CMD 25-H3.1C

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#### **Supplementary Information**

#### Renseignements supplémentaires

### Presentation from Cameco Corporation

#### Présentation de Cameco Corporation

In the Matter of the

À l'égard de

### Cameco Corporation, Beaverlodge Project

#### Cameco Corporation, le projet de Beaverlodge

Application for the Licence Revocation and Transfer of Properties to Saskatchewan Institutional Control Program Demande de révocation de permis et de transfert de propriétés au programme de contrôle institutionnel de la Saskatchewan

#### **Commission Public Hearing**

Audience publique de la Commission

**January 30, 2025** 

30 janvier 2025





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# January 30, 2025 CNSC Hearing Presentation

Decommissioned Beaverlodge Properties Licence Revocation Request

### Introduction



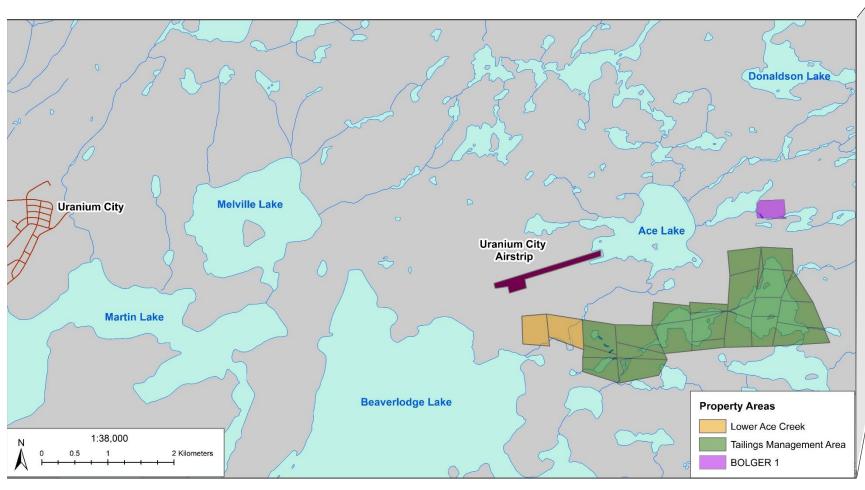
- Cameco has been a committed and capable manager since 1988
- Transition phase monitoring and maintenance activities
- Beaverlodge Management Framework
  - Ongoing stakeholder engagement
  - Path Forward Plan
  - Protect the health and safety of the public and environment
- Continued monitoring and inspections following transfer to provincial Institutional Control Program

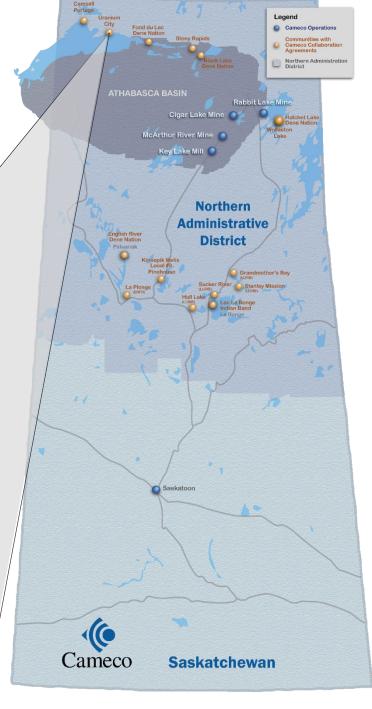


### **Presentation Overview**



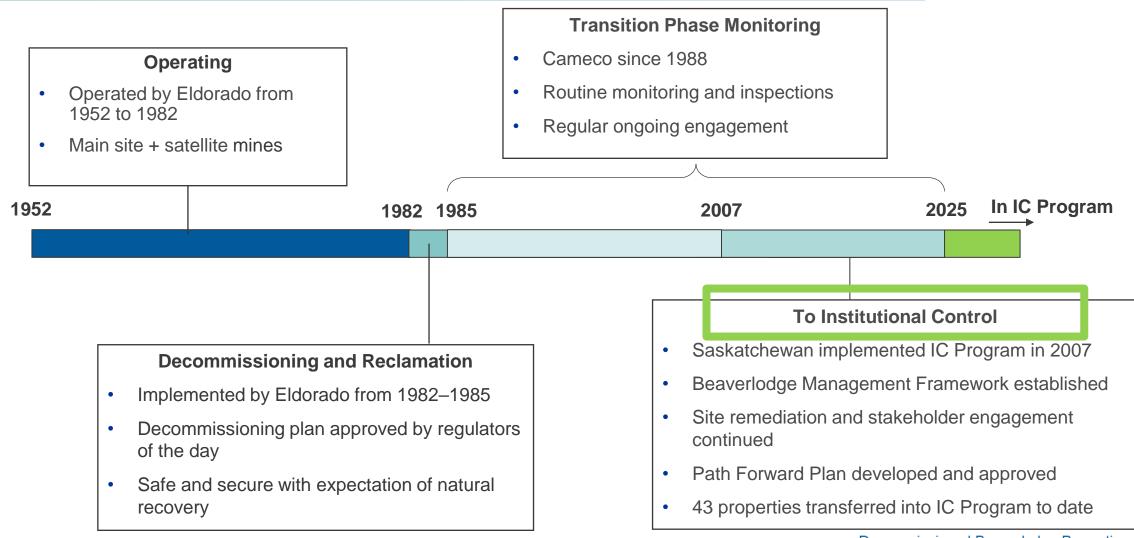
# **Beaverlodge Location**





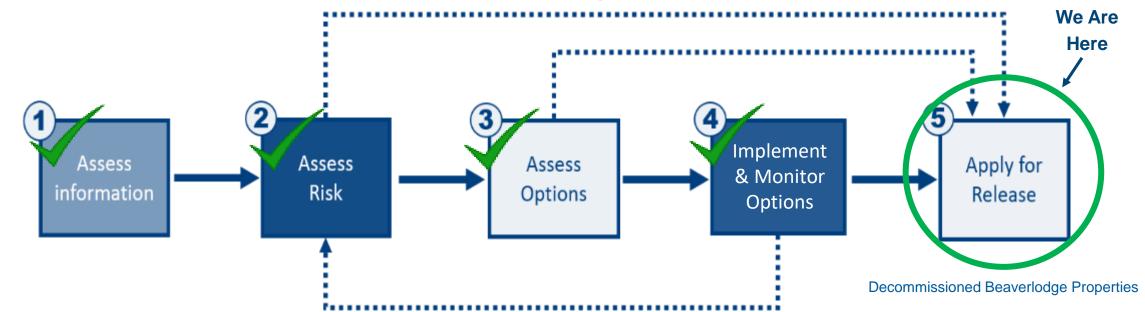
# **Beaverlodge History**







- Developed by Cameco with input from regulatory agencies and local and regional interested groups
- Ensured residual risks were systematically evaluated
- Step by step process for how the decommissioned properties were assessed and the final remedial options were selected, monitored and evaluated
- Facilitate transfer to Institutional Control Program





#### **Remedial Options Workshops**

- Held in 2009 and 2012 with local and regional interested groups
- Presented various remedial options and their outcomes



#### **Path Forward**

- Based on Management Framework, and remedial options workshops
- The Path Forward Plan was accepted by the Commission in 2013
- Implemented select remedial options to prepare the properties for transfer into the IC Program



• Included Performance Criteria (objectives and indicators) to evaluate success of remediation prior to transfer of the properties into Institutional Control Program

### **Performance Objectives**

Safe & Secure

Stable/Improving

#### **Performance Indicators**

Acceptable Gamma Levels
Boreholes Plugged
Stable Mine Openings
Stable Crown Pillar
Site Free from Debris

Water Quality Within Modelled Predictions



### Physically and Radiologically Safe

- Use of term "safe" refers to established Performance Objectives
  - Suitable for general public access and traditional activities
  - Confirmed through inspections and geotechnical assessments
- Residual risks managed through existing advisories
- Inspections will continue in IC Program





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• 5 properties transferred to IC Program



 19 properties transferred to IC Program; 1 property freereleased



18 transferred to IC Program



 Remaining 27 properties proposed for release and transfer to IC
 Program
 Decommissioned Beaverlodge Properties



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- Focus on the rights-bearing First Nations and Métis communities of the Athabasca Basin
  - Northern Settlement of Uranium City
  - Uranium City Métis Local #50
  - Fond du Lac Denesuliné First Nation
- Athabasca Joint Engagement and Environmental Subcommittee
  - Fond du Lac, Black Lake, and Hatchet Lake Denesųłinė First Nations
  - Northern Settlements of Camsell Portage and Wollaston Lake
  - Northern Hamlet of Stony Rapids
  - Ya'thi Néné Lands and Resources Office







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- Cameco strives to proactively engage:
  - Métis Nation of Saskatchewan
  - Athabasca Chipewyan First Nation
  - Northern Saskatchewan Environmental Quality Committee

#### Additional audiences include:

- General public of the Northern Administrative District and the Province of Saskatchewan
- Non-government organizations
- Others that may express interest





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- Long-standing relationships with residents of Athabasca Basin
  - Maintain two-way dialogue to provide information and seek feedback
  - Variety of well-developed tools in place to communicate with residents including:
    - Annual community meetings and site tours
    - Information regularly posted to the Beaverlodge website
  - Community-driven Moose and Vegetation Program
  - Engagement on long-term monitoring



### **Virtual Site Tour**





- Virtual site tours were recorded to help facilitate a reconnection to the land for land users
- Virtual tour was updated in 2024 and includes community member interviews
- Full length videos available on the Beaverlodge website



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#### **Uranium City Country Foods Study**

- Local residents surveyed and sent in food samples
- Study conducted by third party First Nations owned company, with trained local interviewer
- Country foods consumed by Uranium City residents pose no health risks
  - Supported by CNSC and regional health authority







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#### **Eastern Athabasca Regional Monitoring Program**

- Annual community-based monitoring in Athabasca Basin
- Harvested country foods are safe for consumption

### **Community Based Environmental Monitoring Program**

- Completed in Uranium City in 2023
- Continues to demonstrate that it's safe to eat country foods





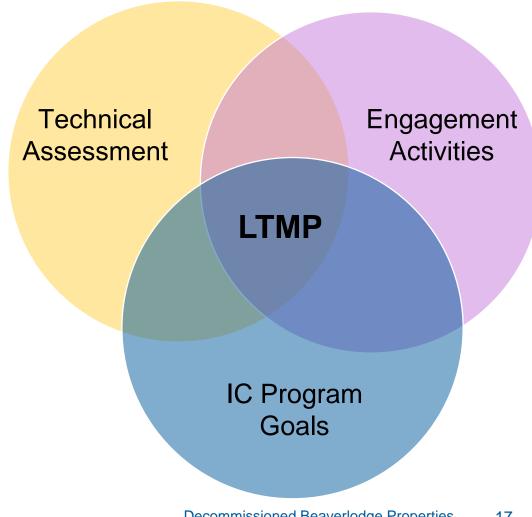


### **Long-term Monitoring Program**



### **Environmental Monitoring**

- Implemented once all properties are in IC Program to ensure natural recovery is occurring as expected
- Consists of fish and water quality sampling
- Technical evaluation completed by a third-party expert to establish program framework
- Informed by engagement activities to obtain knowledge from community residents and rightsholders
- Sampling program subsequently revised based on community input
- Accepted by regulators



### **Long-term Monitoring Program**



### **Physical Site Inspections**

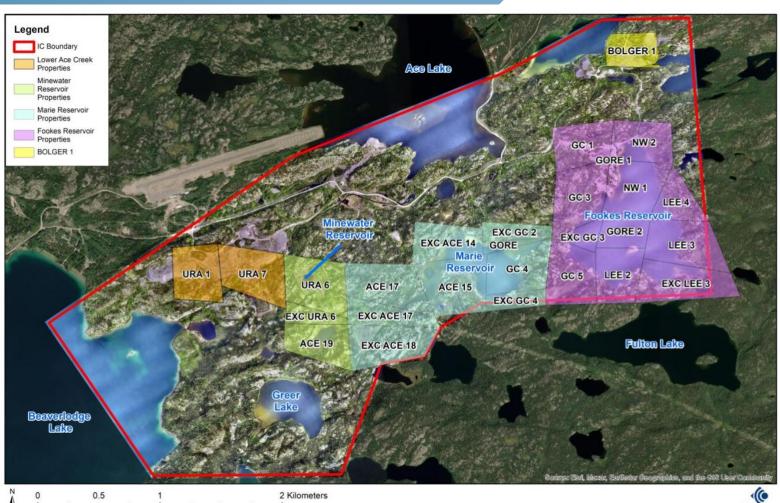
- Routine inspections of physical features to continue in the IC Program
- Institutional Control Inspection Field Guide
- Informed by qualified third-party experts
- Based on inspections completed on properties currently in the IC Program
- Consider aspects such as general site condition, geotechnical conditions, stainless-steel caps and backfilled mine openings



# **Application Summary**



- Release 27 decommissioned properties from CNSC licensing and revoke waste facility operating licence
- Release from decommissioning and reclamation
- Acceptance into Saskatchewan Institutional **Control Program**
- Properties meet established Performance Objectives



### Performance Objectives & Evaluation



- Properties were decommissioned at the end of operations
- Geotechnical assessments completed
- Natural recovery of environmental conditions
- Safe, secure and stable





	PERFORMANCE INDICATORS					
	Acceptable Gamma Levels	Boreholes Plugged	Stable Mine Openings	Stable Crown Pillar	Site Free From Debris	Water Quality Within Modelled Predictions
	Reasonable use scenario demonstrating gamma levels at the site are acceptable.	All boreholes have been sealed.	Mine openings have been secured and signed off by a qualified person, where applicable.	Crown pillar assessed, remediated (if required), and signed off by a qualified person.	Site free of former mining debris at the time of transfer to institutional control.	Water quality data is stable/improving.
URA 6	✓	<b>✓</b>	N/A	N/A	✓	✓
EXC URA 6	✓	N/A	N/A	N/A	✓	✓
ACE 19	✓	N/A	N/A	N/A	✓	✓
Marie Reservoir Properties (9)	✓	N/A	N/A	N/A	✓	✓
Fookes Reservoir Properties (12)	✓	N/A	N/A	N/A	✓	✓
URA 1	✓	✓	N/A	✓	✓	✓
URA 7	✓	✓	✓	✓	✓	✓
BOLGER 1	✓	✓	N/A	✓	✓	✓



#### **Acceptable Gamma Levels**

- Gamma surveys were completed
- SK Guidelines for Northern Mine Decommissioning and Reclamation
  - 25 properties met the criteria set out in the guideline
- Regulatory approved risk-based assessment for remaining two properties
  - Informed by local community member interviews about current and future land use activities
  - Represents a broad range of land users
  - The estimated dose to individuals visiting the decommissioned properties was well below the public dose criterion of 1 mSv/yr
- · Gamma levels on all properties are acceptable





### **Boreholes Plugged**

• 22 boreholes were remediated following regulatory approved methods







#### **Site Free From Debris**

• Properties disturbed by mining or milling activities were inspected to locate historic

debris

 Where safe and feasible, debris was removed and disposed of, in accordance with regulatory approval





Decommissioned Beaverlodge Properties



#### **Stable Mine Openings**

- 1 of the 27 properties contained mine openings
- Openings were secured and labelled

#### **Stable Crown Pillar**

- Applicable to three properties
- Assessed the long-term stability of Crown Pillars and potential safety risks
- Low risk due to thickness of Crown Pillar and depth of underground workings





#### **Water Quality within Modelled Predictions**

- Applicable to five water quality monitoring stations
- Water quality is within modelled predictions
- Continued naturally recovery and monitoring



- 27 decommissioned properties proposed for release from CNSC licensing meet the performance objectives of safe, secure and stable/improving
  - Suitable for general access and practice of traditional activities
- Eligible for transfer into the IC Program once released from CNSC licensing
- Funding design for the IC Program is robust
  - Provided up front
  - Ensures monitoring and maintenance activities occur in the future
  - Facilitate future engagement activities and local community participation in monitoring



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# Thank you!

