

Record of Proceedings, Including Reasons for Decision

In the Matter of

Applicant Cameco Corporation

Subject Application to Renew the Beaverlodge Mine and
Mill Site Waste Facility Operating Licence and to
Exempt Five Decommissioned Sites

Hearing
Date February 18, 2009

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Introduction

1. Cameco Corporation Inc. (Cameco) has applied to the Canadian Nuclear Safety Commission¹ (CNSC) to renew, for a period of three years, the Waste Facility Operating Licence (WFOL) for the Beaverlodge Mine and Mill site in Northern Saskatchewan. In addition to the above request, Cameco requested to exempt five remediated mine site areas from CNSC licensing. At present, 45 site areas are listed in the licence. Cameco's request includes the following:
 - a) the renewal of the licence for the continuation of the current licensed activities including possession, storage and management of decommissioned uranium mill tailings and residual waste rock at the decommissioned Beaverlodge Mine and Mill site including:
 - regular site inspections;
 - regular environmental monitoring;
 - special environmental investigations deemed appropriate and necessary in consultation with CNSC staff and other regulatory authorities; and
 - preparation of as many properties as possible for custodial transfer to the Province of Saskatchewan's Institutional Control Program (ICP).
 - b) the exemption from CNSC licensing of five low risk decommissioned and reclaimed satellite mine site lease areas for registration into the Province of Saskatchewan ICP pursuant to *The Reclaimed Industrial Sites Act*².

In its application, Cameco states that no wastes will be added to the decommissioned properties, and that no additional structures or effluent treatment are proposed at this time.

2. The former Beaverlodge mine was operated by Eldorado Nuclear Limited from 1952 to 1982 and decommissioned from 1982 to 1985. Since 1988, Cameco has been the licence holder for the Beaverlodge site and has been assigned the responsibility of managing the on-going reclamation, maintenance and monitoring activities. Funding for these activities is provided to Cameco by Canada Eldor Inc., a Crown Corporation of the Government of Canada. A Waste Facility Operating Licence, WFOL-W5-2120.0/2007, was issued to Cameco for the decommissioned facilities, located at Beaverlodge, Saskatchewan, in 2005. Following a public hearing held in Ottawa, Ontario, on January 25, 2007, the licence was amended to WFOL-W5-2120.01/2009 to extend its expiry date until March 31, 2009. The licence extension was granted to permit:

¹ 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.

² Reclaimed Industrial Sites Act, S.S. 2006, c. R-4.21

- the completion by Cameco of special environmental and human health studies requested by the Commission and their review by CNSC staff; and
 - the implementation of the Government of Saskatchewan's legislative process to manage all decommissioned mine properties located on provincial Crown land.
3. As mentioned above, in addition to the renewal of its licence, Cameco is seeking approval from the Commission for the exemption from CNSC licensing of five small satellite mine properties associated with the decommissioned Beaverlodge site. The release of these five decommissioned satellite mines to the Province of Saskatchewan would be done in the context of the Provincial ICP. Cameco has also applied, as required by the Saskatchewan *Mineral Industry Environmental Protection Regulations*³, to the Saskatchewan Ministry of Environment (MOE) for the exemption of these five low risk sites from further decommissioning requirements. The Saskatchewan MOE has issued a letter indicating its intention to transfer the five sites to the ICP which will ensure monitoring, maintenance and security of the areas in the long term.

Issues

4. In considering the application, the Commission was required to decide pursuant to subsection 24(4) of the *Nuclear Safety and Control Act*⁴ (NSCA):
- a) if Cameco is qualified to carry on the activity that the licence would authorize; and
 - b) if, in carrying on that activity, Cameco would 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.
5. In considering the application, the Commission was also required to decide pursuant to section 11 of the *General Nuclear Safety and Control Regulations*⁵ (GNSCR):
- a) pose an unreasonable risk to the environment or the health and safety of persons;
 - b) pose an unreasonable risk to national security; or
 - c) result in a failure to achieve conformity with measures of control and international obligations to which Canada has agreed.

³ R.R.S. c. E-10.2 Reg. 5

⁴ S.C. 1997, c. 9.

⁵ S.O.R./2000-202.

Public Hearing

6. The Commission, in making its decision, considered information presented for a public hearing held on February 18, 2009 in Ottawa, Ontario. The public hearing was conducted in accordance with the *Canadian Nuclear Safety Commission Rules of Procedure*⁶. During the public hearing, the Commission received written submissions and heard oral presentations from CNSC staff (CMD 09-H2, CMD 09-H2.A and CMD 09-H2.B) and Cameco (CMD 09-H2.1 and CMD 09-H2.1A). The Commission also considered oral presentations and written submissions from five intervenors (see Appendix A for a list of the intervenors).

Decision

7. Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Proceedings*,

the Commission decides to adjourn the current hearing to fall 2009 until a complete plan that gives details and milestones on long-term activities for the proposed three-year licence period is available for consideration. Pursuant to section 24 of the *Nuclear Safety and Control Act*, the Commission amends the Class IB Waste Facility Operating Licence for Beaverlodge Mine and Mill site in Northern Saskatchewan to extend the current licence expiry date for a period of eight months until November 30, 2009; and

the Commission, pursuant to section 7 of the *Nuclear Safety and Control Act* and to section 11 of the *General Nuclear Safety and Control Regulations*, exempts from licensing the five following satellite mine site lease areas: EMAR 16, EMAR 19, EMAR 21, Eagle 4 & 7 Claims and Eagle Claim.

The amended licence WFOL-W5-2120.2/2009 is valid from April 1, 2009 to November 30, 2009.

Hearing Process

8. Before considering the licence application, the Commission considered concerns expressed by one of the intervenors, the Métis Nation of Saskatchewan (MNS), regarding the Commission's public hearing process.
9. The MNS expressed concerns about its capacity to appear before the Commission, considering the lack of funding to hire an expert to understand the technical aspects related to the Beaverlodge Facility and the difficulties associated with the location of a public hearing in Ottawa that implies travel expenses.

⁶ S.O.R./2000-211.

10. The Commission considered the MNS intervention and its concerns. The Commission noted that pursuant to the NSCA, it does not have the authority to fund any intervenor for participating at a public hearing. The Commission asked CNSC staff and Cameco if they could look into other avenues available to help the Métis increase their capacity to understand Beaverlodge related issues, including potential contamination of water and fish and health-related problems.
11. The Commission notes that intervenors have opportunities to participate at hearings other than to travel to Ottawa. When feasible, the Commission holds hearings in affected communities and uses telecommunication and other technologies to increase access to proceedings. For this hearing, the participants could participate, via videoconference, from the CNSC Regional Office in Saskatoon.
12. The Commission is satisfied that the proceeding was conducted in a fair manner, in accordance with the *CNSC Rules of Procedure*.

Issues and Commission Findings

Licence Extension

13. After reviewing the information submitted by Cameco and CNSC staff for the renewal of the current operating licence, the Commission is of the opinion that it needs more information to be able to make a decision on the proposed licence period. The Commission requests that Cameco and CNSC staff come back before the Commission to present additional information.
14. The Commission requests that Cameco submit a detailed report on long-term planned activities for the proposed licence period including:
 - a detailed plan of consultation with the Joint Regulatory Group (CNSC staff, Saskatchewan Ministry of Environment (MOE), Environment Canada and Fisheries and Oceans Canada) and other stakeholders on the in-depth review to identify new close-out risk-based objectives appropriate for an adequate remediation of the Beaverlodge site;
 - a list of the options for the remediation measures to be taken; and
 - the outline, the milestones and the expected results of the planned activities.
15. In order to permit Cameco and CNSC staff to submit the requested information, the Commission decides to extend the current Waste Facility Operating Licence for Beaverlodge Mine and Mill site for a period of eight months.

16. In making this decision, the Commission considered the information presented at the February 18, 2009 hearing, in Ottawa, and is of the opinion that the licensee is qualified to carry on the activities that the extended licence would authorize and that it will make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed.

Exemption of five satellite sites from licensing

17. Cameco requested the exemption of five low risk satellite mines from CNSC licensing for possessing, managing and storing nuclear substances. CNSC staff noted that these areas do not have any impact on other areas under the licence.
18. Cameco noted that it has performed remediation and final clean-up of the five following decommissioned satellite mine areas: EMAR 16, EMAR 19, EMAR 21 and two portions of the Eagle area (Eagle 4 & 7 Claims and Eagle Claim).
19. CNSC staff noted that the Joint Regulatory Group (JRG) agreed in 2002 that these sites posed little risk to members of the public or to the environment. In 2008, following an additional inspection of the five sites, CNSC staff, the Saskatchewan MOE, and the Northern Saskatchewan Environmental Quality Committee (NSEQC) confirmed that these satellite sites were currently posing no environmental, radiation, health or safety risks. CNSC staff added that the five sites had met risk-informed release criteria, including point source gamma radiations of less than 2.5 microsieverts per hour. CNSC staff also added that the physical and safety risks have been addressed, that no outstanding environmental impacts need remediation and that no long-term site stability issues are present.
20. Cameco reported that it has submitted an application for acceptance of the five Beaverlodge properties under the Saskatchewan ICP. Cameco added that the Saskatchewan MOE has issued a letter indicating its intention to grant Cameco a release from decommissioning and reclamation of these sites once they are exempted from CNSC licensing. Cameco also noted that the provincial Ministry of Energy and Resources (MER) has agreed to transfer the five properties into the provincial ICP. CNSC staff added that this program will ensure the long-term monitoring, maintenance and security of the five areas.
21. The Commission asked CNSC staff on the advantage of transferring these five sites to the Saskatchewan ICP in terms of long-term safety monitoring. CNSC staff responded that these sites, as they no longer present radiological risks, do not require CNSC licensing. CNSC staff added that the five sites could now be managed by the Province of Saskatchewan that could, with its oversight mechanisms of land and environmental control, ensure their safety.

22. A representative of the Saskatchewan MER added that the main advantage was that, in the long term, there will be perpetual monitoring of the sites to address, if any, both public and regulator concerns.
23. The Commission asked about the future maintenance of a concrete cap used on one of the site as a remediation measure. CNSC staff answered that it was included in the ICP and that the Province of Saskatchewan would provide funding for any long-term required maintenance or other remediation due to unforeseen events.
24. A representative of the Saskatchewan MOE reported that a five-year monitoring program was scheduled for those five properties, based on the stability of the sites over the last 20 years. He added that these inspections will be included into the Institutional Control Registry for the properties and formally filed with them and that informal inspections will be conducted on most of the properties every year. He also added that when the sites are exempted from CNSC licensing, all the signage will be removed to allow the sites to be incorporated into the surrounding environment.
25. The Commission inquired if it was possible to replant some vegetation on these sites. CNSC staff answered that it was decided in 1983, when the close-out objectives were established, that these sites were no different from other natural features such as exposed rock with no vegetation that is typical of the area.
26. The Commission asked if the presence of six open pits and one eagle shaft, on the sites to be exempted, would impact the groundwater. Cameco responded that all the open pits had been filled with clean waste rocks and were now above grade so that no water will accumulate in these pits.
27. One of the intervenor did not support Cameco's licensing exemption request for the five satellite sites, claiming that some risks to the environment and to health and safety of persons were still present and that these sites should be revaluated against more recent criteria on radiation risks. CNSC staff responded that the International Commission on Radiological Protection (ICRP) had recently released a new set of recommendations in ICRP Publication 103. In this publication, certain risk factors were updated but most were unchanged. CNSC staff added that the risk for a given dose of radiation, for example the dose to a member of the public of 1 millisievert/year, which represents CNSC regulatory dose limit, had not changed. Therefore, no changes to the regulatory limits are further proposed.
28. In its intervention, the NSEQC supported the sites exemption and their transfer into the Province of Saskatchewan ICP.
29. CNSC staff recommended that the Commission exempt the licensee from possessing, managing and storing nuclear substances at these five low risk sites.

30. Based on the information provided during this hearing, the Commission concludes that the release of the five aforementioned sites from CNSC licensing would not pose unreasonable risk to the environment or the health and safety of persons and to national security or result in a failure to achieve 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.

Public Information

31. With respect to public information activities, CNSC staff reported that it had provided information to the MNS on five occasions between September and December 2008 and that it intended to keep the Métis well informed on the Beaverlodge site issue.
32. CNSC staff added that Uranium City residents and the Athabasca sub-committee of NSEQC were also engaged in discussions and site inspections regarding decommissioning, reclamation and remediation of the Beaverlodge site, including the five satellite mine areas proposed for release. CNSC staff confirmed that it will continue to address any public requests on this project.
33. Cameco noted that it has an active public information program and that it holds annual public meetings in Uranium City to discuss planned activities and the on-going monitoring program. Cameco noted that a meeting held in August 2006 had been attended by Uranium City representatives, the NSEQC, the Northern Mines Monitoring Secretariat (NMMS), the MOE, the MER and CNSC staff. The Institutional Control framework, the provincial *Reclaimed Industrial Sites Act* and the methodology to be used for the transfer of the CNSC-licensed sites into the IC program were presented during that meeting.
34. With respect to Aboriginal consultation, Cameco reported having contacted the MNS to notify them of its proposed re-licensing project and to provide them with information about the site.
35. The Commission requested that Cameco consider improving its communication with Aboriginal groups, including the MNS, to assure that the planned remediation measures and the potential residual health effects present in the Beaverlodge vicinities are understood better by these communities.
36. Based on this information, the Commission is satisfied on the manner Cameco informed the public on the potential release from CNSC licensing of the five low risks, decommissioned and reclaimed satellite mine site lease areas.

Application of the *Canadian Environmental Assessment Act*

37. Before making a licensing decision, the Commission must be satisfied that all applicable requirements of the *Canadian Environmental Assessment Act*⁷ (CEAA) have been fulfilled.
38. CNSC staff noted that the renewal of a licence under subsection 24(2) of the NSCA is not listed under the *Law List Regulations*⁸ of the CEAA. In this case, the activities authorized under the extended licence, resulting from the adjournment of the hearing, remain the same. CNSC staff also noted that exemptions from a licence are not listed in the *Law List Regulations*. Therefore, there is no trigger pursuant to subsection 5(1) of the CEAA, which means that no environmental assessment is required for this matter.
39. The Commission concludes that no environmental assessment under the CEAA is required before the Commission may consider and make a decision on Cameco's application under the NSCA.

Conclusion

40. The Commission has considered the information and submissions of Cameco, CNSC staff and intervenors as presented in the material available for reference on the record.
41. In its decision, the Commission requests that additional information from Cameco and CNSC staff be submitted and presented to the Commission at a later date in order to consider the three-year term licence requested by Cameco. Therefore, the Commission adjourns the current hearing to fall 2009 so that a complete plan that gives details and milestones on long-term activities for the proposed licence period is available for consideration. The specific date for the continuation of the hearing will be announced later.
42. The Commission extends the current Class IB Waste Facility Operating Licence for Beaverlodge Mine and Mill site for a period of eight months and requests that Cameco and CNSC staff be back before the Commission to present the requested information before the end of the licence extension.
43. The Commission exempts from licensing the five satellite mine site lease areas, EMAR 16, EMAR 19, EMAR 21, Eagle 4 & 7 Claims and Eagle Claim. Therefore, the five exempted sites could be transferred for registration into the Province of Saskatchewan's Institutional Control Program pursuant to the *Reclaimed Industrial Sites Act*.

⁷ S.C. 1992, c. 37.

⁸ SOR/94-636

Appendix A – Intervenors

Intervenors	Document Number
Eleanor Knight	CMD 09-H2.2
Métis Nation Saskatchewan, represented by R. Doucette and D. Racine	CMD 09-H2.3
Northern Saskatchewan Environmental Quality Committee, represented by W. Kelly	CMD 09-H2.4
Bill Adamson	CMD 09-H2.5
Jim Penna	CMD 09-H2.6