6.0 Financial Assurance

The financial liabilities associated with the management of the Beaverlodge properties are held by the Government of Canada and managed by CEI, a wholly owned subsidiary of the Canada Development Investment Corporation (CDEV). Both CEI and CDEV report to the federal Minister of Finance. The Ministry of Finance has confirmed via letter to the CNSC that:

Canada Eldor Inc. is an agent of the Crown in right of Canada for all purposes. It follows that any undischarged obligations and liabilities of Canada Eldor Inc. are the obligations and liabilities of the Crown in right of Canada. That will include Canada Eldor Inc.'s obligations and liabilities to decommission the Beaverlodge Site and the expenses associated with possession, management and control of nuclear substances at that site.

The CNSC has acknowledged receipt of the letter and accepted that the information fulfilled the requirements of condition 2.2 of Waste Facility Operating Licence WFOL-W5-2120.0/2007.

The Province of Saskatchewan's *Reclaimed Industrial Sites Act* and its Regulations require provision of a fund sufficient to pay for the long-term monitoring and maintenance of the site. In addition, depending on whether or not any engineered structures or tailings remain on the site, an additional contribution of between 10 - 20% of the monitoring and maintenance amount is made to an Unforeseen Events Fund established under the legislation. The IC program also requires that a financial assurance in the amount of the maximum potential failure event be carried until such time as the Unforeseen Events Fund builds to a level that the Province of Saskatchewan is comfortable that there is sufficient money in the fund to cover any future unforeseen event.

As properties are transferred to the IC program, CEI will provide the required funds to the Province of Saskatchewan to meet the Monitoring and Maintenance requirements as well as the Unforeseen Events Fund. As the obligations and liabilities associated have been accepted by the Crown, there is no need to maintain a financial assurance for the maximum potential failure event for these properties.

7.0 Other Regulatory Approvals

No other regulatory approvals are required to support this application.

8.0 Conclusions

Engagement activities pertaining to the decommissioned properties have been ongoing throughout the current licence term and will continue in the future. While not specified in the Beaverlodge LCH, engagement activities conducted for the decommissioned properties have generally followed guidance contained in CNSC REGDOC-3.2.2, Indigenous Engagement.

Cameco has continued to follow the approved Beaverlodge Management Framework to prepare the decommissioned properties for transfer to the IC Program. Aside from the proposed licence expiry date, no changes to existing terms and conditions of the existing licence or associated LCH are being requested. On-site activities to prepare the final set of properties for release from CNSC licensing are expected to be complete prior to the expiration of the current licence.

Extending the expiry date by 24 months, to May 31, 2025, should provide adequate time for regulatory processes, public and Indigenous engagement, and document preparation to support the final release of the decommissioned Beaverlodge properties and transfer to the IC program.

Cameco will continue to be qualified to carry on the activity that the licence will authorize and, in carryout that activity, will make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed.

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