

Record of Proceedings, Including Reasons for Decision

In the Matter of

Applicant Cameco Corporation

Subject Application to Renew Uranium Mine Operating
Licence for the Rabbit Lake Operation

Hearing
Dates June 11, 2008 and September 18, 2008

RECORD OF PROCEEDINGS

Applicant: Cameco Corporation

Address/Location: 2121 – 11th Street West, Saskatoon, Saskatchewan

Purpose: Application to Renew Uranium Mine Operating Licence for the Rabbit Lake Operation

Application received: December 10, 2007

Dates of hearing: June 11, 2008 and September 18, 2008

Location: Canadian Nuclear Safety Commission (CNSC) Public Hearing Room, 280 Slater St., 14th. Floor, Ottawa, Ontario (Hearing Day One) and Delta Bessborough, 601 Spadina Crescent East, Saskatoon, Saskatchewan (Hearing Day Two)

Members present: M. Binder, Chair A.R. Graham
C.R. Barnes M. J. McDill
A. Harvey D. Tolgyesi

General Counsel: J. Lavoie (Hearing Day One) and L. Thiele (Hearing Day Two)

Secretary: M. Leblanc

Recording Secretary: S. Dimitrijevic

Applicant Represented By	Document Number
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Intervenors	Document Number
See appendix A	

Licence: Renewed
Date of Release of Decision: October 23, 2008

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Introduction

1. Cameco Corporation (Cameco) has applied to the Canadian Nuclear Safety Commission¹ (CNSC) for a renewal of the Rabbit Lake Operation Uranium Mine Operating Licence UMOL-MINEMILL-RABBIT.01/2008, which expires on October 31, 2008. The Rabbit Lake Operation is located on the western shore of Wollaston Lake in northern Saskatchewan, approximately 750 kilometers north of Saskatoon. The current licence also authorizes Cameco to possess, store, transfer, import, use and dispose of nuclear substances and radiation devices.
2. The Rabbit Lake Operation consists of an active underground uranium mine (Eagle Point Mine), three inactive and partially reclaimed and flooded open-pit mines (A-Zone, B-Zone and D-Zone Mines), a mill, various mine and mill waste management systems, and associated site facilities. The operation encompasses the Rabbit Lake open-pit mine converted into an In-pit Tailings Management Facility (RLITMF) and one inactive and partially reclaimed Above Ground Tailings Management Facility (AGTMF).

Issues

3. In considering the application, the Commission was required to decide, pursuant to subsection 24(4) of the Nuclear Safety and Control Act² (NSCA):
 - a) if Cameco is qualified to carry on the activity that the amended 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.

Public Hearing

4. The Commission, in making its decision, considered information presented for a public hearing held on June 11, 2008 in Ottawa, Ontario and on September 18, 2008 in Saskatoon, Saskatchewan. The public hearing was conducted in accordance with the *Canadian Nuclear Safety Commission Rules of Procedure*³. During the public hearing, the Commission received written submissions and heard oral presentations from CNSC staff (CMD 08-H14, CMD 08-H14.A and CMD 08-H14.B) and Cameco (CMD 08-H14.1, CMD 08-H14.1A, CMD 08-H14.1B, CMD 08-H14.1C and CMD 08-H14.1D). The Commission also considered submissions from 10 intervenors (see Appendix A for a detailed list of interventions).

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 S.C. 1997, c. 9.

³ S.O.R./2000-211.

5. The Commission also held public hearings on June 11, 2008 and September 17, 2008 to consider Cameco's applications to renew the operating licences for the McArthur River uranium mine and the Key Lake operation. Considering that certain issues and corporate-wide programs at Cameco apply to all three facilities, and recognizing the interest that some intervenors have in more than one of Cameco's facilities, the Commission decided to consider any relevant information presented on the record for all three hearings.

Decision

6. Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Proceedings*, the Commission concluded that Cameco is qualified to carry on the activity that the licence will authorize. The Commission also determined that Cameco, in carrying on that activity, will make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed. Therefore,

the Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, renews the Uranium Mine Operating Licence issued to Cameco Corporation for its Rabbit Lake Operation located on the western shore of Wollaston Lake in northern Saskatchewan. The licence, UMOL-MINEMILL- RABBIT.00/2013, is valid from November 1, 2008 to October 31, 2013 unless suspended, amended, revoked or replaced.

7. The Commission includes in the licence the conditions recommended by CNSC staff as set out in the draft licence attached to CMD 08-H14.B
8. With this decision, the Commission requests that Cameco prepare a status report on the safety performance of its facility following the midpoint of the five-year licence term. CNSC staff shall also prepare a report on the results of compliance activities carried out during the first half of the licence term and on the licensee's performance during that period. Cameco and CNSC staff shall present their reports at a public proceeding of the Commission, in approximately June 2011.
9. The Commission also requests that Cameco submit to the Commission a report on the progress it has made regarding its Action Plan for reclamation of inactive mining areas and its Fire Protection program. Cameco's reports shall be presented at a public proceeding of the Commission in September 2009.

Issues and Commission Findings

10. In making its decision, the Commission considered a number of issues related to Cameco's qualification to carry out the proposed activities and the adequacy of the proposed measures for protecting the environment, the health and safety of persons, national security and international obligations to which Canada has agreed. The Commission's findings, based on consideration of all of the information and submissions available on the record for the hearing, are summarized below.

Radiation Protection

11. As part of its evaluation of the adequacy of provisions for protecting the health and safety of persons, the Commission considered the past performance and future plans of Cameco in the area of radiation protection.
12. Cameco informed the Commission on its Radiation Protection Program and presented data on workers' radiation doses for the expiring licence period. The presented data show that radiation doses for both underground and surface workers at Rabbit Lake had trended downward during the licence period. All doses were well within regulatory limits.
13. Cameco stated that radiation protection issues related to radon-rich water encountered in development areas at Eagle Point had been identified and addressed. Control of ventilation in the mine is recognized as a critical factor in maintaining effective radiation protection. Cameco added that it is planning to do physical upgrades to the ventilation system.
14. CNSC staff reported to the Commission that an inspection of the implementation of the Radiation Protection Program had been carried out in January 2008. Identified deficiencies did not represent a significant impairment to the overall effectiveness of the program. CNSC staff further reported that it had conducted 24 NSCA Type II inspections. Action items had been issued and Cameco has addressed these items to CNSC staff's satisfaction.
15. CNSC staff noted that improvements to the Radiation Protection Program have been made in the areas of job hazard analysis, dosimetry, training and revision of program documentation. The program and its implementation have been rated as meeting requirements.
16. With respect to radiation doses received by workers, CNSC staff informed the Commission that it had reviewed the data and that radiation doses have been adequately controlled during the licence period. No workers received an effective dose in excess of the regulatory limits, which is 50 mSv/y (millisieverts per year) and 100 mSv per five years. CNSC reported that six weekly action levels (1 mSv/week) and three quarterly action levels (5 mSv/quarter) had been exceeded and that corrective actions have since been implemented.

17. With respect to Cameco's dosimetry plan, E. Knight, in her intervention, remarked that it does not address the fact that radon needs a different detection process and is an alpha-emitter that could be inhaled. CNSC staff is of the view that Cameco has an adequate radiation safety program in place to address the issue of radon detection.
18. Based on the above information and considerations, the Commission concludes that Cameco has made adequate provision for the protection of people from radiation at the Rabbit Lake Operation.

Conventional Health and Safety

19. To determine whether Cameco will make adequate provisions to protect the health and safety of persons while carrying out the proposed activities at the Rabbit Lake Operation, the Commission considered Cameco's conventional health and safety program.
20. With respect to the protection of persons at the Rabbit Lake Operation, CNSC staff informed the Commission that Cameco's Occupational Health and Safety Program (OH&S) has been evaluated by Saskatchewan Ministry of Advanced Education, Employment and Labour (Saskatchewan Labour) and found to be satisfactory. CNSC staff added that Saskatchewan Labour has conducted regular compliance inspections and has indicated that the level of compliance was normal. All contraventions, action notices and recommendations under the NSCA had been adequately addressed by the licensee. Both the program and its implementation have been rated as meeting requirements.
21. Cameco informed the Commission on its lost-time injury frequency, which increased during the licence period due to an unusually large number of incidents involving contractors in 2007. Cameco stated that it had responded with a range of measures intended to improve contractor safety performance.
22. CNSC staff noted that it had issued an enforcement letter with respect to the health and safety of contract workers and the associated licensee responsibilities. As a result, Cameco has developed and implemented a Contractor Management Standard at the Rabbit Lake Operation.
23. The Commission sought more details about the increased number of loss time injuries. Cameco responded that the loss time injuries have been associated exclusively with Cameco's contractors. The Commission further asked CNSC staff about monitoring the safety training and workers health and safety statistics. CNSC staff responded that it follows this issue in cooperation with the provincial government.
24. Based on this information, the Commission is satisfied that Cameco has made adequate provision for the protection of persons from conventional hazards at the Rabbit Lake Operation.

Environmental Protection

25. To determine whether Cameco will make adequate provisions to protect the environment while carrying out the proposed activities at the Rabbit Lake Operation, the Commission considered the potential for the continued facility operations to adversely affect the environment.
26. In this regard, Cameco informed the Commission that after a plant modification in 2006, it had effectively reduced the average annual concentration of uranium in effluent by 63%, to less than 0.1 mg/L (milligrams per litre of effluent) during normal operation. The scope of the uranium reduction project has been broadened to address selenium and molybdenum levels in the effluent.
27. Cameco also informed the Commission that other environmental protection measures included investigations aimed at reducing SO₂ (sulfur dioxide) emissions from acid plants, improvement in water-management practices, and infrastructure improvements to reduce the risk of spills.
28. CNSC staff reported that Cameco's Environmental Management System (EMS) had been audited by CNSC staff in 2005. All deficiencies identified at that time have been addressed by Cameco. In addition, the Environmental Protection Program had also been reviewed. CNSC staff identified minor deficiencies that were addressed by Cameco to further improve the EMS. The program and its implementation have been rated as meeting requirements.
29. CNSC staff added that it had conducted, together with Saskatchewan Ministry of Environment inspectors, 17 NSCA compliance inspections. All action notices have been addressed adequately by Cameco.
30. CNSC staff stated that during the licence period the effluent loading to the environment has remained stable and that the program to reduce uranium in effluent has been successful. CNSC staff considered this to be sufficient to address the current licence condition 2.4 on uranium concentration limits in the effluent, and recommended to the Commission that this condition be removed.
31. CNSC staff informed the Commission that uranium, molybdenum and selenium concentrations within Horseshoe Creek waters had exceeded their relevant surface water quality objectives. CNSC staff expects that the measures to reduce uranium concentrations and loadings to the system would help address these near-field effects.
32. With respect to the Links Lake system, CNSC staff added that contaminant sources have been eliminated or rerouted to the RLITMF. CNSC staff noted that further assessment of reclamation options to prevent contaminant transport from Upper Link Lake were required, including but not restricted to the removal or isolation of the contaminated sediments of Upper Link Lake.

33. Based on this information, the Commission is satisfied that Cameco is making adequate provision to protect the environment.

Operational Performance

34. The Commission examined Rabbit Lake's operational performance in order to establish the adequacy and effectiveness of Cameco's approach to safe operation of the facility. The area has been divided in five sub-programs encompassing mine operations, mill operations, waste management, fire protection and transport. CNSC staff rated all sub-programs and their implementation as meeting requirements, with the exception of fire protection.

Mine Operations – Eagle Point Mine

35. Cameco informed the Commission on its implemented enhancements to quality management at Rabbit Lake Operation that have included formal change management and design control processes, implementation of job hazard analysis for all non-routine tasks, and development of an internal auditing program.
36. CNSC staff reported to the Commission that it had carried out 25 NSCA compliance inspections and that Cameco had addressed the issued action notices and recommendations in a satisfactory manner. CNSC staff further reported that mine modifications and development, proposed by Cameco, had met the specific requirements of licence condition 3.1 and had been approved by CNSC staff.
37. The Commission sought more information on the discovery of insufficient ventilation capacity at the portal ramp. Cameco responded that the error had been made in traffic control since the vehicle traffic had not been restricted. Cameco informed the Commission that an evaluation of the mine ventilation system had been conducted in 2006 and that improvements had been required. Cameco stated that corrective measures had not been implemented quickly enough to address the insufficiency in ventilation caused by an increased number of vehicles passing through the portal. Cameco added that it had conducted a root cause investigation of the incident and addressed all concerns.
38. In his intervention, B. Adamson expressed his concerns about the degradation of the Acid Plant, the ageing structure of the facility and the need for replacements of containment systems, tanks, pumps and pipes. The Commission inquired about changes and improvements planned during the proposed licence period. Cameco responded that its rejuvenation project encompasses mill adaptation and maintenance issues resolution, and that the facility would be brought up to the current standards.
39. E. Knight, in her intervention, stated that mining capacity at Rabbit Lake site is now larger than that listed in the initial Environmental Assessment. Following this intervention, the Commission sought more information on the amounts of mined ore at the site. Cameco responded that the production does not reach the licence level and is

smaller than the production during the last licence period.

40. The Commission asked for clarification with respect to the two different values for mining limits appearing in the proposed licence conditions 2.1 and 2.2. CNSC staff explained that the facility had been licensed to operate at the level of 6.5 million kilograms per year but had produced subsequently at a much lower rate. Therefore CNSC staff proposed a lower stop measure of 4.25 million kilograms per year to ensure that the safety programs were in place for a maximum production rate. Cameco would be required to seek approval from CNSC to produce at the maximum authorized rate (in excess of 4.25 million kilograms per year).

Mill Operations

41. Cameco informed the Commission that the Rabbit Lake Operation has been envisaged as a regional milling facility for processing ore from Eagle Point and other projects in the area. It would also process uranium containing solution from the Cigar Lake site.
42. CNSC staff reported to the Commission that, in addition to provincial inspections, it had carried out 18 NSCA compliance inspections and that Cameco had addressed the issued action notices in a satisfactory manner.
43. The Commission asked about molybdenum and selenium reduction in the effluent. Cameco responded that the treatment of effluents was a day-to-day operation and that water for treatment was collected from all areas of the site. Tests have been conducted to identify ways for further improvements in effluent quality and for construction of new circuits in the Rabbit Lake Water treatment plant, with commissioning expected in 2009.
44. At the Commission request, Cameco presented a plan of activities including Gantt charts for the activities and initiatives planned for the applied-for licence period.

Waste Management

45. Cameco described the types of wastes that are treated in the Rabbit Lake facility that include mill effluent, tailings, waste rock, wastewater, solid waste and other hazardous materials. Cameco informed the Commission that tailings from the milling of Eagle Point ore continue to be stored in the RLITMF, which currently holds about 6.74 million tonnes. Remaining capacity was estimated to be close to 840,000 m³ (cubic metres) and will be increased by modifying the pit-crest of this tailing management facility⁴.

⁴ This project to increase the capacity of the RLITMF has been considered and approved through a separate proceeding before the Commission.

46. Cameco further informed the Commission that three inactive and flooded open pit mines are included in the waste management facilities. One of them, A-Zone, was addressed, in accordance with an approved detailed reclamation plan, by breaching the dike between the flooded pit and Collins Bay. The other one, B-Zone, still does not meet water quality criteria to allow breaching of the dike between the pit and Collins Bay.
47. CNSC staff stated that it had carried out 18 NSCA compliance inspections, in addition to provincial inspections, during the current licence period. Cameco has addressed the action notices arising from these compliance inspection findings in a satisfactory manner.
48. CNSC staff also informed the Commission that the AGTMF was to be closed and allowed to consolidate during the current licence period. However, the Rabbit Lake Operation has continued to use it as a waste facility for contaminated materials. During the proposed licence term, CNSC staff would request the licensee to take a critical review of this practice, in order to allow full reclamation activities of the AGTMF. CNSC staff proposed a corresponding licence condition to address this issue.
49. The Commission inquired about tailings capacity at the Rabbit Lake Operation. Cameco responded that it was studying tailing options and was likely to apply to the Commission for a new tailing facility during the following licence period.
50. With respect to additional mining and increased ore quantities, the Commission requested that Cameco present the results of its trials to thaw frozen residuals. Cameco submitted interim results of its tailings thawing program. Cameco stated that a report with analysis of the results will be submitted to all regulating agencies within six months of the completion of the program.
51. Responding to further inquiry into the problem of consolidating the tailings by thawing frozen water residuals, Cameco explained in more details the procedure applied and noted that this activity was expected to result in about a 10% increase in tailings capacity. The Commission sought more information on consolidation of paste tailings. Cameco responded that after considering this option, it had been realised that the paste tailings were already well consolidated.
52. The Commission asked if tailings were reprocessed in the mill. Cameco responded that they were not reprocessing any tailings.
53. The Commission inquired on the reasons for the indications that the amount of total suspended solids increases faster than the total flow of effluents. Cameco responded that the effluent discharge was within regulatory limits, and an increase in the amount of suspended solids could be related to a cleanout of effluent treatment settlement ponds and consequent carryover of suspended solids into the final treated effluent.

Transport and Packaging

54. CNSC staff informed the Commission on its inspection of the Rabbit Lake Operation compliance with the *Packaging and Transport of Nuclear Substances Regulations*⁵ for Class 7 materials. CNSC staff stated that all requirements had been met.
55. CNSC staff further informed the Commission that packaging and transport aspects have been consistently assessed during regular facility inspections and that the necessary processes and systems were in place.

Events

56. Cameco informed the Commission on two major events that have occurred during the current licence period. The first event was a water inflow of 120 m³/h that was observed in November 2007. Cameco suspended mining activities, examined the situation and developed and implemented an action plan for the mitigation of adverse effects and remediation. Cameco reported that it had successfully plugged the hole and grouted it to seal off the water inflow to the mine.
57. Cameco stated that the most serious environmental incident had been the discovery of subsurface contamination from the mill during construction work in January 2008. Namely, ice contaminated with uranium had been found during excavation of the low pH clarifier. Construction was stopped immediately and a sump was installed to collect contaminated groundwater and limit its spread. Cameco identified and corrected the source of the contamination and was completing a hydrogeological study including the drilling of 11 new sets of monitoring wells.
58. Commenting on these two events, CNSC staff stated that Cameco had submitted a root cause investigation report on the 2007 water inflow, and CNSC staff was currently reviewing it. With respect to the subsurface contamination, CNSC staff noted that this had been reported to the Commission as a Significant Development Report in April 2008⁶. CNSC staff had identified specific concerns to be addressed prior to the mill restarting.
59. Commenting on other events of smaller scale, CNSC staff mentioned that in late 2006, sulfur dioxide (SO₂) emissions were significantly higher than normally reported. After the repair of the acid plant reaction system, the SO₂ emissions have returned to normal levels.
60. CNSC staff informed the Commission that there had been 18 reportable spills under the Saskatchewan Environment *Spill Control Regulations* criteria. In all cases, the incidents had been reported as required and appropriate actions were taken. In addition, there had been 37 incidents reported under section 29 of *General Nuclear Safety and*

⁵ S.O.R./2000-208.

⁶ Refer to the Minutes of the CNSC public meeting held on April 2, 2008.

*Control Regulations*⁷. CNSC staff added that adequate investigation and follow-up actions had been taken.

61. The Commission inquired on potential leaks and contamination from the mill operations and on the effectiveness of visual inspections. Cameco responded that its staff conducts daily inspection, but pointed out that the ageing issues could have contributed to the events. Cameco added that a process to upgrade several of the sumps was underway. The Commission requested that Cameco present more details of its groundwater studies and results of analysis of data obtained from test wells.
62. Cameco informed the Commission on the contamination caused by seepage from the mill and provided a summary of observations and recommendations from the groundwater contamination investigation. Results have shown that the quality of water samples have dramatically improved over the past six months, which was found to be consistent with the source of contamination being removed. CNSC staff committed to continue to monitor the situation and to update the Commission as soon as new results on groundwater quality become available.

Conclusions on Operational Performance

63. Based on the above information and considerations, the Commission is satisfied that Cameco has sufficient controls in place so that the continued operation of the facility will not pose unreasonable risk to health and safety of persons or the environment.
64. With respect to the production limit, the Commission agrees with the proposed licence conditions that the annual production from the facility above 4.25 million kilograms of uranium would require the prior written approval of a person authorized by the Commission and that the annual production from the facility shall not exceed 6.5 million kilograms of uranium. If the licensee requires increased operational flexibility, the Commission would consider a different approach to setting the production limit upon receipt of a licence application with supporting documentation.

Quality Management

65. Cameco informed the Commission that it is currently focused on four initiatives related to quality management: training, corrective action, quality procurement and contractor management. Cameco stated that each of these initiatives is being applied through the quality management system (QMS) at the Rabbit Lake Operation.
66. CNSC staff reported that an inspection of the QMS had been conducted in June 2007. During the inspection, deficiencies related to the design control, procurement process and the non-compliance and corrective action process had been identified. One directive and nine action notices have been issued and CNSC staff has been reviewing Cameco's responses.

⁷ S.O.R./2000-202

67. CNSC staff stated that further evaluation of the program and its implementation will be carried out as part of its compliance program. The Quality Management program area has been rated as meeting requirements for the program, and below expectations for its implementation.
68. E. Knight, in her intervention, expressed the opinion that Cameco needs to show results of its training concept under real working conditions.
69. Cameco said that it was implementing a systematic approach to training (SAT) to manage and track corporate training requirements and program development.
70. CNSC staff informed the Commission that it had completed one inspection of the Training subprogram in April 2008, and numerous document reviews. Ten action notices had been issued to address minor deficiencies. CNSC staff added that Cameco was implementing the SAT using a risk-informed basis.
71. Cameco noted that it expects full implementation of this program during the following licensing period, by 2011.
72. Based on the above information and considerations, the Commission is of the opinion that the outstanding issues in program implementation pose a low risk to the achievement of regulatory performance requirements and expectations and concludes that Cameco has in place the necessary programs to assure continued acceptable performance.

Emergency Preparedness and Fire Protection

73. Cameco informed the Commission that, during the current licence period, emergency preparedness and response capabilities at the Rabbit Lake site were improved by the completion of rapid intervention team training and incident command training, and by purchase of a new fully equipped fire truck. Cameco noted that emergency response drills were conducted in response to requirements of the Saskatchewan Ministry of Advanced Education, Employment and Labour and those under the *Environmental Emergency Regulations*⁸ and the *Metal Mining Effluent Regulations*⁹.
74. CNSC staff reported to the Commission that, in November 2007, it had audited a complex emergency response exercise that had been carried out by Cameco at the Rabbit Lake Operation. Following the exercise, Cameco had conducted briefings with all staff that had been involved in the scenario to identify lessons learned and recommendations for follow-up actions. The briefing sessions had been evaluated by CNSC staff.

⁸ S.O.R./2003-307

⁹ S.O.R./2002-222

75. CNSC staff informed the Commission that the Rabbit Lake Emergency Preparedness and Response Program is referenced in the Mining Facility Licensing Manual. The program and its implementation have been rated as meeting requirements.
76. Cameco informed the Commission that it had commissioned a third-party review of the fire protection requirements in 2005 and had engaged a third-party expert in 2006 to conduct inspections. Cameco added that it was addressing the identified issues.
77. CNSC staff informed the Commission that it had conducted three compliance inspections. The findings have shown that Cameco's Fire Protection program did not provide sufficient information to demonstrate that the fire protection activities are planned, coordinated, controlled and integrated to achieve the fire protection safety objectives required by the codes and standards listed in the operating licence.
78. CNSC staff reported that its review of the third party review report identified several non-compliances with the operational requirements of the *National Building Code of Canada, 2005*. The Commission requested that information on the status of non-compliance issues be presented within the next year.
79. Intervenor E. Knight expressed her opinion that an improvement of the fire protection program, so that it meets national standards, has been needed since the initiation of the Rabbit Lake Operation.
80. Responding to the Commission's request to present an update on its activities for improvement of Fire Protection program and its implementation, Cameco has presented the Fire Protection program status with details regarding its integrated approach to fire protection, fire inspection process, maintenance of fire protection systems and proactive measures for the prevention of fire hazard.
81. The Commission inquired about a fire incident in the electrical shop and its potential impact on workers' safety. Cameco responded that there were no immediate consequences to the workers' health and safety.
82. Responding to the Commission's question on a timeline for resolving outstanding issues with respect to fire protection, Cameco stated that the last checks related to the third party inspections are expected to be done by the end of this year.
83. The Commission remains concerned that Cameco has not yet demonstrated full compliance with the CNSC requirements for fire protection and expects that the outstanding issues will be addressed as soon as possible. In this regard, the Commission requests that Cameco provide an update to the Commission on the status of its fire protection program at a public proceeding in September 2009.

Nuclear Security

84. With respect to site physical security issues, the Commission was provided with separate, protected CMD 08-H14.A for its consideration.
85. The Commission concludes that Cameco has made, and will continue to make, adequate provisions for ensuring the physical security of the Rabbit Lake Operation.

Safeguards

86. CNSC staff informed the Commission that the licensee has in place a satisfactory procedure to facilitate the prompt access of the International Atomic Energy Agency (IAEA) inspectors upon request. During this review period, no access requests from IAEA were received.
87. Based on the information received, the Commission is satisfied that Cameco has made adequate provisions in the areas of safeguards and measures necessary for implementing international agreements to which Canada has agreed.

Decommissioning Plan and Financial Guarantee

88. CNSC staff informed the Commission that it has found the updated Preliminary Decommissioning Plan (PDP) and associated cost estimate to be acceptable. CNSC staff recommended that the financial guarantee to cover the cost of decommissioning be increased to \$ 105 million, to be provided by Cameco in irrevocable letters of credit.
89. In her intervention, E. Knight expressed concerns about the AGTMF reclamation process and funding for decommissioning of the Collins Bay site. The Commission noted that all aspects of this issue are encompassed by the Preliminary Decommissioning Plan and that sufficient funds for decommissioning are in place.
90. The Northern Saskatchewan Environmental Quality Committee, in its intervention, expressed understanding for the need for a larger, new Tailings Management Facility. It suggested the decommissioning of the original one and prompted the decommissioning of all unused old facilities.
91. The Commission sought more details on Cameco's plans to provide information on its decommissioning activities to the neighbouring communities and to address growing concerns with this respect. In its response, Cameco explained in more details its frequent communication with interested communities and stated that it would intensify its efforts with special accent on decommissioning and reclamation of the A-zone.

92. The Commission is of the opinion that the revised PDP and financial guarantee, as proposed, are acceptable. The Commission notes that any changes to Cameco's cost estimate shall be brought forward to the Commission for consideration.

Public Information

93. CNSC staff stated that it considers that Cameco's Public Information program meets the regulatory requirements of the CNSC. The program makes use of a variety of communication methods, including the use of community-based working groups and committees, a northern affairs office, a newsletter, a Web site, public meetings on specific issues, and a variety of informal communications with the public. CNSC staff noted that it had reviewed the communication samples provided by Cameco, explored its Web site and concluded that information about Cameco's Rabbit Lake facility is readily available to the public.
94. Cameco informed the Commission that its Public Information program is evaluated by third-party surveys conducted twice a year. Cameco provided more details on the information it disseminates to its target audience that includes the Northern Saskatchewan Environment Quality Committee (EQC), the Northern Mines Monitoring Secretariat (NMMS), the Mudjatik Co-Management Board, and the Northern Labour Market Committee.
95. Cameco stated that it travels regularly to communities impacted by the Rabbit Lake Operation and participates in various outreach activities, such as presentations at schools, career fairs and workshops, and added that general public is kept informed through newspaper and radio advertisements, brochures and pamphlets, news releases, articles in magazines and corporate Web site.
96. B. Adamson, in his intervention, expressed the view that CNSC is "being morphed into an organization differing from that authorized by NSCA". The Commission strongly reconfirmed its commitment to the mandate and stated that it fully respects the NSCA and acts accordingly.
97. The Commission is satisfied that Cameco has in place a developed public information program and expresses the view that the program should provide meaningful information in a clear and understandable manner to the public.

Cost Recovery

98. CNSC staff reported to the Commission that Cameco Corporation is in good standing with the Canadian Nuclear Safety Commission's *Cost Recovery Fees Regulations*¹⁰, with respect to the payment of licensing fees for its Rabbit Lake Operation.

Application of the *Canadian Environmental Assessment Act*

99. Before making a decision, the Commission must be satisfied that all applicable requirements of the *Canadian Environmental Assessment Act*¹¹ (CEAA) have been fulfilled.
100. Northern Village of Sandy Bay, in its intervention, proposes a full and complete EA for Rabbit Lake Operation and all other major projects in Northern Saskatchewan.
101. CNSC staff noted that the renewal of an operating licence under subsection 24(2) of the NSCA is not listed as a "trigger" under the *Law List Regulations*¹², and therefore an environmental assessment pursuant to the CEAA is not required.
102. Based upon the above assessment, the Commission is satisfied that an environmental assessment is not required before the Commission may consider and make a decision on this licence renewal application for the Key Lake facility under the NSCA.

Licence Length and Interim Reporting

103. Cameco requested and CNSC staff recommended a licence term of five years beginning November 1, 2008, and ending October 31, 2013.
104. B. Adamson, in his intervention, proposed a three-year licence period, while Saskatchewan Chamber of Commerce, Board of Directors of St. Paul's Hospital (Grey Nuns) of Saskatoon, Saskatoon Regional Economic Development Authority and Edwards School of Business, University of Saskatchewan supported a licence renewed for a five-year period.
105. The Commission inquired on reporting and requested that CNSC staff present a mid-term report. CNSC staff added that Cameco should submit the Action Plan for reclamation of the inactive mining areas by the end of June 2009, to be approved by the Commission or by a person authorized by the Commission.

¹⁰ S.O.R./2003-212.

¹¹ S.C. 1992, c. 37.

¹² S.O.R./94-636.

106. The Commission is of the view that deficiencies that remain in certain program areas do not constitute an unreasonable risk to the maintenance of health, safety, security, environmental protection, or conformance with international obligations to which Canada has agreed.
107. Based on the above information and considerations, the Commission accepts the proposed five-year licence term. With respect to interim reporting, the Commission requests that Cameco and CNSC staff present to the Commission a mid-term report on the safety performance at the Rabbit Lake Operation at a public proceeding of the Commission.

Conclusion

108. The Commission has considered the information and submissions received from Cameco, CNSC staff and intervenors as presented in the material on the record.
109. The Commission concludes that an environmental assessment under the CEAA is not required before the Commission may make its decision with respect to the application for the renewal of the licence.
110. The Commission is of the opinion that Cameco is qualified to carry on the activities that will be permitted under the licence. The Commission is also of the opinion that in carrying on those activities, Cameco 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.
111. The Commission therefore renews, pursuant to section 24 of the *Nuclear Safety and Control Act*, Cameco's Uranium Mine Operating Licence, UMOL-MINEMILL-RABBIT.00/2013.
112. The Commission includes in the licence the conditions recommended by CNSC staff, as set out in the draft licence attached to CMD 08-H14.B.
113. The Commission requests that Cameco and CNSC staff prepare mid-term reports that will provide a summary of the performance of the Rabbit Lake Operation. The reports shall be presented at public proceedings of the Commission in approximately June 2011.

114. The Commission also requests that Cameco submit to the Commission a report on the progress it has made regarding the Action Plan for reclamation of inactive mining areas and its Fire Protection program. Cameco's reports shall be presented at a public proceeding of the Commission in September 2009.



Michael Binder
President
Canadian Nuclear Safety Commission

OCT 23 2008

Date

Appendix A – Intervenors

Intervenors	Document Number
Northern Saskatchewan Environmental Quality Committee, represented by V. Powder	CMD 08-H14.2
Northern Lights School Division No. 113	CMD 08-H14.3
B. Adamson	CMD 08-H14.4
E. Knight	CMD 08-H14.5
Northern Village of Sandy Bay	CMD 08-H14.6
Northern Saskatchewan Women's Network Incorporated	CMD 08-H14.7
Saskatchewan Chamber of Commerce	CMD 08-H14.8
Board of Directors of St. Paul's Hospital (Grey Nuns) of Saskatoon	CMD 08-H14.9
Saskatoon Regional Economic Development Authority	CMD 08-H14.10
Edwards School of Business, University of Saskatchewan	CMD 08-H14.11