



Canadian Nuclear  
Safety Commission

Commission canadienne  
de sûreté nucléaire

## Record of Decision

DEC 19-H6

In the Matter of

Applicant Cameco Corporation

Subjects Application to remove 20 properties from the Beaverlodge Waste Facility Operating Licence to enable the transfer of 19 properties into the Saskatchewan Institutional Control Program

Public Hearing  
Date October 2, 2019

Record of  
Decision Date December 19, 2019

**RECORD OF DECISION – DEC 19-H6**

Applicant: Cameco Corporation

Address/Location: 2121 11<sup>th</sup> Street West, Saskatoon SK, S7M 1J3

Subjects: Application to remove 20 properties from the Beaverlodge Waste Facility Operating Licence to enable the transfer of 19 properties into the Saskatchewan Institutional Control Program

Application received: February 20, 2019

Date of public hearing: October 2, 2019

Location: Lac du Bonnet Community Centre, Lions Hall,  
25 McArthur Avenue, Lac du Bonnet, Manitoba

Members present: R. Velshi, Chair  
S. Demeter  
M. Lacroix  
T. Berube

Secretary: M.A. Leblanc  
Recording Secretary: M. Hornof  
Senior Counsel: D. Saumure

<b>Applicant Represented By</b>		<b>Document Number</b>
L. Mooney	Vice-President, Safety, Health, Environment and Quality and Regulatory Relations	CMD 19H6.1 CMD 19-H6.1A
K. Nagy	Director, Compliance and Licensing	
M. Webster	Senior Reclamation Specialist	
K. Cuddington	Senior Corporate Responsibility and Communication Specialist	
M. Carter	Executive Vice-President, Canada Eldor Inc.	

<b>CNSC staff</b>		<b>Document Number</b>
H. Tadros	Director General, Directorate of Nuclear Cycle and Facilities Regulation (DNCFR)	CMD 19-H6 CMD 19-H6.A
P. Fundarek	Director, Uranium Mines and Mills Division, DNCFR	
R. Snider	Senior Project Officer, Uranium Mines and Mills Division. DNCFR	

M. Rinker	Director General, Directorate of Environment and Radiation Protection (DERPA)	
A. McAllister	Director, Environmental Risk Assessment Division, DERPA	
<b>Intervenors</b>		
See appendix A		
<b>Other Government Representatives</b>		
Saskatchewan Health Authority and the Saskatchewan Ministry of Health, represented by J. Irvine		
Ministry of Energy and Resources, represented by C. Hughes		
Saskatchewan Ministry of Environment, represented by T. Moulding		

**Licence:** Amended  
**Exemption (to the province of Saskatchewan):** Granted

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## 1.0 INTRODUCTION

1. Cameco Corporation (Cameco) has applied to the Canadian Nuclear Safety Commission<sup>1</sup> for an amendment of its Waste Facility Operating Licence (WFOL) for the decommissioned Beaverlodge mine and mill site located near Uranium City in northern Saskatchewan. The current operating licence, WFOL-W5-2120.0/2023, expires on May 31, 2023.
2. Beaverlodge is a former uranium mine and mill which was operated by Eldorado Nuclear Limited from 1952 to 1982, with decommissioning of the site completed in 1985. In 1988, Eldorado Nuclear Limited and the Saskatchewan Mining and Development Corporation merged to form Cameco, with Cameco assigned the responsibility for the maintenance and monitoring of the site and holding the CNSC Beaverlodge WFOL. Canada Eldor Inc. (Canada Eldor), a wholly-owned subsidiary of the Canada Development Investment Corporation, provides all of the funding for Beaverlodge site activities. The Beaverlodge properties are divided into five main areas: the Hab Mine Site, the Dubyna Mine Site, the Bolger/Verna Mine Site, the Lower Ace Creek Area and the Tailings Management Area. The Beaverlodge site also includes three smaller areas, the Eagle Area and two areas within the Martin Lake Area.
3. The Beaverlodge site consists of 65 separate properties and Cameco has requested this amendment to allow for the removal of 20 of the 65 Beaverlodge properties from its licence. The Beaverlodge site and the boundaries of the properties areas are detailed in Appendix A, Figure 1-1 of the Beaverlodge WFOL. This amendment would allow for the release of the 20 properties from licensing under the NSCA and would include an update to Appendix A of Cameco's WFOL to show the updated licensed properties. A release from licensing under the NSCA for the properties would enable their transfer into Saskatchewan's Institutional Control Program (ICP), for which the Saskatchewan Ministry of Energy and Resources (SMER) is the provincial authority. Cameco intends to transfer 19 of the 20 properties into the ICP, with the other property being proposed for release from CNSC licensing without any further regulatory oversight.
4. The province of Saskatchewan, through *The Reclaimed Industrial Sites Regulations 2017*,<sup>2</sup> requires that any property accepted into the ICP be released from any and all licences that are issued by regulatory agencies, including those issued by the CNSC pursuant to the NSCA, thus reverting total custodial responsibility back to the province. As such, the Commission will also consider whether to grant the province of

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<sup>1</sup> The *Canadian Nuclear Safety Commission* is referred to as the "CNSC" when referring to the organization and its staff in general, and as the "Commission" when referring to the tribunal component.

<sup>2</sup> Ch. R-4.21 of *The Statutes of Saskatchewan, 2006*, as amended by *The Statutes of Saskatchewan, 2014*, c.E-13.1; and 2018, c.32.

Saskatchewan an exemption under section 7<sup>3</sup> of the *Nuclear Safety and Control Act*<sup>4</sup> (NSCA) in relation to the 19 properties identified for acceptance into the ICP.

5. In March 2019, up to \$50,000 in funding to participate in this licensing process was made available to Indigenous peoples, not-for-profit organizations and members of the public through the CNSC's Participant Funding Program (PFP). A Funding Review Committee (FRC) – independent of the CNSC – recommended that up to \$50,000 in participant funding be provided to three applicants. These applicants were required, by virtue of being awarded participant funding, to submit a written intervention at the public hearing commenting on Cameco's application.

### Issues

6. In considering Cameco's licence amendment application and, specifically, whether to release 20 Beaverlodge properties from licensing under the NSCA, the Commission was required to decide:
  - a) what environmental assessment review process to apply in relation to this application;
  - b) whether the 20 Beaverlodge properties meet the performance indicators and criteria previously accepted by the Commission in order for the sites to be released from licensing under the NSCA and accepted into the ICP;
  - c) whether Cameco remains qualified to carry on the activity that the licence would authorize; and
  - d) whether, in carrying on that activity, Cameco will continue to 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.
7. In considering whether to exempt the province of Saskatchewan from licensing under the NSCA for the 19 identified Beaverlodge properties, or portions thereof, to enable their acceptance into the ICP, the Commission was required to decide whether, pursuant to section 7 of the NSCA and in accordance with section 11 of the *General Nuclear Safety and Control Regulations*<sup>5</sup> (GNSCR), their exemption from the application of the NSCA and its regulations:

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<sup>3</sup> Section 7 of the *Nuclear Safety and Control Act* states that “The Commission may, in accordance with the regulations, exempt any activity, person, class of person or quantity of a nuclear substance, temporarily or permanently, from the application of this Act or the regulations or any provision thereof.”

<sup>4</sup> S.C. 1997, c.9

<sup>5</sup> SOR/2000-202

- a) does not pose an unreasonable risk to the environment or the health and safety of persons;
- b) does not pose an unreasonable risk to national security; and
- c) does not result in a failure to achieve conformity with measures of control and international obligations to which Canada has agreed.

### Public Hearing

- 8. Pursuant to section 22 of the NSCA, the President of the Commission established a Panel of the Commission to review the application. The Commission, in making its decision, considered information presented for a public hearing held on October 2, 2019 in Lac du Bonnet, Manitoba. The public hearing was conducted in accordance with the *Canadian Nuclear Safety Commission Rules of Procedure*<sup>6</sup> (Rules of Procedure). During the public hearing, the Commission considered written submissions and heard oral presentations from Cameco (CMDs 19-H6.1 and 19-H6.1A) and CNSC staff (CMDs 19-H6 and 19-H6.A). The Commission also considered written submissions from 10 intervenors (see Appendix A for the list of interventions). The hearing was webcast live via the CNSC website and video archives are available on the CNSC's website.
- 9. In the spirit of reconciliation and in recognition of the Indigenous oral tradition for sharing knowledge, the Commission invited oral presentations from Indigenous Peoples. During the hearing, the Commission considered oral presentations from two First Nations and one Métis Nation, in addition to their written submissions.

### **2.0 DECISION**

- 10. Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Decision*, the Commission is satisfied that the 20 Beaverlodge properties meet the performance indicators and criteria previously accepted by the Commission in order for the sites to be released from licensing under the NSCA. The Commission also concludes that Cameco remains qualified to carry on the activity that the licence will authorize. The Commission is of the opinion that Cameco, in carrying on that activity, will continue to 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. Therefore,

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<sup>6</sup> SOR/2000-211

the Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, amends the Waste Facility Operating Licence issued to Cameco Corporation for its Beaverlodge site, located near Uranium City in northern Saskatchewan, to remove 20 Beaverlodge properties from the figure within Appendix A of the licence. The amended licence, WFOL-W5-2120.1/2023, remains valid until May 31, 2023.

11. With this decision, the Commission releases the following 20 Beaverlodge properties from licensing under the NSCA and removes them from the figure in Appendix A of Cameco's WFOL for the Beaverlodge site: HAB 3, HAB 6, EXC 2, HAB 2A, JO-NES, BOLGER 2, ACE 5, EAGLE 1, RA 6, RA 9, EXC ATO 26, EXC ACE 1, ACE 10, URA 5, EXC URA 5, ATO 26, URA MC, URA 3, ACE 2, EXC ACE 3.
12. Amended Appendix A, Figure 1 – which reflects the 20 Beaverlodge properties removed from Cameco's WFOL – shall replace Appendix A, Figure 1-1 of Cameco's WFOL, as proposed by CNSC staff in CMD 19-H6. The Commission expects CNSC staff to update the Beaverlodge LCH to reflect the removal of the 20 properties from Appendix A of Cameco's Beaverlodge WFOL.
13. The Commission accepts the updated standardized CNSC licence format for Cameco's WFOL, as proposed by CNSC staff in CMD 19-H6.
14. The Commission is satisfied that the EXC 2 property poses no risk to the environment or the public, meets the unconditional clearance levels as defined in Schedule 2 of the *Nuclear Substances and Radiation Devices Regulations*<sup>7</sup> (NSRDR) and satisfies the requirements of subsection 5(1) of the NSRDR. Therefore, the Commission is satisfied that the EXC 2 property can be released from CNSC licensing without any further regulatory oversight.
15. The Commission also considered whether to exempt the province of Saskatchewan from requiring CNSC licensing for the 19 remaining properties (or portions thereof, as identified in the materials submitted for this hearing) under section 7 of the NSCA, to enable their acceptance into Saskatchewan's ICP. Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Decision*, the Commission concludes that, in accordance with section 11 of the GNSCR, exempting the province of Saskatchewan from requiring licensing under the NSCA for these 19 Beaverlodge properties will not pose an unreasonable risk to the environment or the health and safety of persons; pose an unreasonable risk to national security; or result in a failure to achieve conformity with measures of control and international obligations to which Canada has agreed. Therefore,

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<sup>7</sup> SOR/2000-207

the Commission, pursuant to section 7 of the *Nuclear Safety and Control Act* and in accordance with section 11 of the *General Nuclear Safety and Control Regulations*, exempts the province of Saskatchewan from licensing obligation under the *Nuclear Safety and Control Act* for the 19 Beaverlodge properties, or portions thereof, intended for transfer into the province of Saskatchewan's ICP.

16. For clarity, the Commission exempts the province of Saskatchewan from licensing obligation under the NSCA for all of the properties listed in paragraph 11, with the exception of EXC 2, for which the Commission has determined that it may be released from CNSC licensing without any further regulatory oversight.
17. The Commission is also satisfied that, in respect to the 19 properties intended for transfer into Saskatchewan's ICP, the portions of the properties that Cameco identified in its application as not requiring institutional control meet the unconditional clearance levels as defined in Schedule 2 of the NSRDR and, having satisfied the requirements of subsection 5(1) of the NSRDR, can be released from CNSC licensing without further regulatory oversight.
18. The Commission is satisfied that an environmental assessment (EA) under the *Canadian Environmental Assessment Act, 2012*<sup>8</sup> (CEAA 2012) was not required in this matter and considers the environmental protection review that was conducted by CNSC staff to be acceptable and thorough. Since Cameco's application was submitted to the CNSC prior to the coming into force of the *Impact Assessment Act*<sup>9</sup> (IAA), the Commission is satisfied that the IAA does not apply to this licensing application.
19. The Commission recognizes the importance of site tours and of walking the Beaverlodge lands with First Nations and the Métis Nation to allow for physical interaction and reconnection with the Beaverlodge lands. Therefore, the Commission expects Cameco to increase these 'boots on the ground' tours of the Beaverlodge site with First Nations and the Métis Nation to ensure physical interaction with and provide opportunities for reconnection with the Beaverlodge lands. The Commission anticipates that Cameco will invite the interested First Nations and the Métis Nation for individual tours of the Beaverlodge site to allow Cameco to gain a better understanding of the history of the lands, and how the First Nations and Métis Nation use and feel about the lands. The Commission also expects Cameco to report on the anticipated learnings from these future engagement activities and site tours at the next Commission proceedings regarding the Beaverlodge properties.

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<sup>8</sup> S.C. 2012, c. 19, s. 52

<sup>9</sup> S.C. 2019, c. 28, s. 1

### 3.0 ENVIRONMENTAL ASSESSMENT

20. Cameco's application was made on February 20, 2019, at which time CEAA 2012 and its regulations provided the requirements for EA for nuclear projects. A licence amendment for an existing activity is not included on the Designated Project list for an EA, as a licence amendment is not an activity identified in the *Regulations Designating Physical Activities*.<sup>10</sup>
21. The IAA came into force on August 28, 2019. Under the IAA and the *Physical Activities Regulations*<sup>11</sup> made under it, impact assessments (IA) will be conducted on projects identified as having the greatest potential for adverse environmental effects in areas of federal jurisdiction. While CEAA 2012 and not the IAA applies to this project, the Commission notes the requested licence amendment is not an activity defined in the regulations for an IA under the IAA.
22. Cameco submitted that the 20 Beaverlodge properties proposed for release from licensing were fully decommissioned in accordance with an Atomic Energy Control Board approval issued in 1985 and with the provincial and federal regulations at that time.
23. The Commission considered the completeness and adequacy of information provided for the environmental protection review (EPR) under the NSCA and its regulations that CNSC staff conducted for this licence amendment, as detailed in section 3.8 of CMD 19-H6. CNSC staff reported through its EPR that the 20 Beaverlodge properties for which Cameco requested release from licensing achieved the established performance indicators, as detailed further in section 4.1 of this *Record of Decision*, and do not pose an unreasonable risk to the environment or the health and safety of persons.
24. CNSC staff further explained that the main objectives of the ICP, including the protection of human health and safety, and of the environment, are similar to those of the CNSC, and that its review showed that the ICP will be effective in ensuring adequate oversight of the 19 Beaverlodge properties (or portions thereof) being recommended for transfer into the ICP. CNSC staff noted that the province of Saskatchewan achieved appropriate oversight of the properties in the ICP through land use controls, monitoring and maintenance, and that CNSC staff was of the view that the 19 Beaverlodge properties proposed for transfer to the ICP would remain in a safe state and not pose an unreasonable risk in the future.
25. In its application, Cameco requested that the EXC 2 property be released from CNSC licensing without any further regulatory oversight (free released). CNSC staff submitted that its review of the EXC 2 property's gamma surveys<sup>12</sup> showed that the gamma levels averaged over a one hectare area ranged from less than 0.1 µSv/h to 0.3

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<sup>10</sup> SOR/2012-147

<sup>11</sup> SOR/2019-285

<sup>12</sup> Additional details about the gamma surveys carried out at the Beaverlodge site are included in section 4.1.1 of this *Record of Decision*.

µSv/h above background, meeting the gamma screening criteria of the *Saskatchewan Guidelines for Northern Mine Decommissioning and Reclamation*<sup>13</sup> (EPB 381) and that the EXC 2 property posed no risk to the environment or the public. CNSC staff further submitted that the EXC 2 property met the regulatory unrestricted clearance levels as defined in Schedule 2 of NSRDR, satisfying the requirements of subsection 5(1) of the NSRDR, and therefore did not require the institutional controls provided for by the ICP.

26. Based on the information provided for this hearing, the Commission concludes that the requested licence amendment is not a designated project under CEAA 2012 and that an EA under CEAA 2012 is not required prior to its approval. The Commission is also satisfied that an IA under the new IAA is not required in respect of this application. Further, the Commission is satisfied that Cameco has made, and will continue to make, adequate provision for the protection of the environment during the remainder of its current licence period.
27. The Commission also concludes that an environmental protection review carried out by CNSC staff was appropriate for Cameco's request to release 20 Beaverlodge properties from CNSC licensing and that the NSCA continues to provide a strong regulatory framework for environmental protection for the remaining Beaverlodge properties.
28. Further, the Commission concludes granting the province of Saskatchewan an exemption from licensing under the NSCA for the 19 Beaverlodge properties intended for transfer into the ICP is reasonable and appropriate. The Commission is satisfied that the ICP has the appropriate framework to ensure that those 19 Beaverlodge properties will not pose an unreasonable risk to the environment, or the health and safety of persons.

#### **4.0 ISSUES AND COMMISSION FINDINGS**

29. In making its decision in regard to the requested licence amendment, the Commission considered a number of issues and submissions relating to whether the 20 identified Beaverlodge properties meet the performance indicators and criteria as detailed in the Beaverlodge Path Forward Report and accepted by the Commission in order for the sites to be released from licensing under the NSCA.
30. In regard to the exemption of the province of Saskatchewan from licensing for the 19 identified properties, or portions thereof, under section 7 of the NSCA to enable their transfer into the ICP, the Commission examined whether the conditions for exemption as set out in section 11 of the GNSCR were met.

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<sup>13</sup> Government of Saskatchewan, Ministry of Environment, *Northern Mine Decommissioning and Reclamation Guidelines*, EPB 381, November 2008.

#### 4.1 Performance Objectives and Indicators

31. The Commission considered the information provided by Cameco in regard to its Beaverlodge Management Framework (the framework) which was developed in 2009 and details the scope for the management of the Beaverlodge site, residual risk and decision-making criteria in regard to the transfer of Beaverlodge properties into the ICP. Cameco noted that the framework had been accepted by public stakeholders, including the Northern Saskatchewan Environmental Quality Committee (NSEQC), and the residents and leaders of Uranium City, Saskatchewan.
32. In its application, Cameco submitted that 19 of the 20 Beaverlodge properties that are part of this licensing application meet the performance objectives and indicators as detailed in the Beaverlodge Path Forward Report, previously accepted by the province of Saskatchewan and by the Commission during the 2013 licence renewal hearing,<sup>14</sup> and as further clarified in CMD 14-M60,<sup>15</sup> making the properties – or portions thereof – eligible for acceptance into the ICP. Cameco also submitted that one of the 20 properties also meets the performance objectives and indicators, but also meets CNSC regulatory requirements for unconditional release from licensing under the NSCA and does not require further institutional control restrictions.
33. Cameco reported that each property was assessed through the five general stages of the Beaverlodge Management Framework prior to a recommendation for transfer into the ICP. These stages were: the establishment of a comprehensive foundation of information in regard to residual risks; an assessment of residual risks posed by the properties; identification of reasonable remediation options to mitigate the risks; implementation of remediation options; and a determination about whether the expected benefit was achieved or whether any other measures could be reasonably carried out to mitigate residual risks beyond natural recovery.
34. Cameco submitted that, by progressing through the framework, Cameco had gathered extensive information about the Beaverlodge properties' environmental conditions and the human activities being carried out on the decommissioned properties, leading to the development of the Beaverlodge Quantitative Site Model (QSM) and the subsequent Beaverlodge Path Forward Report.
35. Cameco provided the Commission with information about the performance objectives of “stable,” “secure,” and “stable/improving” for the Beaverlodge properties. Cameco further submitted that, to determine whether a site was meeting performance objectives, the following six site-specific performance indicators for the Beaverlodge properties were established:

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<sup>14</sup> CNSC Record of Proceedings, Including Reasons for Decision – Cameco Corporation, *Application to Renewal Waste Facility Operating Licence at Decommissioned Beaverlodge Mine and Mill Site*, issued May 2013.

<sup>15</sup> CMD 14-M60, *CNSC Staff Update on Cameco Corporation's Decommissioned Beaverlodge Mine and Mill Site*, October 2014.

- acceptable gamma levels
  - boreholes plugged
  - stable mine openings
  - stable crown pillars
  - sites free from debris
  - water quality within modelled predictions
36. CNSC staff reported that the Beaverlodge performance objectives of “safe” and “secure” applied to the first five performance indicators and that the performance objective of “stable/improving” applied in respect of the sixth indicator, “water quality within modelled predictions.”
37. Cameco reported that the Beaverlodge performance indicators remained unchanged from those presented to the Commission during the 2013 Beaverlodge licence renewal hearing<sup>16</sup> and further clarified during a 2014 Commission meeting,<sup>17</sup> and noted that Cameco had assessed that 20 of the Beaverlodge properties met the performance indicator acceptance criteria. Cameco further reported that, on April 8, 2016 and April 6, 2018, Cameco submitted Final Closure Reports to the CNSC and provincial authorities for 14 and 6 Beaverlodge properties, respectively. In submitting the closure reports, Cameco reported that it had requested that the properties be formally released from further decommissioning activity by the Saskatchewan Ministry of Environment (SMOE); released from CNSC licensing; and accepted into the ICP by the SMER, the provincial authority responsible for the Saskatchewan ICP.
38. In its written submission, Cameco provided the Commission with detailed information about and the location of the properties being requested to be released from CNSC licensing. The 20 properties include
- four properties in the Hab area: HAB 3, HAB 6, EXC 2 and HAB 2A
  - one property in the Dubyna area: JO-NES
  - two properties in the Verna/Bolger area: BOLGER 2 and ACE 5
  - one property in the Eagle area: EAGLE 1
  - two properties in the Martin Lake area: RA 6 and RA 9
  - ten properties in the Lower Ace Creek area: ATO 26, EXC ATO 26, URA MC, EXC ACE 1, ACE 10, ACE 2, EXC ACE 3, URA 3, URA 5, EXC URA 5
39. Cameco submitted that EXC 2 property in the Hab area was the only property that would not require inspection or maintenance under the ICP, with the property being eligible for release from CNSC licensing without any further regulatory oversight since it meets the unconditional clearance levels as defined in Schedule 2 of the NSRDR and satisfies the requirements of subsection 5(1) of the NSRDR. As such, Cameco is requesting through this licence amendment request that this property be released from CNSC licensing without further regulatory oversight.

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<sup>16</sup> *Supra* note 14.

<sup>17</sup> *Supra* nota 15.

40. Cameco reported that the 20 decommissioned properties that were being proposed for release from CNSC licensing had required little to no remediation when Beaverlodge operations ended, and that all 20 properties currently meet the established performance objectives of “safe” and “secure,” or “stable/improving,” and pose minimal risk to public safety or the environment. Cameco submitted that the Final Closure Reports for the Beaverlodge properties detailed the status of the performance indicators for all 20 properties and that assessments showed that the properties could support traditional Indigenous activities including hunting, the gathering of country foods and the collection of firewood.
41. Cameco reported that the SMOE would only grant a Release from Decommissioning and Reclamation<sup>18</sup> under the condition that the properties were released from CNSC licensing to allow for their transfer into the ICP. In its submission, Cameco informed the Commission that the SMOE had issued letters of intent on February 9, 2017 and April 5, 2019 indicating that the SMOE was satisfied that Cameco had adequately addressed all comments from stakeholders and authorities in regard to its request for release from further decommissioning for the 20 Beaverlodge properties. Cameco further noted that the process for release from licensing and the transfer into institutional control being followed for these 20 properties mirrors the process that was followed in 2009 when the Commission agreed to release five Beaverlodge properties from CNSC licensing, with their subsequent acceptance by the SMER into the ICP.<sup>19</sup>
42. CNSC staff submitted that it had verified that the 19 properties proposed for release from CNSC licensing and transfer into the ICP were safe and would remain safe in perpetuity through continued monitoring carried out under the ICP. CNSC staff noted that 9 of the 19 properties that were proposed for transfer into the ICP would be transferred in whole. In regard to the 10 other properties, only portions of those properties would be transferred into the ICP, with the remaining portions of those properties being eligible for release from CNSC licensing without additional regulatory oversight since they meet unconditional clearance levels as defined in Schedule 2 of the NSRDR and satisfy subsection 5(1) of the NSRDR. These 10 properties include: HAB 3, HAB 6, JO-NES, EAGLE 1, RA 6, RA 9, ATO 26, EXC ACE 1, ACE 10 and URA 3.

#### 4.1.1 Acceptable Gamma Levels

43. The Commission considered the information submitted by Cameco regarding the gamma surveys carried out on the Beaverlodge properties, noting the acceptance criteria for release from licensing included a “Reasonable use scenario demonstrating gamma levels at the site are acceptable.” Cameco reported that the *Saskatchewan*

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<sup>18</sup> In accordance with the *The Reclaimed Industrial Sites Regulations 2017*, Ch. R-4.21 of *The Statutes of Saskatchewan, 2006*, as amended by *The Statutes of Saskatchewan, 2014*, c.E-13.1; and 2018, c.32.

<sup>19</sup> CNSC Record of Proceedings, Including Reasons for Decision – Cameco Corporation, *Application to Renew the Beaverlodge Mine and Mill Site Waste Facility Operating Licence and to Exempt Five Decommissioned Sites*, issued 14 March 2009.

*Guidelines for Northern Mine Decommissioning and Reclamation* gamma screening level criteria on reclaimed sites limit residual gamma levels to a maximum of 1  $\mu\text{Sv}/\text{hour}$  above the natural range of variability over a one hectare area (screening level criteria).

44. Cameco submitted that a gamma survey of the areas of the Beaverlodge properties that were disturbed by past mining operations and that were reasonably accessible was completed in 2014. Cameco also submitted that, where the properties met the screening criteria for residual gamma levels of less than 1  $\mu\text{Sv}/\text{hour}$  above background over a one hectare, those areas were considered acceptable for transfer into the ICP from a gamma radiation perspective.
45. In regard to properties for which the gamma survey measured radiation levels higher than the screening level criteria, Cameco provided information about the risk-based approach that was used to assess the potential risks to members of the general public, including consultation with local community members and about expected land use activities. Cameco further submitted that the assessment included both conservative and realistic approaches, and that the estimated cumulative doses from the Beaverlodge properties for both approaches were well below the public dose limit of 1 mSv/year. Cameco reported that the assessments showed that the 20 properties proposed for release from licensing meet the “acceptable gamma levels” performance indicator, with all gamma survey details included in the Final Closure Reports for the properties.
46. CNSC staff submitted that it was satisfied with the site-wide Beaverlodge gamma survey and associated report that were completed in 2014, as well as the Beaverlodge site gamma radiation risk evaluation report that Cameco submitted to the CNSC in 2015. CNSC staff further submitted that the reports were accepted by the CNSC after Cameco had addressed CNSC staff’s comments on the reports. CNSC staff reported that it was satisfied that the regulatory acceptance criterion of “reasonable use scenario demonstrating that gamma levels at the site are acceptable” was met for the 20 Beaverlodge properties for which Cameco had requested release from CNSC licensing.
47. The Commission requested additional details about the methodology used to complete the Beaverlodge gamma survey. The Cameco representative explained that Cameco staff and third-party experts conducted the survey, which first involved a detailed walking survey to model the properties so that the areas that had been disturbed by mining activities could be safely accessed. The Cameco representative stated that this modelling was followed by the gamma surveys, during which a grid was set out and continuous readings were collected by a worker walking or driving an off-road vehicle, with all of the readings resulting in a weighted average dose rate over a 10 m by 10 m area. This weighted average dose rate was averaged for a one hectare area, which was then compared against the screening level criteria.

48. In regard to identifying areas that had significant ranges in dose rates, or specific locations with higher dose rates or ‘hot spots’, the Cameco representative explained that the survey methodology allowed Cameco to identify locations with elevated readings, but noted that the intent of the gamma survey was to determine whether the dose rates at the Beaverlodge properties met the screening level criteria. The Cameco representative confirmed that Cameco had collected location-specific information about the dose rates on the properties but, for reporting purposes, these were averaged.
49. Further on this topic, the Cameco representative provided the Commission with details about risk assessments that were carried out for reasonable land use scenarios in order to determine whether those areas presented any risk of an individual exceeding the annual public dose limit of 1 mSv/year. The Cameco representative confirmed that the 20 Beaverlodge properties proposed for release from CNSC licensing do not present such a risk to the public. The Commission is satisfied with the information provided on the Beaverlodge gamma survey and associated methodology, but is of the view that additional administrative controls may be required for specific locations on the properties with significantly higher dose rates (hot spots). The Commission’s detailed consideration of the Beaverlodge Site Land Use Study is found in section 4.2 of this *Record of Decision*.
50. The Commission considered the concerns expressed by the Athabasca Chipewyan First Nation (ACFN) and the Ya’thi Néné Land and Resource Office (Ya’thi Néné) about health effects resulting from exposure to former uranium mining sites, such as higher cancer rates, and requested information from the Northern Saskatchewan Medical Health Officer (NSMHO) about these issues. The NSMHO reported that he had worked in partnership with the Saskatchewan Cancer Agency, the Northern Inter-Tribal Health Authority and the Athabasca Health Authority in regard to the assessment of cancers in northern Saskatchewan. The NSMHO provided the Commission with information about health status in cancer assessments that had been carried out at the request of northern Saskatchewan communities, noting that the first report was issued in 1992 and considered data from 1967 to 1982, and that three other reports had since been issued, with regularly updated reports available to the communities through web-based health status reports. The NSMHO also stated that a cancer cluster assessment was carried out in Black Lake in 1996, with a second cancer cluster assessment carried out in Uranium City in 2002.
51. The NSMHO explained that the health assessments showed that, up until 2014, the northern Saskatchewan cancer rate for females and males was statistically equivalent to and slightly lower than the provincial cancer rates. However, the NSMHO informed the Commission that the cancer rates were predicted to increase due to smoking rates in northern Saskatchewan. The NSMHO stated that, in Canada as a whole, smoking rates were at about 20% whereas the recent First Nations Food, Nutrition & Environment Study,<sup>20</sup> which included First Nations in northern Saskatchewan, showed that the smoking rate in these communities was at approximately 79%, leading to increased cancer rates. Specifically, the NSMHO reported that, although the male cancer rate was

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<sup>20</sup>First Nations Food, Nutrition & Environment Study, <http://www.fnfnes.ca/> (accessed 20 November 2019).

decreasing provincially, this decrease was not yet seen in the Athabasca region. In regard to pediatric cancer rates, the NSMHO stated that a recent study carried out over 25 years found that pediatric cancer rates in northern Saskatchewan were low at 7 per 100,000, as compared to 14 per 100,000 provincially and 16 per 100,000 nationally.

52. Asked to respond in regard to the intervention from the Ya'thi Néné which indicated that cancers within its members had increased in the past years, the NSMHO stated that populations in First Nations communities have increased and include a large aging population, with the number of Elders in communities increasing significantly. The NSMHO stated that these population changes have led to increased cancer numbers and rates in First Nations communities. The NSMHO also emphasized that environmental monitoring has consistently shown the absence of correlation between cancer rates and air, water and country food quality. The NSMHO noted that incidences of cancers varied from one five-year cycle to the next, as well as from community to community and that, for this reason, trending over 10 to 15 years and within larger populations was the preferred method used for the identification of any meaningful changes in cancer rates.
53. The NSMHO further informed the Commission that, following a meeting with the Ya'thi Néné and subsequent discussions with the Saskatchewan Cancer Agency, it was agreed that the 2014 cancer study would be updated and that the update would include the Wollaston Lake First Nation and the Hatchet Lake First Nation, in addition to the Athabasca Health Authority. The NSMHO acknowledged that continued communication in regard to cancer risks and screening programs was important to prevent and reduce the risk of cancer.
54. Asked for comment in regard to the information provided by the NSMHO, the Ya'thi Néné representative stated that the Ya'thi Néné appreciated that a cancer study encompassing its region would be carried out. The Commission appreciated the detailed information provided by the NSMHO on health assessments and cancer rates in northern Saskatchewan. The Commission anticipates that the appropriate authorities will update health and cancer rate studies for northern Saskatchewan communities as discussed during this hearing.
55. In regard to the concerns expressed by the ACFN about radiation poisoning from former uranium mine sites having affected some of its members, the NSMHO informed the Commission that, though such information would be more readily available from the Saskatchewan Ministry of Labour Relations and Workplace Safety and related organizations, the NSMHO had not encountered any cases of radiation poisoning in northern Saskatchewan since commencing work in that area in 1985. Asked by the Commission about this issue, CNSC staff indicated concurrence with the information provided by the NSMHO. The Commission appreciates and is satisfied with the detailed information provided by the NSMHO on this issue and is satisfied that the Beaverlodge properties do not pose a risk of radiation poisoning.

56. In considering the use of the Beaverlodge properties as submitted by the ACFN and noting that the HAB 3 property includes a portion of Pistol Lake, and that this lake contains elevated radium and uranium levels, the Commission enquired about the risk posed by a person establishing a camp in that area for an extended period of time. The Cameco representative stated that the gamma survey and the land use study showed that, under the reasonable use scenarios, an individual would not exceed the 1 mSv/year regulatory public dose limit at that property. The Cameco representative added that, to exceed the public dose limit, an individual would have to spend an unreasonable amount of time at the Beaverlodge properties and that the intended state of these properties is that they are safe for casual access and traditional use activities, such as hunting and fishing. The Commission is satisfied with the information provided on this issue.
57. Based on the information provided, the Commission is satisfied that Cameco has demonstrated that the Beaverlodge properties considered for this application meet the regulatory acceptance criterion for the “acceptable gamma levels” performance indicator, supporting release from CNSC licensing in anticipation of free releasing the EXC 2 property and transferring the remaining 19 Beaverlodge properties to the ICP.
58. Though the Commission is satisfied that transferring the 19 Beaverlodge to the ICP will not pose a risk to persons or the environment, the Commission is of the view that administrative controls for Beaverlodge properties with areas of significantly higher dose rates (hot spots) should be in place. Recognizing that the responsibility for these properties when transferred to the ICP will lie with the province of Saskatchewan, the Commission encourages Cameco and the province of Saskatchewan to collaborate in determining a suitable administrative control mechanism to identify these areas with higher dose rates for properties in the ICP.
59. The Commission also recognizes the concerns expressed by First Nations and the Métis Nation about the health of people living near and/or using the Beaverlodge properties. The Commission encourages the province of Saskatchewan and Cameco to leverage ongoing studies to provide more information in this regard to First Nations and the Métis Nation, and anticipates that health and cancer rate studies for northern Saskatchewan communities will be updated as discussed during this hearing.

#### *4.1.2 Boreholes Plugged*

60. The Commission considered the information submitted by Cameco and CNSC staff regarding the performance indicator for the plugging of exploration boreholes on the 20 Beaverlodge properties being proposed for release from CNSC licensing, noting that the regulatory acceptance criteria for this indicator required that “All boreholes have been sealed.”

61. Cameco submitted that all of the boreholes located on the Beaverlodge properties proposed for release from licensing have been sealed, with 14 boreholes having been found to exhibit, or could exhibit, the potential for groundwater associated with historic underground mine workings to rise to the surface. Cameco further submitted that seven of these boreholes were plugged in 2011, are inspected annually, show no evidence of flows, and will continue to be inspected under the ICP. Cameco reported that the seven remaining boreholes which showed no evidence or potential of groundwater flow were plugged as a precaution. Cameco also reported that a permanent record of borehole locations associated with the Beaverlodge properties would be provided to the province of Saskatchewan upon the transfer of the properties to the ICP.
62. CNSC staff reported that its inspections had shown that all of the boreholes identified on the Beaverlodge properties being considered in this matter have been sealed to prevent groundwater outflow to the surface, meeting the regulatory acceptance criterion for this performance indicator.
63. The Commission enquired about the methodology that was used to plug the boreholes on the Beaverlodge properties. The Cameco representative explained that Cameco aimed to plug the boreholes to a depth of 30 meters below the surface and then backfill them with grout but noted that, for some boreholes, issues such as blockages prevented Cameco from plugging the boreholes to the full 30 meters. The Commission is satisfied with the information provided on this point but notes that Cameco was not able to provide information on the expected lifespan of the grout used to backfill the boreholes. Although the Commission is satisfied that not having information about the lifespan of the grout does not present an impediment to release from licensing of these properties, the Commission directs Cameco to have this information available for future proceedings in regard to the release of Beaverlodge properties from CNSC licensing.
64. Based on the information provided, the Commission is satisfied that Cameco has met the regulatory acceptance criterion for the “boreholes plugged” performance indicator, supporting release from CNSC licensing in anticipation of free releasing the EXC 2 property and transferring the remaining 19 Beaverlodge properties to the ICP.

#### *4.1.3 Stable Mine Openings*

65. The Commission considered the performance indicator related to stable mine openings on the Beaverlodge properties. Cameco submitted that, since 2014, the scope of this performance indicator was expanded to include all mine openings – not only vertical mine openings – and was renamed “stable mine openings,” with the regulatory acceptance criterion being that the “Caps have been signed off by a qualified person.” Cameco further submitted that only the HAB 2A, RA 6, RA 9, JO-NES and URA 3 properties being proposed for release from CNSC licensing had mines openings, that the openings had been sealed through approved methods, and that they were safe and secure. Cameco further stated that the raises on the HAB 2A, URA 3 and JO-NES

properties had been sealed with a stainless steel cap with a certified usable lifespan of 1,200 years.

66. Cameco reported that the adit on the RA 6 property had been secured using a steel grate attached to bedrock, providing a permanent closure to the mine. In regard to the RA 9 and JO-NES adits, Cameco submitted that these were covered with waste rock.
67. CNSC staff reported that five of the 20 Beaverlodge properties for which a release in licensing was being requested had mine openings and that the installation of stainless steel caps was initiated in 2016, with most of the caps expected to be installed by the end of 2019. CNSC staff noted that the installation of the stainless steel caps was, or would be, signed off by qualified persons, with this performance indicator meeting the regulatory acceptance criterion for release from CNSC licensing.
68. Based on the information provided, the Commission is satisfied that Cameco has met or will meet the regulatory acceptance criterion for the “stable mine openings” performance indicator for the five Beaverlodge properties with mine openings, supporting the release of the 20 Beaverlodge properties from CNSC licensing in anticipation of free releasing the EXC 2 and transferring the remaining 19 Beaverlodge properties to the ICP. The Commission notes that the stainless steel caps on the mine openings will all be installed by the end of 2019 and expects Cameco to have completed the installation prior to the transfer of the Beaverlodge properties to the ICP.

#### *4.1.4 Stable Crown Pillar*

69. The Commission considered the performance indicator relating to stability of the crown pillars at the Beaverlodge site. Cameco submitted that, in accordance with the regulatory acceptance criteria of “Crown pillar assessed, remediated (if required), and signed off by a qualified person,” a site-wide crown pillar stability assessment was carried out by a third-party expert in 2015, with no areas of concern noted in relation to the 20 decommissioned Beaverlodge properties being requested to be released from CNSC licensing.
70. CNSC staff submitted that, based on the surface subsidence in the Lower Ace Creek area, a crown pillar assessment was completed in 2014 for the Martin Lake area, as well as the four areas that have mine workings close to the surface including the HAB, Dubyna, Bolger/Verna and Lower Ace Creek areas. CNSC staff reported that Cameco submitted its crown pillar assessment report to the CNSC in 2015 and that the report was accepted by CNSC staff in 2016. CNSC staff further reported that, based on the assessment, it was satisfied that the crown pillars in those Beaverlodge areas were stable and that the regulatory acceptance criteria for this performance indicator was met.

71. In considering the intervention from the Saskatchewan Environmental Society (SES), the Commission enquired about the nomenclature used by Cameco and CNSC staff to describe crown pillar stability. Specifically, the Commission noted that the terminology used included “no indication of subsidence” for the HAB 3 property, “low likelihood of subsidence” for the JO-NES property, and “no immediate subsidence” for the RA 6 property, and requested clarity on how these terms related to crown pillar stability. The Cameco representative explained that the terms were different ways of describing the same general level of risk, specifically that the crown pillars on the 20 properties proposed for release from CNSC licensing were found to be at a low level of risk for failure, as reported in the 2015 crown pillar assessment report.
72. Further on the topic of the crown pillar stability assessment, the Commission enquired about how such an assessment was carried out. The Cameco representative explained that the crown pillar assessment methodology was based on a standardized process and that all 65 Beaverlodge properties had been assessed in 2014. The Cameco representative further explained that the assessment consisted of a comprehensive desktop review, including the review of information such as historical mine records and drawings, and that, based on that review, additional field investigations were carried out at specific properties. The Cameco representative explained that, during the field investigations, ground-penetrating radar was used to measure material competency between the surface and the mine workings, and that, based on the radar assessments, additional targeted drilling of exploratory boreholes at several properties was carried out, as needed.
73. Also in considering the intervention from the SES, the Commission asked CNSC staff about how it verified the accuracy of Cameco’s crown pillar stability report. CNSC staff responded that, in addition to visual inspections carried out by CNSC staff, a CNSC geological specialist reviewed the crown pillar stability assessment report and had indicated agreement with the conclusion that the 20 properties being considered in this matter presented a low risk of subsidence. The CNSC geological specialist had also agreed with the finding that the properties did not require follow-up crown pillar stability investigations other than the continued visual inspections that were planned following the properties’ transfer into the ICP. The Commission notes that, in CNSC staff’s CMD 19-H6.A, CNSC staff reported that field inspections in some areas of the Beaverlodge site were limited by geography but that these areas were assessed as unlikely to contain any mining structures. The Commission is satisfied with the detailed information about the Beaverlodge crown pillar stability assessment that was provided during this hearing.
74. Based on the information provided, the Commission is satisfied that Cameco has met the regulatory acceptance criteria for the “stable crown pillar” performance indicator for the Beaverlodge areas with mine workings close to the surface, supporting the release of the 20 Beaverlodge properties from CNSC licensing in anticipation of free releasing the EXC 2 and transferring the remaining 19 Beaverlodge properties to the ICP. The Commission expects that crown pillar stability of the properties proposed for

transfer into the ICP will continue to be inspected on a regular basis as detailed in the materials submitted for this hearing and the submitted ICP inspection plan.

*4.1.5 Site Free from Debris*

75. The Commission considered the information provided by Cameco on how Cameco had ensured that debris from past mining operations was removed from the 20 Beaverlodge properties proposed for release from licensing and that the properties met the regulatory acceptance criterion of “Site free of former mining debris at the time of transfer to the ICP.” Cameco submitted that it used GPS tracking – which is detailed in the Final Closure Reports for the 20 Beaverlodge properties – while carrying out property surveys for debris in order to ensure adequate coverage of the properties. Cameco also submitted that any debris that was found during the surveys was disposed of in the Bolger Pit and the Lower Fay Pit, in accordance with regulatory approvals.
76. CNSC staff reported that, based on the Beaverlodge Final Closure Reports and the visual evidence of debris removal, it was satisfied with Cameco’s debris removal efforts for the 20 Beaverlodge properties. CNSC staff further reported that it was satisfied that the 20 Beaverlodge properties being requested for release from licensing were free of former mining debris, meeting the regulatory acceptance criterion.
77. In response to the concerns about the legacy exploration cores stored on the Beaverlodge properties, as raised by the Métis Nation-Saskatchewan (MN-S) in its intervention, the Cameco representative explained that the cores were removed and disposed of in open pits on the Beaverlodge properties, in accordance with regulatory approvals. Based on the information provided, the Commission is satisfied that Cameco has appropriately disposed of the legacy exploration cores and that they no longer pose a health and safety risk at the Beaverlodge site.
78. The Commission considered the concern raised by the SES regarding risk to wildlife from the historic spilled tailings on the URA 5 property. CNSC staff submitted that the historic spilled tailings were unpalatable and were not considered to be a primary food source for wildlife in the area. As such, CNSC staff was of the view that exposure to high levels of metals and radionuclides from the spilled tailings was unlikely and had assessed the risk to wildlife from exposure to these tailings as low. CNSC staff also noted that, although Lower Ace Creek passed through the URA 5 property, monitoring had shown that water quality was not being negatively impacted by the URA 5 property. The Commission notes that historic spilled tailings were identified at the EXC ACE 1, URA 5, EXC URA 5 and ACE 2 properties and that, based on the information provided during this hearing and in the written submissions, the Commission is satisfied that the risk to wildlife from the historic spilled tailings is, and will remain, low.

79. Asked about the tailings pipelines that had been developed on several Beaverlodge properties, the Cameco representative explained that these pipelines were used to transfer tailings to the tailings management areas. The Cameco representative further explained that tailings from the Beaverlodge mining operations were separated into a coarse fraction – approximately 40% to 42% of the tailings – and a fine fraction. The Cameco representative added that the coarse fraction was returned underground, whereas the fine fraction was pumped via steel, wood or stave pipelines to impoundments within the tailing management areas and that this transfer sometimes led to spilled tailings on the Beaverlodge properties. The Commission is satisfied with the information provided in regard to the Beaverlodge tailings pipelines.
80. Based on the information provided, the Commission is satisfied that Cameco has met the regulatory acceptance criterion for the “site free from debris” performance indicator, supporting release from CNSC licensing in anticipation of free releasing the EXC 2 property and transferring the remaining 19 Beaverlodge properties to the ICP. The Commission anticipates that the risk to persons, animals and the environment from historic spilled tailings at the Beaverlodge properties will remain low and will continue to be monitored following the properties’ transfer into the ICP.

#### *4.1.6 Water Quality Within Modelled Predictions*

81. The Commission considered the information provided by Cameco on the methodology used by Cameco to confirm that water quality at the 20 properties being proposed for release from licensing met the acceptance criterion of “Water quality data is stable/improving.” Cameco submitted that an inspection of the properties showed that the 20 properties being proposed for release from licensing were not anticipated to have a measurable influence on the downstream water quality.
82. CNSC staff reported that annual reports submitted to the CNSC comparing water quality at the Beaverlodge site with modelled predictions were submitted to the CNSC and that most monitoring stations showed water quality to be within modelled predictions. CNSC staff submitted that the 20 properties being proposed for release from licensing do not affect water quality at the Beaverlodge site because the properties are either not adjacent to a water body or, for properties that are adjacent to water bodies, CNSC staff is satisfied that adequate remediation was completed to limit releases to surface water. CNSC staff noted that, for those monitoring stations that were not meeting predictions, follow-ups and a reassessment of risk were going to be carried out by Cameco and that the results would be presented to the Commission should Cameco apply to have additional properties released from CNSC licensing.
83. The Commission considered the water quality information and the potential impacts on the traditional activities carried out at the Beaverlodge site as submitted by the ACFN, the Ya’thi Néné and the MN-S, and asked about CNSC staff’s assessment in regard to the safety of the Beaverlodge properties for traditional uses. CNSC staff noted that there were fish consumption advisories related to elevated selenium levels at several

properties. In regard to elevated uranium and radium levels in the waterbody on the EAGLE 1 property, CNSC staff stated that the waterbody's surface water quality results between 1995 and 2015 showed uranium concentrations of 134 µg/L to 856 µg/L, and radium-226 levels of 0.29 Bq/L to 0.65 Bq/L, which were significantly above the *Saskatchewan Environmental Quality Guidelines*<sup>21</sup> for Freshwater Aquatic Life<sup>22</sup> and for potable water.<sup>23</sup> CNSC staff further explained that the waterbody was a human-made pit with a small footprint, was difficult to access, and did not represent a habitat for aquatic species. The Cameco representative added that, if transferred to the ICP, the EAGLE 1 property would be subject to administrative controls, and explained how these controls, as well as how modifications that had already been made to the pit, would help ensure the safety of people using that property.

84. In regard to the dose rate calculations related to the consumption of the water from the human-made pit on the EAGLE 1 property, CNSC staff stated that a drinking water assessment carried out by CNSC staff showed that six days of full-time occupancy using the pit water as the sole source of drinking water would be required to result in a dose of 10 µSv. CNSC staff further explained that the Beaverlodge land use study, as considered in section 4.2 of this *Record of Decision*, showed an average annual use of the Beaverlodge properties of 50 hours / person and that the risk to humans from consumption of water from the EAGLE 1 pit was low.
85. In response to a Commission enquiry on this same topic, CNSC staff specified that the limiting dose of 10 µSv was an internal dose to the recipient, was based on uranium and radium intake, and was calculated using an internal dosimetry software with the models taking into account the radionuclides' half-lives and their distribution to critical organs during exposure.
86. Further on the issue of the consumption of water from the pit that contained uranium and the risks presented by uranium, the Commission noted that CNSC staff had only addressed the radiological risk and asked about the toxicological risk. CNSC staff responded that the drinking water assessment for the EAGLE 1 pit considered, in addition to radiological risk, the toxicological risk from uranium. CNSC staff further responded that, although this information was not included in the written materials submitted for this hearing, CNSC staff's assessments on the toxicological risk of consumption of the pit water showed that the water from the EAGLE 1 pit could be safely consumed as a sole source of drinking water for 7 to 50 days.

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<sup>21</sup> *Saskatchewan Environmental Quality Guidelines*, [envrbrportal.crmp.saskatchewan.ca/seqg-search/](http://envrbrportal.crmp.saskatchewan.ca/seqg-search/) (accessed on 2 October 2019).

<sup>22</sup> *Saskatchewan Environmental Quality Guidelines* for freshwater aquatic species are 15 µg/L for uranium and 0.11 Bq/L for radium-226.

<sup>23</sup> *Saskatchewan Environmental Quality Guidelines* for potable water are 20 µg/L for uranium and 0.5 Bq/L for radium-226.

87. The Commission is satisfied with the information provided by Cameco and CNSC staff about the radiological and toxicological risks presented by the water in the EAGLE 1 pit. The Commission recommends, however, that future assessments clearly show how uranium toxicology is considered in such risk assessments, noting that the *Saskatchewan Environmental Quality Guidelines* for both freshwater aquatic species and for potable water include uranium concentration limits in µg/L, which are based on kidney toxicity, rather than in Bq/L, which indicate guidelines based on radiological toxicity.
88. In considering the interventions from the ACFN, the Ya'thi Néné and the MN-S, the Commission enquired about whether there were fishing or drinking water advisories at any of the natural waterbodies on the 20 Beaverlodge properties proposed for release from CNSC licensing. The Cameco representative responded that fish consumption advisories in respect of Beaverlodge Lake and Martin Lake, which are downstream of the Beaverlodge properties, were in place. CNSC staff explained that the province of Saskatchewan's fishing advisory for Beaverlodge and Martin Lakes was changed to a healthy fishing advisory in 2016, recognizing that fish consumption from those lakes was healthy as long as it remained within specified limits. CNSC staff added that the consumption advisory is based on selenium concentrations in fish, whereas the drinking water advisory is based on elevated uranium concentrations in those lakes.
89. Further in regard to fishing and drinking water advisories, the Cameco representative stated that Uranium City obtains its drinking water from Fredette Lake, which is upstream of Uranium City and is not impacted by nearby historic mining operations. The Cameco representative further informed the Commission that, through the Eastern Athabasca Environmental Monitoring Program (EARMP), community-based monitoring was carried out by all seven First Nations communities in Eastern Athabasca, and that water quality monitoring has shown that water is consistently of good quality and below the limits as set out in the *Saskatchewan Environmental Quality Guidelines*. The Commission is satisfied with the information provided by Cameco and CNSC staff about fishing and drinking water advisories at the Beaverlodge properties proposed for release from licensing.
90. Asked about waste rock acid generation, the Cameco representative explained that sulfide-based ores could lead to sulfides in waste rock which, over time, had the potential to generate acid following oxidation by water or air. The Cameco representative further stated that the ores mined at the Beaverlodge site were primarily carbonate-based, with very few sulfide-based minerals present, and that this reduced the acid generation potential of the waste rock. The Cameco representative explained that Cameco had confirmed the acid generation potential of the waste rock through extensive waste rock sampling during the decommissioning process and that, during 34 years of monitoring, there had been no indication of potential waste rock acid generation at the Beaverlodge site. The Commission is satisfied with the information provided on this topic.

91. Based on the information provided, the Commission is satisfied that, due to the location of the 20 properties being recommended for release from licensing, the properties do not affect water quality at the Beaverlodge site. The Commission is satisfied that Cameco is adequately monitoring the water quality at the Beaverlodge site and implementing remediation options as required to ensure that water quality continues to trend towards stable and improving. Therefore, the Commission is satisfied that Cameco has met the regulatory acceptance criterion for the “water quality within modelled predictions” performance indicator, supporting release from CNSC licensing in anticipation of free releasing the EXC 2 property and transferring the remaining 19 Beaverlodge properties to the ICP.
92. Based on the interventions from First Nations and the Métis Nation, the Commission is of the view that the information disseminated about the status of waterbodies, including drinking water and fishing advisories, at the Beaverlodge properties may not be sufficient. The Commission expects Cameco to engage with the First Nations and the Métis Nation in this regard, and encourages increased transparency of the status of Beaverlodge waterbodies on properties proposed for transfer into the ICP. The Commission anticipates updates on these engagement activities during future Commission proceedings regarding the Beaverlodge properties.

#### **4.2 Beaverlodge Site Land Use Study**

93. Cameco submitted that, in December 2014, it had retained a consultant to carry out a Beaverlodge site land use study.<sup>24</sup> Cameco further submitted that the land use study was carried out through interviews with Uranium City residents to gain information about which Beaverlodge properties the residents travelled to; the amount of time that they spent on those properties; the age groups that frequented those properties; and the types of activities that the residents carried out on those properties. Cameco also submitted that the information gathered from this study was used to assess risk from potential gamma exposure in various land use scenarios, as identified by the interviewed land users.
94. CNSC staff submitted that the results of the study were documented in the Beaverlodge land use report and submitted to CNSC staff in April 2015. CNSC staff further submitted that the interviews with the Uranium City residents focused on land use in the five years before the study was conducted, as well as the interviewees’ expected land use in the foreseeable future. CNSC staff reported that the study showed that the maximum reported recreational and traditional use of any of the Beaverlodge properties by Uranium City residents, during the five-year study period, did not exceed 50 hours per year.
95. Upon enquiry, CNSC staff explained that the Beaverlodge land use study did not include historic traditional land use of the Beaverlodge properties. Rather, the study

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<sup>24</sup> 2014 *Uranium City Consultation on Land Use*, prepared for Cameco Corporation and Saskatchewan Research Council, prepared by SENES Consultants and Kingsmere Resources Service, January 2015.

was intended to assess the risk to land users that were and would be using the decommissioned Beaverlodge properties.

96. The Commission reviewed the information submitted by the ACFN regarding the ACFN members' use of the Beaverlodge site. Specifically, the Commission considered the assertion that the Beaverlodge site land use study did not accurately represent the ACFN's use of and time spent on the lands, and enquired about the methodology that was used for the study. The Cameco representative explained that the Beaverlodge land use study focussed on Uranium City residents since, at 8 km from the Beaverlodge site, they would be expected to spend the most time at the Beaverlodge properties. The Cameco representative further stated that the study response rate was 62%, with the third-party expert who carried out the study reporting that the results represented a good cross-section of community land users, including key land users such as trappers and local Elders. The Cameco representative also reported that the study considered access to the Beaverlodge properties via road vehicles, as well as by vehicles that are not dependent on roads such as all-terrain vehicles, ski-doo's and boats.
97. In regard to the dose assessment referred to in the land use study and the concerns expressed by the Ya'thi Néné in this regard, the Cameco representative explained that the results from the Beaverlodge gamma survey – which are considered in section 4.1.1 of this *Record of Decision* – were used for this dose assessment. The Cameco representative further stated that the estimated dose to a receptor for all 65 Beaverlodge properties was well below the public dose limit of 1 mSv per year.<sup>25</sup> In regard to sensitivity analyses carried out for the survey, the Cameco representative stated that the survey did include a sensitivity analysis which showed that an individual would have to spend a significant amount of time in one specific area, rather than moving around the properties, to reach the public dose limit and that this was not considered to be a reasonable land use scenario.
98. Upon further enquiry, the Cameco representative provided information about how the Beaverlodge gamma survey included conservative land use assumptions and scenarios, noting that the dose assessment included a cumulative dose scenario which assumed that a person went to all 65 properties and spent the maximum amount of time at the properties, as indicated by the land use study. The Cameco representative stated that this cumulative dose scenario showed that the dose received by a receptor would remain below the public dose limit.
99. During the ACFN's oral intervention, the ACFN representative expressed a concern about the land use study finding that the traditional use of any of the Beaverlodge properties would not exceed 50 hours per year. The ACFN representative further stated that it was not unreasonable for a person practicing traditional activities, such as hunting and trapping, to spend a week or two in one area. The Commission requested additional information on how a higher use of the Beaverlodge properties would affect the risk to the land users. CNSC staff responded that, even at an annual usage higher than the estimated 50 hours per person, the estimated dose to receptors remained very

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<sup>25</sup> SOR/2000-203

low, with no risk to human health. In regard to concerns about cumulative doses to children who returned to the Beaverlodge site annually during their lifetime, CNSC staff stated that the human health risk assessment showed that the cumulative lifetime dose was also low and presented no risk to human health. The Commission is satisfied with the information provided on the dose assessments that were carried out for the users of the Beaverlodge properties.

100. The Commission enquired about the ACFN's planned future use of the Beaverlodge properties proposed for transfer into the ICP. The ACFN representative responded that, although the Beaverlodge site is within the ACFN's traditional territory, not all Elders may feel comfortable returning to and using the areas. The ACFN representative further stated, however, that some ACFN members do currently use the land – and would like to keep using the land – for the peaceful enjoyment of treaty rights, as they always have.
101. In its intervention, the MN-S informed the Commission that the state of the environment around Uranium City was very important to its members and that those lands, including the Beaverlodge properties, were akin to a grocery store to MN-S members since they hunted, fished and gathered berries on those lands. Considering this information, the Commission enquired about how the MN-S would use the Beaverlodge properties proposed for transfer into the ICP. The MN-S representative responded that, although those properties were rugged and barren, road access allowed for hunting, fishing, and the cutting of wood, and that the MN-S members would continue carrying out these traditional activities on those lands.
102. The Commission carefully considered the interventions from the ACFN, the Ya'thi Néné and the MN-S about the land use study and future Beaverlodge land use, and expressed the view that Cameco's Beaverlodge land use study may not fully represent all of the communities using the properties. The Commission stated that, based on the interventions, it was clear that Uranium City residents were not the only people using the Beaverlodge site and, had Cameco extended an invitation to allow the broader community to participate in the Beaverlodge land use study, this may have provided a more representative view of the properties' current and future use. In response, the Cameco representative stated that Cameco was of the opinion that the land use study was conservative enough to ensure that it would apply to any land user of the decommissioned Beaverlodge properties. However, in considering the interventions and the Commission's enquiries on this issue, the Cameco representative stated that Cameco was willing to share the study findings with any interested First Nations and the Métis Nation, and to engage with them in addressing their concerns in regard to the land use study.
103. The Commission acknowledges the efforts made by Cameco in carrying out the Beaverlodge land use study. However, based on the information provided by intervenors, Cameco and CNSC staff for this hearing, the Commission recognizes that the Beaverlodge properties are used by not only residents of Uranium City, but also by members of several First Nations and the Métis Nation. For this reason, the

Commission is of the view that the scope of the study could have been broader to include and better represent the range of users of the Beaverlodge properties. On this basis, the Commission expects Cameco and CNSC staff to continue engaging with users of the Beaverlodge properties to ensure a comprehensive understanding of their use of these lands and any associated concerns, and to help ensure that First Nations and the Métis Nation feel comfortable to continue practicing traditional activities on the Beaverlodge properties. The Commission anticipates updates on these engagement activities during future proceedings considering the Beaverlodge properties.

#### **4.3 Transfer to the Province of Saskatchewan's Institutional Control Program**

104. The Commission considered the proposed transfer of the 19 Beaverlodge properties for which Cameco is requesting a release from CNSC licensing into the Saskatchewan ICP. Cameco submitted that, should the Commission release the 19 properties intended for transfer into the ICP from CNSC licensing, the SMOE would grant Cameco a Release from Decommissioning and Reclamation, akin to the process followed when the SMER accepted five Beaverlodge properties into the ICP in 2009.<sup>26</sup>
105. In its submission, Cameco noted that the SMER had proposed that, based on the absence of historic mining and milling activities, some portions of the 19 properties need not be transferred into the ICP and are eligible for free-release. Cameco submitted that the portions of the 19 properties that were planned to be free released do not require licensing under the NSCA or institutional control because they are below the unconditional clearance levels as defined in Schedule 2 of the NSRDR. Cameco also reported that, for some properties, the proposed ICP boundaries would extend beyond the current property boundaries due to property aspects that the SMER had indicated would require monitoring under the ICP.
106. The Commission considered the ICP overview submitted by CNSC staff, including the operation and funding of the ICP. CNSC staff provided details about the two ICP funds, including the Institutional Control Monitoring and Maintenance Fund (ICMMF) and the Institutional Control Unforeseen Events Fund (ICUEF). CNSC staff further explained that the ICP was fully operated by the SMER, including the monitoring and maintenance of properties in the ICP. The ICP thus provided assurance that its monitoring program would ensure that these properties would remain safe, secure and stable, meeting the requirements of section 11 of the GNSCR, should the Commission release the requested Beaverlodge properties from licensing under the NSCA and grant the province of Saskatchewan an exemption under section 7 of the NSCA for the 19 properties intended for transfer to the ICP.
107. CNSC staff submitted that, under the NSCA and the NSRDR, undisturbed and remediated areas that have an inventory of nuclear substances below unconditional clearance levels and that do not require institutional control would not require licensing under the NSCA or an exemption from licensing. As such, CNSC staff submitted that

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<sup>26</sup> *Supra* note 19.

these areas, including the EXC 2 property and some portions of properties proposed to be transferred into the ICP (as detailed in the materials submitted for this hearing), do not require licensing under the NSCA and could be, by operation of law, free released. Conversely, CNSC staff reported that, for properties that have quantities of nuclear substances above exemption quantities/clearance levels, Cameco would require a release from CNSC licensing, and the province of Saskatchewan would need to be granted an exemption from CNSC licensing for these properties in order for them to be accepted into the ICP.

108. CNSC staff reported that Saskatchewan's ICP was set up in a manner to ensure that Canada's international obligations, including those under the *Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management*<sup>27</sup> (Joint Convention), were met. CNSC staff submitted that national security and Canada's international nuclear non-proliferation obligations would continue to be maintained for the properties proposed for transfer to the ICP because the ICP was established in consideration of these obligations. CNSC staff further submitted that access to the tailings management area was restricted through the use of a locked gate and that, because of the remoteness of the properties, a low inventory of nuclear substances and land use restrictions placed on the properties by the Government of Saskatchewan, CNSC staff did not have concerns about the maintenance of national security for the properties proposed for transfer into the ICP.
109. CNSC staff submitted information about the inspections that would be carried out under the ICP at the 19 Beaverlodge properties proposed for transfer, as well as the associated monitoring and maintenance costs for these activities. CNSC staff noted that the 2018 net value of Cameco's contribution to the ICMMF for the 19 Beaverlodge properties (or portions thereof) is \$176,206. CNSC staff further explained that, in regard to the ICUEF, the maximum failure event has been identified as a premature failure of a stainless steel shaft cap, with an estimated replacement cost of \$117,064. CNSC staff noted that, prior to the transfer of properties into the ICP, the SMER will require that Cameco review and update the ICMMF contribution estimate to ensure that the 2019 net present value is used in the final cost estimate.
110. In considering the concerns expressed by intervenors about the funding and maintenance of properties in the ICP, the Commission enquired about the assessments that were undertaken by the SMOE and the SMER to confirm that the 19 Beaverlodge properties proposed for transfer to the ICP met the regulatory acceptance criteria. The SMOE representative informed the Commission that the SMOE had done a thorough review of the closure reports submitted by Cameco in regard to the status of the 19 properties and that an SMOE environmental protection officer carried out inspections of the properties. The SMOE representative informed the Commission that the SMOE was satisfied that the agreed-to work for the properties had been completed by Cameco, satisfying the regulatory acceptance criteria for the performance indicators, and that the SMOE intended to release the properties from the decommissioning and reclamation

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<sup>27</sup> *Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management* (1997), IAEA Doc. INFCIRC/546, 2153 UNTS 357, entered into force 18 June 2001 (Joint Convention).

requirements per *The Mineral Industry Environmental Protection Regulations, 1996*,<sup>28</sup> should the Commission release the Beaverlodge properties from licensing under the NSCA.

111. Upon further enquiry of the role of the SMER in respect of the ICP, the SMER representative informed the Commission that the SMER is of the view that its most important role in respect of the ICP is to ensure that sufficient funds are available to fulfill ICP requirements of monitoring the sites in the ICP into perpetuity. The SMER representative also stated that, should the 19 properties be exempt from licensing under the NSCA and accepted into the ICP, the SMER would be responsible for the management of those properties, and that the SMER relied on the recommendations of regulators, including the CNSC and the SMOE, in regard to the properties' acceptability for acceptance into the ICP.
112. Considering the concerns raised by the Ya'thi Néné about the responsibility for monitoring and maintenance of properties in the ICP, and noting the concerns about ICP funding as raised in the intervention from the SES, the Commission asked the SMER to provide additional information about the sufficiency of the ICUEF and ICMMF. The SMER representative informed the Commission that the Beaverlodge properties proposed for entry into the ICP were stable and assumingly predictable, and that, for these reasons, the SMER did not expect any unforeseen events. The SMER representative added that the ICUEF, which is based on a maximum-failure event, was backed up by a financial assurance until these funds grew to a sufficient amount to address any unforeseen maximum-failure events.
113. The Commission enquired about third-party assessments of the properties proposed for acceptance into the ICP. The SMER representative responded that the SMER only required third-party assessments in respect of the funds required for the monitoring and maintenance of the properties within the ICP, to ensure that the funds that would be needed for monitoring and maintenance activities in perpetuity were adequately estimated. The Commission appreciated the detailed responses provided by the SMOE and the SMER on the comprehensive reviews and planning involved for the funding and the operation of the ICP.
114. Further in regard to the concerns raised by the Ya'thi Néné about the public availability of monitoring and inspection data for properties in the ICP, the SMER representative stated that the results of ICP inspections and monitoring are publicly available on the ICP website,<sup>29</sup> noting that inspections were scheduled for later in 2019 for the properties currently in the ICP, and that those results will then also be made publicly available. The Commission encourages the SMER to make information about ICP funds and inspection results as transparent and accessible to First Nations, the Métis Nation and the public as possible.

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<sup>28</sup> *The Mineral Industry Environmental Protection Regulations, 1996*, Chapter E-10.2, Reg 7.

<sup>29</sup> Saskatchewan ICP website: <https://www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/mineral-exploration-and-mining/institutional-control-program> (accessed 20 November 2019).

115. Asked about whether local community members assisted in inspections of properties in the ICP, the SMER representative stated that the inspections were carried out by a qualified third party consultant and that local community members participated in the inspections. The SMER representative further explained that, for the properties currently in the ICP, the inspections were short and, therefore, there was not a high level of community involvement in them. The Commission is satisfied with the information provided on this matter, and encourages the SMER to consider broader community involvement in these inspections as much as practicable.
116. The Commission reviewed the information submitted for this hearing about Cameco's future plans for the transfer of remaining Beaverlodge properties to the ICP or for their release from CNSC licensing without any further regulatory oversight. Cameco reported that its plan was to have all remaining Beaverlodge properties transferred to the ICP or released from CNSC licensing, depending on the presence of historic mining / milling activities, by May 31, 2023 and that this plan was on track. CNSC staff submitted that its reviews showed that Cameco's existing timelines for the transfer into the ICP or released from CNSC licensing of the remaining licensed Beaverlodge properties (65 properties including the 20 properties being considered during this hearing) were realistic.
117. In considering the intervention from the SES, the Commission enquired about how the properties in the ICP would be regulated if political or social changes led the province of Saskatchewan to cease its acceptance of the responsibility for the maintenance and monitoring of these properties. CNSC staff informed the Commission that, should the safety of the properties change or should there be a change in policy within the province of Saskatchewan, the Commission has the authority, pursuant to subsection 43(3) of the NSCA, to redetermine its decision in this matter and require that the properties be again licensed under the NSCA. Asked about who would be the licensee in such a situation, CNSC staff responded that it would depend on the situation that had led to requiring that the properties be brought back under CNSC licensing, but noted that the Commission has the authority to license any person, including the province of Saskatchewan or another suitable entity. The Commission is satisfied that appropriate mechanisms exist to ensure that the 20 properties being proposed for transfer into the ICP could be brought back under CNSC licensing in the unlikely event that a situation warranting such action arises.
118. The Commission enquired about whether the Beaverlodge properties proposed for transfer to the ICP would include signage to indicate that the province of Saskatchewan was now responsible for their maintenance. The Cameco representative explained that, since the purpose of the ICP was to monitor and maintain properties that were safe for traditional uses and casual access, the province of Saskatchewan had expressed its preference that no signage indicating that the properties were in the ICP be placed on the Beaverlodge properties.

119. Noting that some of the Beaverlodge properties proposed for transfer into the ICP would need some administrative controls, the Commission requested additional details about these controls. The Cameco representative explained that, although the properties were safe for casual access, traditional activities and recreational uses, they were not suitable for residential, commercial or industrial developments. As such, the Cameco representative stated that administrative controls, such as provincial regulations or land disposition regulations and requirements, may be applied to those properties. The Commission is satisfied with the information provided in regard to signage and administrative controls for the Beaverlodge properties proposed for acceptance into the ICP.
120. Based on the information submitted for this hearing, the Commission is satisfied that the province of Saskatchewan's ICP has the appropriate mechanisms and funding in place to ensure the adequate monitoring and maintenance of properties accepted into the ICP in perpetuity. The Commission is satisfied that the ICP will ensure that properties accepted into the ICP will not pose an unreasonable risk to the environment or the health and safety of person, and includes controls to ensure that measures required to implement international obligations to which Canada has agreed exist.
121. The Commission encourages the SMER to engage with First Nations and the Métis Nation, as well as stakeholders, in regard to the maintenance and monitoring of the Beaverlodge properties accepted to ICP. The Commission also encourages the SMER to consider the participation of the interested First Nations and the Métis Nation, and stakeholders, in the maintenance and monitoring of these properties, as appropriate.

#### **4.4 Indigenous Engagement and Public Information**

##### *4.4.1 Participant Funding Program*

122. The Commission assessed the information provided by CNSC staff regarding public engagement in the licensing process as enhanced by the CNSC's Participant Funding Program (PFP). CNSC staff submitted that, in March 2019, up to \$50,000 in funding to participate in this licensing process was made available to Indigenous peoples, members of the public and other stakeholders to review Cameco's application for the release from CNSC licensing of 20 Beaverlodge properties, and to provide the Commission with value-added information through topic-specific interventions.
123. The Commission considered the concerns about the 30-day deadline for interventions which intervenors, including the Ya'thi Néné, had expressed was not sufficient for the preparation of their written submissions. In response to the Commission's enquiry about this topic, CNSC staff provided the Commission with information about its engagement activities with First Nations and the Métis Nation for this proceeding, noting that CNSC staff had carried out in-person meetings and open houses in the First Nation and Métis Nation communities following the submission of Cameco's licence

amendment application.<sup>30</sup> CNSC staff reported that these and other engagement activities were conducted early in this licensing process to ensure that the First Nations and the Métis Nation were informed of the PFP and had the opportunity to meaningfully participate in the proceedings. In considering the intervenors' concerns about the timelines, the Commission notes that the work for an intervention can start as soon as an application is submitted by an applicant, well before the CMDs are submitted to the Commission, and encourages intervenors to begin preparing their interventions early in the licensing process. The Commission is satisfied that the timelines that it established for the submission of written materials for this hearing respected the requirements of the Rules of Procedure, but notes that it will be reviewing its processes in respect of the submission of interventions in the coming months.

124. Based on the information submitted for this hearing, the Commission is satisfied that Indigenous peoples, members of the public and other stakeholders were properly notified of Cameco's application and were provided with sufficient information on how to participate in this licence amendment process.

#### 4.4.2 *Indigenous Engagement*

125. The common law duty to consult with Indigenous peoples applies when the Crown contemplates action that may adversely affect established or potential Indigenous and/or treaty rights. The CNSC, as an agent of the Crown and as Canada's nuclear regulator, recognizes and understands the importance of building relationships and engaging with Canada's Indigenous peoples. The CNSC ensures that its licensing decisions under the NSCA uphold the honour of the Crown and considers Indigenous peoples' potential or established Indigenous and/or treaty rights pursuant to section 35 of the *Constitution Act, 1982*.<sup>31</sup>
126. The Commission examined the information submitted by Cameco regarding its ongoing engagement with Indigenous peoples near the Beaverlodge site. Cameco reported that, recognizing that the majority of northern Saskatchewan population included Indigenous peoples, Cameco utilized its public engagement activities to engage effectively with Indigenous peoples in regard to the Beaverlodge site. Cameco further noted that it used various communication tools including presentations, posters, fact sheets and a website specific to the Beaverlodge site to engage with and keep Indigenous peoples informed of Beaverlodge activities.
127. Cameco informed the Commission that the focus of its engagement activities included the Northern Hamlet of Uranium City; the Yáthi Néné Land and Resource Office; the NSEQC; and the Athabasca Joint Engagement and Environment Subcommittee (AJES).

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<sup>30</sup> Additional information about CNSC staff's Indigenous engagement activities available in section 4.4.2 of this *Record of Decision*.

<sup>31</sup> *Constitution Act, 1982*, Schedule B to the *Canada Act 1982*, 1982, c. 11 (U.K.)

128. The Commission considered the intervention from the AJES and requested additional information about this subcommittee. The Cameco representative responded that the AJES was the result of a confidential collaboration agreement between members and consists of six members: one Cameco representative, one Orano Canada Inc. representative, the Executive Director of the Ya'thi Néné, two representatives from Athabasca First Nations and one representative from Uranium City. In regard to the work carried out by the AJES, the Cameco representative explained that the AJES meets four times a year to discuss matters of concern to the respective communities including operation-specific activities, project proposals and environmental monitoring. The Commission appreciates the information that was provided on the AJES.
129. Cameco submitted that it hosted an annual public meeting in Uranium City to provide First Nations, the Métis Nation, and local residents with information about the completed and planned activities for the Beaverlodge site, as well as information about the properties planned for transfer into the ICP. Cameco reported that the meetings were typically carried out with participation from the CNSC and the SMOE, and that this annual meeting allowed First Nations and the Métis Nation, as well as the public, to provide Cameco with feedback regarding the Beaverlodge properties and their suitability for transfer to the ICP.
130. CNSC staff provided the Commission with information about the eight First Nations and Métis Nation which may have an interest in Cameco's request to release 20 Beaverlodge properties from CNSC licensing, explaining that these groups were identified because they had all previously expressed an interest in being kept informed of CNSC licensed activities. CNSC staff submitted that letters of notification were sent to the eight identified First Nations and Métis Nation in April 2019 with information on Cameco's licensing request and PFP, and on how to participate in the Commission hearing process. CNSC staff further submitted that it carried out follow-up phone calls to answer any additional questions that the First Nations and Métis Nation may have, and that no issues related to potential impacts on Indigenous and/or treaty rights as a result of the release of the 20 Beaverlodge properties from licensing under the NSCA had been communicated to CNSC staff.
131. CNSC staff submitted that, since Cameco's licensing request did not propose any new activities, this licence amendment would not cause adverse impacts to any potential or established Indigenous and/or treaty rights. While CNSC staff expressed the view that no formal duty to consult was engaged by the licensing request, CNSC staff further submitted that continued communication with the interested First Nations and the Métis Nation was, and would continue to be, a priority for CNSC staff and would be continued throughout the current licence period to ensure that the interested First Nations and Métis Nation received all of the information requested and to establish, maintain and enhance relationships with them.

132. CNSC staff also submitted that, since Cameco's licensing release request does not propose any novel activities that could impact Indigenous and/or treaty rights, the specifications of REGDOC-3.2.2, *Aboriginal Engagement*<sup>32</sup> – which provides guidance for licensees whose proposed projects may raise the Crown's duty to consult – do not apply to this licensing request. CNSC staff noted, however, that it encouraged Cameco to continue to keep the interested First Nations and Métis Nation informed of its activities at the Beaverlodge site and of proposed transfers of properties to the ICP.
133. In considering the interventions from the ACFN, the Ya'thi Néné and the MN-S about Cameco's communication with them, the Commission enquired about how Cameco addressed concerns raised by the First Nations and Métis Nation. The Cameco representative provided the Commission with detailed information on engagement mechanisms that Cameco had in place, including two-way communication to address questions and concerns in a timely and clear manner. The Cameco representative noted that engagement mechanisms included regular community engagement meetings, workshops, town halls and site tours. The Cameco representative also stated that Cameco had community liaisons in all of the First Nations communities and that Cameco regularly updated the NSEQC and the AJES on its operations at the Beaverlodge site.
134. The Commission noted that interventions from the First Nations and Métis Nation reflected a general discomfort about the safety of the Beaverlodge properties. Although the Commission noted that Cameco had carried out tours of the decommissioned Beaverlodge properties with First Nations and the Métis Nation, the Commission enquired about whether Cameco had gone out and meaningfully walked the Beaverlodge lands with Elders and other First Nation and Métis Nation community members prior to the proposed ICP transfers. The Cameco representative explained that Cameco carried out annual tours during which it went to the Uranium City community and stated that the Beaverlodge tours included a presentation from Cameco about the properties being proposed for transfer to the ICP, followed by a visit to some of those properties. The Cameco representative also stated that invitations to the annual tours were extended to the NSEQC and AJES, which included northern Saskatchewan First Nations representatives. The Cameco representative informed the Commission, however, that visits to some of the properties were not possible due to the accessibility challenges that some of the Beaverlodge properties presented.
135. Further on tours of the Beaverlodge properties, the Cameco representative explained that, since Cameco was in the final stages of preparing these properties for transfer into the ICP, many of the tours and meetings held by Cameco focused on information related to the proposed transfers. However, the Cameco representative stated that, based on the concerns expressed by First Nations and the Métis Nation during this hearing, and the recognized benefits and importance of meaningful and physical interaction with the lands, Cameco's tours could be augmented to address areas of specific concern, taking into consideration safety of participants since many of the properties are relatively inaccessible.

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<sup>32</sup> CNSC Regulatory Document REGDOC-3.2.2, *Aboriginal Engagement*, 2016.

136. Recognizing the importance of using the Beaverlodge lands for traditional uses as expressed in the interventions from the ACFN, the Ya'thi Néné and the MN-S, the Commission requested comments from the NSMHO about the assessed safety of traditional country foods in northern Saskatchewan communities. The NSMHO provided the Commission with detailed information about the country food assessment approach, noting that a variety of groups and organizations, including the EARMP, the AJES and the CNSC's Independent Environmental Monitoring Program were involved in the monitoring of the country foods. The NSMHO also stated that, from a health perspective, the transition to store-bought, highly processed foods was of much greater concern to the NSMHO because the consumption of these foods presented an increased risk for cancer, diabetes and heart disease. The NSMHO expressed the opinion that more damage to the health of Indigenous peoples would occur if confidence in the safety of traditional country foods was eroded.
137. Further on the safety of traditional country foods, the NSMHO stated that having a First Nations-run organization, such as the AJES, involved in the EARMP was very valuable in regard to the decision-making for the testing locations and the communication of the results to First Nations communities. The NSMHO expressed the view that ongoing, long-term traditional country food assessments are needed to provide valuable and important information about the safety of these foods and that increased communication to the land users was needed in regard to assessment results.
138. The Commission noted that the First Nations and the Métis Nation that intervened in this hearing expressed a general level of satisfaction with the engagement and information sharing being carried out by Cameco and CNSC staff in regard to the Beaverlodge site. The Commission further noted, however, that there appeared to be a disconnect in regard to the on-the-ground involvement of First Nations and the Métis Nation with the work being carried out on and the understanding of the current status and safety of the Beaverlodge properties and the ICP. The Cameco representative acknowledged that Cameco's engagement with First Nations and the Métis Nation was evolving and that Cameco would endeavour to better discuss the concerns that were brought forth during this hearing through its engagement activities. The Cameco representative also stated that many of Cameco's engagement activities were focussed on the residents of Uranium City, including informal engagement activities, and that, based on the information presented by the Ya'thi Néné, the ACFN, and the MN-S, Cameco recognizes the need to be more responsive in its engagement activities with First Nations and the Métis Nation.

Athabasca Chipewyan First Nation (ACFN)

139. The Commission noted the four recommendations presented in the ACFN's oral submission and requested comments from Cameco on the recommendations. The Cameco representative expressed Cameco's willingness to engage with the ACFN and to further discuss its concerns about the Beaverlodge site through its engagement mechanisms, including site tours and community meetings. Regarding the concerns

raised about radiation contamination at the Forestry Dock in Fort Chipewyan, the Cameco representative stated that Cameco's records did not indicate that uranium was shipped from Beaverlodge to that dock. The Cameco representative stated that Cameco would need additional information on this issue to determine whether there was a reason to suspect contamination at that dock and whether any action needed to be taken. The Commission expects Cameco to engage with the ACFN in regard to the concerns raised about the contamination at the Fort Chipewyan Forestry Dock and take any remedial actions if needed.

140. Considering the concerns expressed by the ACFN regarding the lack of engagement with Cameco about the Beaverlodge site, the Cameco representative stated that Cameco would explore how to better consider the ACFN's perspectives and concerns in future activities at the Beaverlodge site. The Cameco representative also stated that, through the multiple forms of its engagement process, Cameco tried to incorporate a range of world views and knowledge systems into decision-making processes.
141. In regard to the ACFN's recommendation for community-based environmental monitoring programs, the Cameco representative stated that community involvement in monitoring programs was in place through the EARMP, as well as through a collaboration agreement with three Eastern Athabasca First Nations. The Cameco representative acknowledged, however, that the ACFN was not involved in those monitoring programs since Cameco had focussed on the First Nations communities that were in closer proximity to the Beaverlodge site. The Cameco representative informed the Commission that Cameco would welcome the opportunity to communicate with the ACFN regarding the community environmental monitoring programs that are in place.
142. In regard to the question about a Cameco community liaison in Fort Chip, Alberta, as brought forth by the ACFN representative, the Cameco representative responded that, at this time, Cameco did not have a community liaison in Fort Chip. The Commission enquired about whom the ACFN could contact should they have additional questions or to share their concerns about the Beaverlodge site. The Cameco representative stated that Cameco's Senior Corporate Responsibility and Communications Specialist, who is responsible to engage directly with northern communities, would work with the ACFN and the CNSC to ensure that any post-hearing follow-up questions are answered and to provide the ACFN with additional information about the decommissioned Beaverlodge properties.
143. Asked for comment by the Commission regarding CNSC staff's engagement activities with the ACFN, CNSC staff stated that it would work with the ACFN to ensure that its questions about CNSC staff's recommendations in regard to the release from licensing of Beaverlodge properties was understood by the ACFN's members, and for CNSC staff to gain a better understanding of the ACFN's use of the Beaverlodge site.

144. Based on the information provided for this hearing, the Commission notes that Cameco has had very limited engagement with the ACFN in regard to the Beaverlodge properties. In considering that the Beaverlodge site is part of the ACFN's traditional territory and that the ACFN carries out its traditional activities at the site, the Commission is of the view that Cameco's engagement activities with the ACFN need to increase. Therefore, the Commission expects Cameco to engage with the ACFN during the balance of its licence period, including the engagement activities that Cameco has stated it would undertake during this hearing. As part of this engagement, the Commission anticipates Cameco to discuss with the ACFN how the ACFN could become involved in environmental monitoring activities at the Beaverlodge site. The Commission expects updates on Cameco's engagement activities with the ACFN in future Commission proceedings regarding the Beaverlodge site.
145. The Commission appreciates the information provided by the ACFN and the ACFN's participation in this hearing process. Though the Commission is of the view that CNSC staff has carried out adequate engagement activities with the ACFN, the Commission also directs CNSC staff to increase these engagement activities, as required, to ensure that the ACFN's concerns about and its use of the Beaverlodge site are well understood by the CNSC. Furthermore, the Commission expects Cameco and CNSC staff to be proactive, rather than reactive, in any future engagement activities with the ACFN.

Ya'thi Néné Land and Resource Office (Ya'thi Néné)

146. The Commission considered the recommendation submitted by the Ya'thi Néné regarding the remediation of over 500 legacy buildings in Uranium City and enquired about who was responsible for this remediation. CNSC staff responded that the province of Saskatchewan was responsible for the maintenance of Uranium City and that this is outside of both the CNSC's mandate and Cameco's licence for the Beaverlodge site. The Canada Eldor representative added some background about the history of Uranium City, noting that it had been set up by the province to support the mining industry and confirmed that Saskatchewan was responsible for its maintenance.
147. Noting the existing fishing advisories in some areas near the Beaverlodge site, the Commission requested information on the impacts that these advisories have had on the Ya'thi Néné members' practice of traditional activities in the area. The Ya'thi Néné representative responded that the Ya'thi Néné had trouble reconciling that, although Beaverlodge Lake has a drinking water advisory, fish from the lake are safe for consumption. The Ya'thi Néné representative further provided the Ya'thi Néné's observations about the health of Beaverlodge Lake as compared with surrounding lakes, noting that Beaverlodge Lake appeared to be unhealthy. The Ya'thi Néné representative explained that, although this lake used to be one of the Ya'thi Néné's closest inland lakes for good fishing, the Ya'thi Néné no longer fish in Beaverlodge Lake. The Commission appreciates the information provided by the Ya'thi Néné regarding its traditional activities at the Beaverlodge properties.

148. The Commission considered the concerns that the Ya'thi Néné expressed about the potential risks to health and livelihood presented by former uranium mine sites. The Commission notes the work that has been carried out by the EARMP in regard to traditional country foods in the Eastern Athabasca area. The Commission also notes that CNSC staff submitted that provincial agencies in Saskatchewan and Ontario are working with licensees to carry out an updated health study regarding Canadian uranium workers. In its submissions and during this hearing, CNSC staff committed to continued engagement with the Ya'thi Néné regarding this and other studies being carried out in regard to the potential health issues related to the mining industry. The Commission anticipates that the engagement activities being carried out by Cameco and CNSC staff with the Ya'thi Néné will continue during the balance of this licence period and beyond. The Commission expresses its appreciation for the Ya'thi Néné's participation in and the submission made for this hearing.

Métis Nation-Saskatchewan (MN-S)

149. The Commission, in considering the intervention from the MN-S, noted the recommendation that Cameco provide Indigenous groups with tours of the Beaverlodge site while work at the site is being carried out. The MN-S submitted that such tours could increase confidence about the safety of the Beaverlodge properties. The Commission asked for comments about this recommendation. The Cameco representative stated that, since the Beaverlodge site had been decommissioned and was no longer an active remediation project, very little work was being carried out at the site. In consideration of this recommendation, the Cameco representative reaffirmed Cameco's commitment to making its annual site visits with local residents – including members of the MN-S – as productive as possible for tour participants.
150. In regard to the issues raised by the MN-S about employing local Indigenous peoples at the Beaverlodge site, the Cameco representative stated that Cameco was focused on providing as many employment opportunities as possible, such as the installation of the stainless steel caps, to residents of Uranium City. The Cameco representative also stated that Cameco had engaged a local contractor to carry out environmental monitoring, including sample collection and inspections at the Beaverlodge site, and that Cameco used locally-owned services in Uranium City.
151. The Commission appreciates the information provided by the MN-S for this hearing. Based on this information provided in regard to this intervention, the Commission expects Cameco to engage with the MN-S in regard to making annual Beaverlodge site tours as meaningful and productive as possible for the MN-S.

### Assessment of Indigenous Engagement

152. Based on the information provided for this hearing, the Commission is satisfied that Indigenous engagement activities carried out for this licence renewal were adequate.
153. In considering the information provided by the First Nations and the Métis Nation for this hearing, the Commission is of the view that, having Cameco meaningfully walk the Beaverlodge lands with the First Nations and Métis Nation who use the lands, in order to better understand how the lands were, are and will be used, and how the First Nations and Métis Nation feel about the lands, would be a beneficial process for both Cameco and the land users to re-establish the First Nations' and the Métis Nation's connections to the lands.
154. Therefore, the Commission expects Cameco to increase these 'boots on the ground' tours of the Beaverlodge site with First Nations and the Métis Nation to ensure physical interaction with and provide opportunities for reconnection with the Beaverlodge lands. The Commission anticipates that Cameco will invite the interested First Nations and the Métis Nation for individual tours of the Beaverlodge site to allow Cameco to gain a better understanding of the history of the lands, and how the First Nations and Métis Nation use and feel about the lands. The Commission also expects Cameco to report on the anticipated learnings from these future engagement activities and site tours at the next Commission proceedings regarding the Beaverlodge properties.

#### *4.4.3 Public Information*

155. The Commission considered Cameco's public information program (PIP) for the Beaverlodge site and how the PIP met the specifications of RD/GD-99.3, *Public Information and Disclosure*.<sup>33</sup> Cameco submitted that its PIP ensured that Cameco's activities and plans for the decommissioned Beaverlodge properties were effectively communicated to the public.
156. Cameco submitted that it measured the effectiveness of its public information efforts through annual polling of public perceptions in respect of the uranium mining industry across Saskatchewan. Cameco reported that the latest polling activities in November 2018 showed that a large majority of Saskatchewan residents continued to support uranium mining and milling, and that current support is consistent with the long-term trend identified since 1990.
157. CNSC staff submitted that Cameco has a robust PIP and had undertaken numerous activities and efforts to maintain and improve its communications with persons interested in and concerned about the Beaverlodge site. CNSC staff reported that

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<sup>33</sup> CNSC Regulatory/Guidance Document RD/GD-99.3, *Public Information and Disclosure*, 2012.

Cameco has adequately developed and sustained public information programs that inform and engage the citizens of northern Saskatchewan.

158. Based on the information presented for this hearing, the Commission is satisfied that Cameco's PIP meets the specifications of RD/GD-99.3 and that, through its PIP, Cameco will continue to communicate to the public information about the health, safety and security of persons and the environment and other issues related to the Beaverlodge site.
159. The Commission anticipates that Cameco will continue engaging the local Uranium City community through communications and monitoring activities related to the Beaverlodge properties during the balance of the licence period. The Commission wishes to be provided information about these engagement activities at future Commission proceedings regarding the Beaverlodge properties.

#### *4.4.4 Conclusion on Indigenous Engagement and Public Information*

160. Based on the information presented, the Commission is satisfied that, overall, Cameco's PIP meets regulatory requirements and is effective in keeping Indigenous peoples and the public informed of activities at the Beaverlodge site.
161. The Commission acknowledges the current efforts and commitments made by Cameco in relation to Indigenous engagement and CNSC staff's efforts in this regard on behalf of the Commission. Based on the information presented on the record for this hearing, the Commission is satisfied that this licence amendment will not result in changes to the Beaverlodge site that would cause adverse impacts to any potential or established Indigenous and/or treaty rights. The Commission is also of the opinion that the engagement activities taken for the review of Cameco's licence amendment application were adequate for this application.
162. Although the Commission is satisfied with CNSC staff's Indigenous engagement and consultation on behalf of the Commission, the Commission wishes to be provided with more information detailing the mechanisms by which CNSC staff carries out these activities and on the Indigenous consultation and engagement activities. The Commission directs CNSC staff to track and annually present to the Commission information about all Indigenous engagement and consultation activities carried out by both CNSC staff and licensees in applicable RORs or via other means, as appropriate.
163. The Commission wishes to acknowledge the meaningful participation of the ACFN, the Ya'thi Néné and the MN-S in this proceeding, and encourages their participation in future proceedings.

#### 4.5 Financial Guarantee

164. In order to ensure that adequate resources are available for continued safe and secure management of the decommissioned Beaverlodge site, the Commission requires that an adequate financial guarantee for realization of the planned activities is put in place and maintained in a form acceptable to the Commission throughout the licence period.
165. Cameco submitted that the financial liabilities associated with the management of the Beaverlodge site were held by the Government of Canada and managed by Canada Eldor, a wholly-owned subsidiary of the Canada Development Investment Corporation, both of which report to the federal Minister of Finance. Cameco further submitted that, in a 2007 letter sent to the CNSC, the Ministry of Finance confirmed that any undischarged obligations and liabilities of Canada Eldor were the obligations and liabilities of the Crown in Right of Canada.
166. Cameco reported that, in regard to the ICP, the province of Saskatchewan's *Reclaimed Industrial Sites Act* and its regulations required the provision of a fund sufficient to pay for the long-term monitoring and maintenance of the site (the ICMMF). Cameco further submitted that the ICP required an additional contribution of 10% to 20% of the monitoring and maintenance fund to the ICP's ICUEF, which is intended to cover any future unforeseen event with a property in the ICP.
167. CNSC staff submitted that the funds for both the ICMMF and the ICUEF would be provided to the province of Saskatchewan by Canada Eldor and would replace the financial guarantee should the 19 properties, or portions thereof, be released from CNSC regulatory oversight by the Commission. CNSC staff noted that the licensee-backed financial assurance requirement – in this case, from Canada Eldor – for the ICUEF would remain in place until the SMER was confident that there were sufficient funds available in the ICUEF to manage the total costs for unforeseen risks (based on the cost of a maximum failure event at a site) and to minimize the ICP's financial risks.
168. In regard to the financial guarantee for the remaining licensed Beaverlodge properties, CNSC staff submitted that the request for release from licensing of the 20 properties would not have an impact on the existing financial guarantee arrangement for the Beaverlodge properties that will remain licensed by the CNSC.
169. Based on the information considered at this hearing, the Commission is satisfied that the financial guarantee for the continued monitoring and maintenance of the Beaverlodge site remains acceptable. The Commission is also satisfied that there are acceptable mechanisms in place to ensure the adequate funding of the ICMMF and ICUEF to allow for the transfer of the 19 Beaverlodge properties to the ICP in accordance with the province of Saskatchewan's regulations.

#### 4.6 Cost Recovery

170. The Commission examined Cameco's standing under the *Cost Recovery Fees Regulations*<sup>34</sup> (CRFR) requirements for the Beaverlodge site. Paragraph 24(2)(c) of the NSCA requires that a licence application is accompanied by the prescribed fee, as set out by the CRFR and based on the activities to be licensed.
171. Cameco submitted that it remained in good standing with respect to the payment of cost recovery fees for the Beaverlodge site.
172. Based on the information submitted by Cameco and CNSC staff, the Commission is satisfied that Cameco continues to satisfy the requirements of the CRFR.

#### 5.0 CONCLUSION

173. The Commission has considered the licence amendment application submitted by Cameco. Based on its consideration of the information submitted, the Commission is satisfied that the application submitted by Cameco meets the requirements of the NSCA, the GNSCR and other applicable regulations made under the NSCA.
174. The Commission has also considered the information and submissions of Cameco, CNSC staff and all participants as set out in the material available for reference on the record, as well as the oral and written interventions provided for or made by the participants at the hearing.
175. The Commission is satisfied that the 20 Beaverlodge properties meet the performance indicators and criteria previously accepted by the Commission in order for the sites to be released from licensing under the NSCA. The Commission is also satisfied that Cameco meets the test set out in subsection 24(4) of the *Nuclear Safety and Control Act*. That is, the Commission is of the opinion that Cameco remains qualified to carry on the activity that the proposed licence will authorize and that it will continue to 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.
176. Therefore, the Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, amends the Waste Facility Operating Licence issued to Cameco Corporation for its Beaverlodge site, located near Uranium City in northern Saskatchewan, to remove 20 Beaverlodge properties from the figure within Appendix A of the licence. The amended licence, WFOL-W5-2120.1/2023, remains valid until May 31, 2023.

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<sup>34</sup> SOR/2003-212

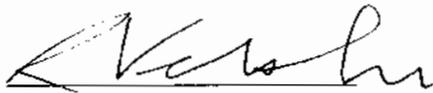
177. For clarity, the Commission removes the following 20 properties from Appendix A of Cameco's WFOL for the Beaverlodge site: HAB 3, HAB 6, EXC 2, HAB 2A, JO-NES, BOLGER 2, ACE 5, EAGLE 1, RA 6, RA 9, EXC ATO 26, EXC ACE 1, ACE 10, URA 5, EXC URA 5, ATO 26, URA MC, URA 3, ACE 2, EXC ACE 3.
178. Amended Appendix A, Figure 1 – which reflects of the 20 Beaverlodge properties removed from Cameco's WFOL – shall replace Appendix A, Figure 1-1 of Cameco's WFOL, as proposed by CNSC staff in CMD 19-H6. The Commission expects CNSC staff to update the Beaverlodge LCH to reflect the removal of the 20 properties from Appendix A of Cameco's Beaverlodge WFOL.
179. The Commission accepts the updated standardized CNSC licence format for Cameco's WFOL, as proposed by CNSC staff in CMD 19-H6.
180. The Commission is satisfied that the EXC 2 property poses no risk to the environment or the public, meets the unconditional clearance levels as defined in Schedule 2 of the NSRDR and satisfies the requirements of subsection 5(1) of the NSRDR. Therefore, the Commission is satisfied that the EXC 2 property can be released from licensing any without further regulatory oversight.
181. The Commission also considered whether to exempt the Government of Saskatchewan from requiring CNSC licensing for the 19 remaining properties (of portions thereof as identified in the materials submitted for this hearing<sup>35</sup>) under section 7 of the NSCA, to enable their acceptance into Saskatchewan's ICP. Based on its consideration of the matter, the Commission concludes that exempting the province of Saskatchewan from requiring licensing under the NSCA for these properties will not pose an unreasonable risk to the environment or the health and safety of persons; pose an unreasonable risk to national security; or result in a failure to achieve conformity with measures of control and international obligations to which Canada has agreed.
182. Therefore, the Commission, pursuant to section 7 of the *Nuclear Safety and Control Act* and in accordance with section 11 of the *General Nuclear Safety and Control Regulations*, exempts the province of Saskatchewan from licensing obligation under the *Nuclear Safety and Control Act* for 19 Beaverlodge properties, or portions thereof, intended for transfer into the province of Saskatchewan's ICP.
183. For clarity, the Commission exempts the province of Saskatchewan from licensing under the NSCA for all properties listed in paragraph 177, with the exception of the property EXC 2, which the Commission has determined may be released from CNSC licensing without any further regulatory oversight.
184. The Commission is also satisfied that, in respect of the 19 properties intended for transfer into Saskatchewan's ICP, the portions of the properties that have been identified as not requiring institutional control meet the unconditional clearance levels

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<sup>35</sup> Portions of the Beaverlodge properties intended for transfer into the ICP as identified in CMDs 19-H6.1 and 19-H6.

as defined in Schedule 2 of the NSRDR and, having satisfied the requirements of subsection 5(1) of the NSRDR, can be released from CNSC licensing without any further regulatory oversight.

185. The Commission is satisfied that an EA under CEAA 2012 was not required in this matter and considers the environmental protection review that was conducted by CNSC staff to be acceptable and thorough. The Commission notes that the NSCA provides a strong regulatory framework for environmental protection. Since Cameco's application was submitted to the CNSC prior to the coming into force of the IAA, the Commission is satisfied that the IAA does not apply to this licensing application. The Commission is also satisfied that Cameco has made, and will continue to make, adequate provision for the protection of the environment and the health of persons throughout the proposed licence period.



DEC 19 2019

Rumina Velshi  
President,  
Canadian Nuclear Safety Commission

Date

## Appendix A – Intervenors

Intervenors – Oral Presentations	Document Number
Ya’Thi Néné Land and Resource Office, represented by G. Schmidt, L. Mercredi, C. Sayazie, D. Robillard and P. Denechezhe	CMD 19-H6.8 CMD 19-H6.8A
Athabasca Chipewyan First Nation, represented by J. Telegdi	CMD 19-H6.9
Métis Nation-Saskatchewan, represented by E. Cook and A. Augier	CMD 19-H6.11

Intervenors – Written Interventions	Document Number
Saskatchewan Mining Association	CMD 19-H6.2
Dean Classen	CMD 19-H6.3
Canada Eldor Inc.	CMD 19-H6.4
Orano Canada Inc.	CMD 19-H6.5
Saskatchewan Environmental Society	CMD 19-H6.6
Athabasca Joint Engagement and Environmental Subcommittee	CMD 19-H6.7
Northern Saskatchewan Environmental Quality Committee	CMD 19-H6.10