

**Canadian Nuclear
Safety Commission**

**Commission canadienne de
sûreté nucléaire**

Public hearing

Audience publique

**Cameco Corporation:
Application for the renewal
of the operating licence for
the Rabbit Lake Operation**

**Cameco Corporation:
Demande visant le renouvellement
de son permis d'exploitation pour
l'installation de Rabbit Lake**

June 11, 2008

Le 11 juin 2008

Public Hearing Room
14th floor
280 Slater Street
Ottawa, Ontario

Salle d'audiences publiques
14e étage
280, rue Slater
Ottawa (Ontario)

Commission Members present

Commissaires présents

Mr. Michael Binder
Mr. Alan Graham
Dr. Moyra McDill
Dr. Christopher Barnes
Mr. André Harvey
Dr. Ronald Barriault
Mr. Dan Tolgyesi

Mr. Michael Binder
Mr. Alan Graham
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Dr. Christopher Barnes
M. André Harvey
Dr. Ronald Barriault
M. Dan Tolgyesi

Secretary: Mr. Marc Leblanc

Secrétaire: Mr. Marc Leblanc

General Counsel :
Mr. Jacques Lavoie

Conseiller général :
Mr. Jacques Lavoie

1 --- Upon resuming at 4:31 p.m.

2 L'audience est reprise à 16h31

3 **THE CHAIRMAN:** Okay, we're ready to proceed
4 with what has become known in the CNSC as the Cameco Day.

5 The next item on the agenda is the
6 application by Cameco Corporation for the renewal of the
7 operating licence for the Rabbit Lake operations.

8 **MR LEBLANC:** So this is Day One of the
9 public hearing. The notice was published on April 11th,
10 2008. Two revisions of the notice were published to
11 change the date of hearing for Day One and to correct the
12 date of Day Two.

13 Submissions from both Cameco and staff were
14 due on May 12th. We have received supplementary
15 information by both Cameco and CNSC and we will again not
16 need to go in closed session on security matters.

17 **THE CHAIRMAN:** Mr. Grandey, I understand
18 you have another presentation to make.

19
20 **Cameco Corporation:**
21 **Application for the renewal of**
22 **The operating licence for the**
23 **Rabbit Lake Operation**
24

1 **08-H14.1 / 08-H14.1A / 08-H14.1B**

2 **Oral presentation by**

3 **Cameco Corporation**

4
5 **MR. GRANDEY:** Thank you very much, Dr.
6 Binder.

7 For the record I'm Gerry Grandey, President
8 and Chief Executive Officer.

9 And for the Rabbit Lake licence renewal --
10 that's the reason we're here -- I'm pleased to have with
11 me again Tim Gitzel, Senior Vice President and Chief
12 Operating Officer; David Neuburger, Vice President of
13 Mining. And then from the Rabbit Lake Operation David
14 Rezanoff, General Manager; Maurice Balych, Manager,
15 Special Projects, Environment; Kim Sparling,
16 Superintendent, Safety, Radiation, Quality and Training.

17 And from the Mining Division, Ken Gullen,
18 Director Technical Services; John Alonso, Director,
19 Compliance and Licensing; Pat Landine, Manager, Hydrology
20 and Civil Engineering; Jered Heigh, Superintendent, Safety
21 and Radiation Systems Application; Barry Esford, Senior
22 Hydrologist, Mining Division.

23 Likewise, from the Corporate Office, John
24 Jarrell, Vice President, Safety, Health, Environment and
25 Quality; John Takala, Director, Safety, Health,

1 Environment and Quality Systems; and Liam Mooney, Senior
2 Legal Counsel, Safety, Health, Environment and Quality.

3 As well, from Golder Associates, Greg
4 Misfeldt.

5 So with that introduction I'll now turn it
6 over to David Rezansoff for his remarks about Rabbit Lake.

7 **MR. REZANSOFF:** David Rezansoff for the
8 record.

9 Good afternoon, ladies and gentlemen.
10 General Manager Rabbit Lake Operation. It's my pleasure
11 to present to you a summary of Cameco CMD for the Rabbit
12 Lake Operation renewal of the Rabbit Lake operating
13 licence with the Canadian Nuclear Safety Commission.

14 Rabbit Lake Operation consists of a uranium
15 mill, an underground mine located on the shores of
16 Wollaston Lake, west of the community of Wollaston Lake
17 and about 700 kilometres north of Saskatoon.

18 Rabbit Lake is Canada's longest operating
19 uranium production facility. The operation has mined five
20 different ore bodies on the site since 1975 and has
21 produced a total of 169 million pounds of U308.

22 During the current licence term, the mill
23 processed ore from the Eagle Point Mine located
24 approximately 15 kilometres north of the mill on the
25 Harrison Peninsula, ore remnants from the B-zone pit mine

1 during the 1980s, a waste rock pile containing low-grade
2 ore from the original mining of the Rabbit Lake open pit
3 in the 1970s.

4 Eagle Point was expected to close during
5 the current licence term but successful exploration and
6 market conditions have extended the expected life of the
7 operation into the year 2013 with good potential for this
8 to increase further.

9 New life for the operation beyond mining
10 activities is being sought through the processing of Cigar
11 Lake uranium solution at the Rabbit Lake Mill. This
12 proposal is the subject of a separate EA hearing which
13 will be held later today.

14 We have applied to the Commission to extend
15 our operating licence for another five years and believe
16 our performance during the current term demonstrates that
17 we are fully qualified and capable of operating the
18 facility safely and without harming the environment.

19 Lost-time accident frequency for employees
20 and contractors at Rabbit Lake was relatively low during
21 the licence period, at .76 injuries per 200,000 hours
22 worked. This accident frequency for Cameco employees
23 actually declined over the licence period but we
24 unfortunately experienced an unusually high number of
25 incidents involving contractors during 2007 and that

1 affected this statistic.

2 In addition to the corporate initiatives to
3 enhance contractor management at all of our operations, as
4 described in the overview in earlier presentations today,
5 Rabbit Lake has taken a number of site level initiatives
6 to enhance safety of contractors.

7 So far in 2008 we have experienced two
8 relatively minor lost-time injuries and continue to make
9 efforts to improve in this area.

10 Rabbit Lake has maintained good radiation
11 control over the licence period. Doses to both employees
12 and contract workers trended downward during the licence
13 period.

14 With a large amount of development activity
15 in the mine we have encountered some challenges, in
16 particular related to the management of radon gas and the
17 limitation of ventilation systems. While measures to
18 manage these challenges were being implemented and
19 continue to be, we've also recognized that tighter change
20 management related to mine ventilation is necessary.

21 Though not related to radiation protection,
22 the importance of ventilation was highlighted for us
23 during a CNSC inspection in November 2007 when it was
24 found that ventilation was not sufficient in the ramp area
25 of the mine for the amount of diesel powered equipment

1 operating at any given time on the ramp.

2 Operations were suspended immediately and
3 action taken to correct the situation. We have also
4 conducted a root cause analysis to determine how that
5 situation developed and have addressed the issues
6 identified through that root cause investigation report.

7 Actions taken include improvements to
8 management procedures and engineering standards and
9 additional training and awareness raising activities for
10 workers.

11 Upgrades to the ventilation system at the
12 Eagle Point Mine are also planned to support future mine
13 development.

14 Environmental performance was also good
15 during the current licence period. All operational
16 discharges were within regulatory limits and there were
17 nine reportable spills over the licence period, all but
18 one of them minor.

19 The significant spill recorded was the
20 recent discovery of contamination in an excavation
21 adjacent to the mill which was the subject of a
22 significant development report to the Commission in April
23 2008 which I'll discuss further in the next few slides.

24 The quality of effluent from the operation
25 improved through a 63 percent reduction of average uranium

1 concentration and the treated effluent achieved in
2 response to a licence condition.

3 Through extensive engineering and research
4 work involved in reducing uranium and effluent Cameco also
5 identified opportunities to reduce selenium and molybdenum
6 and we are now acting on them. This is a proactive Cameco
7 initiative. We are currently constructing a low-gauge
8 clarifier specifically for the removal of molybdenum and
9 selenium at the Rabbit Lake Mill. The current project
10 cost is estimated at \$42 million for this new
11 installation.

12 Construction of these new circuits are
13 underway and we expect the construction to be completed by
14 year end with commissioning thereafter.

15 As we described in previous appearances in
16 front of the Commission, the seepage of process solution
17 was discovered during excavations at the end of January of
18 this year as part of a construction of the new water
19 treatment circuit adjacent to the mill. Cameco responded
20 quickly and decisively to this event. Construction was
21 stopped immediately and steps taken to collect and treat
22 affected groundwater.

23 We also began a review of structural
24 integrity and containment structures in the mill building
25 and our practices for handling processed liquids. This

1 review identified the source of the leakage and led to
2 repair and replacement of concrete in several areas of the
3 mill and the cleaning and resealing of concrete in several
4 others.

5 An extensive hydrogeological investigation
6 program to characterize and delineate the extent of
7 contamination was initiated, including the installation of
8 11 new monitoring well nests around the mill building, and
9 the current status of the hydrogeological assessment,
10 details of which were provided in a supplemental CMD which
11 is part of the package that has been provided to you.

12 We've also initiated a root cause analysis
13 to understand what systemic deficiencies exist so that
14 corrective actions beyond those noted above can be
15 implemented to ensure the potential for similar
16 recurrences is minimized.

17 We now have results from testing of the
18 groundwater from the new monitoring wells in the vicinity
19 of the mill. And I mentioned, the 11 piezometer nests
20 that were installed, five piezometer nests of those were
21 installed around and near the excavation where the
22 discovery was made to delineate the contamination. A
23 further six piezometer nests were installed across the
24 mill hill area to better define groundwater flow. Each
25 piezometer nest is structured to allow sample collection

1 in the bedrock and overburden or fill material at
2 different depths. Soil samples collected during the
3 drilling of these wells have also been tested.

4 In general terms, the study has confirmed
5 that the previous modelling conducted over the past
6 several years confirms that groundwater in the vicinity of
7 the mill flows towards the tailings management facility.
8 Further, concentrations of uranium and sulphate in samples
9 from the new wells were all found to be within historic
10 norms.

11 From the groundwater flow monitoring we
12 expect the contaminants are moving towards the tailings
13 facility but have not yet reached the new monitoring wells
14 on the north side of the mill building.

15 Testing of samples taken of water
16 collected from a sump in the excavation area since the
17 contamination was first discovered shows a sharp drop-off
18 in concentrations. This strongly suggests that we have
19 identified and addressed the sources of contamination in
20 the mill in the case of this particular event.

21 We have also completed and submitted to the
22 CNSC staff, as of last week, the root cause analysis of
23 the event. The analysis indicated six causal factors
24 associated with this event, insufficient process fluid
25 handling practices, a deficiency in systematic

1 preventative maintenance, insufficient provisions to apply
2 experience from other operations in Rabbit Lake's
3 management system, a failure to mitigate specific
4 conditions identified as potential risks through Rabbit
5 Lake's environmental management system, assessment of
6 contaminant conditions was not risk informed and a lack of
7 monitoring in the immediate vicinity of the mill to more
8 quickly detect anomalous conditions.

9 You will note also that these factors are
10 similar to those identified through the causal analysis of
11 seepage from Cameco's Port Hope conversion facility in
12 2007.

13 After reviewing the analysis of the Port
14 Hope event in 2007, the mining division directed all
15 operations to carry out containment inspections and
16 process reviews -- process practice reviews to look at the
17 structural integrity of containment structures, as well as
18 our practices for handling process fluids in due course of
19 normal operations.

20 As noted in previous presentations, a plan
21 was in development for this work at all the sites when the
22 contamination was discovered at Rabbit Lake.

23 The root cause analysis recommended seven
24 corrective actions related to this event. It called for
25 improvement of design and operating standards with respect

1 to containment, better definition of secondary and primary
2 containment systems, systematic assessment of conditions
3 to standards, risk-based preventive maintenance of
4 containment facilities, a rigorous use of experience
5 program, improve risk assessment processes especially in
6 areas of likelihood, and also continued third-party
7 evaluations of mill containment integrity.

8 Management's review of the assessment
9 concluded that we need a better process to respond to
10 identified risks. In this case, the environmental aspect
11 had been identified but we did not fully appreciate the
12 potential consequences and as a result failed to mitigate
13 in a timely way. This is a condition that has been
14 prevalent in recent issues that Cameco has been dealing
15 with and we believe through taking these actions will help
16 to further improve the safety culture at the Rabbit Lake
17 operation.

18 We continue to make progress to improve our
19 quality management systems. Activities in each of these
20 areas, as outlined in Mr. Neuburger's overview
21 presentation earlier today, are certainly under way at
22 Rabbit Lake.

23 As indicated by the CNSC staff's overall
24 rating with respect to quality management, the written
25 programs and procedures are now in place and we are

1 working on implementation and refinement to ensure an
2 overall effective system and adherence by employees at all
3 levels in the company.

4 A recent CNSC follow-up assessment of
5 Rabbit Lake's QMS identified significant improvement in
6 the system and progress in addressing issues raised during
7 the related Type 1 CNSC inspection that was carried out in
8 2007.

9 We have committed the necessary resources
10 and developed plans to ensure that staff's concerns have
11 been addressed.

12 Areas of specific focus in terms of quality
13 management at Rabbit Lake are in contractor management and
14 formal change management and design control processes.

15 With respect to contractor management, we
16 have applied the new corporate program, as well as the
17 mining division standard. These measures are intended to
18 ensure that all contract workers are aware of Cameco's
19 programs and expectations and that all contract work is
20 carried out in full compliance with the standards of
21 Cameco's programs and the integrated safety, health,
22 environment and quality policy.

23 The need to enhance or change management in
24 design control processes was underlined by the 2007 water
25 flow event at Eagle Point, which we did successfully

1 respond to. The root cause analysis of that event
2 identified the need to revise some of our standards and
3 guidelines for mining and development work, and improve
4 our change management and risk assessment processes.

5 The analysis was finalized recently and
6 we're currently working to formulate actions to address
7 the corrective action recommendations.

8 Another area of focus for Rabbit Lake is
9 training. Again, and as indicated by CNSC staff's rating,
10 we have a solid system in place and are working on
11 effective implementation. Cameco's corporate systematic
12 approach to training system, as described earlier, will
13 provide the tool we need to ensure expectations are met.

14 The healthy safety culture at the Rabbit
15 Lake operation will certainly ease implementation of the
16 measures we are undertaking in training and quality
17 management.

18 As required under Cameco's Safety and
19 Health Management Program, a safety culture assessment was
20 conducted at the Rabbit Lake operation in 2005. The
21 assessment found an overall healthy safety culture, the
22 workforce recognizing the importance of safety initiatives
23 and willingness to alter their practices to enhance
24 safety.

25 The assessment did also identify some areas

1 requiring additional work, such as a tendency to not
2 recognize opportunities or set or achieve higher standards
3 which are being addressed through corporate and site level
4 communication and training initiatives.

5 Cameco is also working to meet CNSC
6 expectations with respect to fire protection, the subject
7 of some discussion already today. The operation has in
8 place fully trained and equipped firefighting and
9 emergency response teams that are capable of dealing with
10 any conceivable emergency at the site. We also have
11 extensive fire detection and automated suppression
12 systems.

13 However, bringing the 33-year-old mill
14 facility and associated ancillary facilities into
15 compliance with the 1995 fire code has been challenging.
16 Also, as mentioned earlier by Mr. Jered Heigh, we are in
17 fact working towards the 2005 revision of that standard.

18 We have been taking many steps towards this
19 goal and we expect to be in compliance with this code, as
20 well as key licence requirements by the end of 2008.

21 Tailings from the milling of Eagle Point
22 ore are stored in the Rabbit Lake in-pit tailings
23 management facility. The facility has the remaining
24 capacity of approximately 840,000 cubic metres which is
25 sufficient to store the waste from the milling of most of

1 the remaining ore at Eagle point.

2 We are currently applying different
3 injection approaches as well to thaw ice lenses in the
4 tailings and thereby further improve consolidation and
5 increase available tailing space.

6 However, with the continued expansion of
7 the reserve base at Eagle Point through successful
8 exploration, it is clear that additional tailings capacity
9 will be necessary to sustain the Rabbit Lake operation
10 beyond the year 2013.

11 As part of the environmental assessment for
12 the Rabbit Lake Solution Processing Project, Cameco has
13 proposed expanding the capacity of this facility. As the
14 amount of storage capacity we gain decreases the elevation
15 of the deposited tailings we are seeking expedited
16 consideration of this proposal by the Commission in order
17 to begin work during the current construction season, that
18 being the summer and fall of 2008.

19 With respect to reclamation, the general
20 approach at Rabbit Lake is to focus first on the Harrison
21 Peninsula and then to shift to the Rabbit Lake drainage
22 basin where planning for a number of potential source
23 points must be integrated into the overall decommissioning
24 strategy.

25 The current general plan calls for a

1 completion of A-Zone reclamation and that was initiated
2 and for the most part successfully achieved within the
3 last two years, followed by the D-Zone pit, B-Zone waste
4 rock pile, the Eagle Point Mine in the case that we may be
5 unable to further extend the life of the mine, the above-
6 ground tailings management facility, the B-Zone pit and
7 ore pad, facilities located in the Rabbit Lake drainage
8 basin, Link Lake, the current Rabbit Lake in-pit tailings
9 management facility, and finally the mill and effluent
10 treatment areas.

11 During the current licence period,
12 reclamation efforts have focussed on completion of the A-
13 Zone pit reclamation and development of a comprehensive
14 plan for the B-Zone area, and the above-ground tailings
15 management facility.

16 As I mentioned, the A-Zone work is
17 essentially complete. In 2006 the steel cells isolating
18 the pit from Wollaston Lake were removed. Monitoring has
19 shown key parameters to be low and stable and follow-up
20 aquatic studies are planned for this year.

21 In March of 2007, the breaches separating
22 the islands from the shore were completed and then earlier
23 this year in 2008 those breaches were widened and in fact
24 exceed the minimum design requirements of 15 meters.

25 Planning for B-Zone reclamation is well

1 advanced. In 2007, Cameco received and responded to staff
2 comments on the B-Zone comprehensive decommissioning plan.

3 While an in-situ cover option for the waste
4 rock pile has been developed for the reclamation of this
5 area; there is on going discussion as to whether that is
6 in fact the best means to address this facility.

7 One alternative and as raised also by CNSC
8 is to relocate the B-Zone waste rock pile to the B-Zone
9 pit adjacent to Collin's Bay. We're presently working to
10 address staff questions in this regard.

11 We're also making progress with the
12 aboveground Tailing facility which holds tailings
13 deposited from the years 1975 through 1985.

14 Work completed to date includes re-sloping
15 of the north and south dams at the aboveground Tailing
16 facility and measures to promote consolidation.

17 We've also conducted extensive work towards
18 a final design for AGTMF closure. The next steps include
19 completion of design work for Tailing still, final cover
20 and a spill way to direct surface water away from the
21 facility.

22 Timing for reclamation for B-Zone will be
23 addressed as part of the pending licence condition and
24 with respect to planning and scheduling of overall
25 reclamation works.

1 At the time that we drafted our 2003
2 Licence Application, it was expected that A-Zone, B-Zone
3 and D-Zone decommissioning could be completed within the
4 current licence term. However, with improved market
5 conditions and extension of mine life at Eagle Point our
6 technical capacity has been stretched by necessary
7 enhancements to the mill water treatment systems and also
8 the need to expand Tailing's capacity.

9 While we have made good progress and the
10 facilities awaiting decommission are continually monitored
11 and managed and are not harming the environment. We fully
12 understand that reclamation work must proceed as part of
13 ongoing operations. The licence condition of -- for the
14 upcoming licence proposed by CNSC staff is reasonable and
15 consistent with Cameco's vision of establishing a long
16 term plan to actively reclaim the inactive areas of the
17 surface lease.

18 However, we do feel that the expectations
19 have the strategy fully developed by the end of February
20 2009 may not be entirely realistic. Given the resources
21 required to develop this plan are currently fully engaged
22 in addressing various other issues at our site including
23 development of a comprehensive Tailing strategy, follow-up
24 on mill seepage and other reclamation and waste rock
25 issues.

1 As such, we would consider a June 2009
2 deadline perhaps to be more appropriate to support
3 development of a well-considered long term plan.

4 At the beginning of the current licence
5 period, it was thought that the Rabbit Lake operation was
6 winding down. Today our vision for the operation is very
7 different. Strengthening markets and successful
8 expiration at Eagle Point have extended the anticipated
9 mine life to 2012 and there is a very real possibility of
10 continuing expiration efforts that may further extend the
11 life of the mine.

12 There is also a strong likelihood that the
13 renewed exploration by Cameco and other companies will
14 find additional deposits in this area creating other
15 milling opportunities.

16 We also have a proposal before the
17 Commission and the Provincial regulators to process
18 uranium resolution from Cigar Lake or Rabbit Lake.

19 Our vision for Rabbit Lake is a modern
20 regional milling facility that will continue operating for
21 several decades into the future.

22 To achieve this vision would require
23 extensive investment by Cameco to renew the mill to
24 improve operational and environmental performance, develop
25 a long term solution to manage Tailings, to reclaim legacy

1 pits, waste rock and Tailing facilities as well.

2 Sustaining the Rabbit Lake operation as a
3 regional milling facility would also avoid the need to
4 construct additional facilities on untouched lands and
5 would preserve employment and business opportunities for
6 northern people.

7 In conclusion, while Cameco continues to
8 weigh the business case, this is our favourite course for
9 Rabbit Lake. Work towards these goals is already underway
10 and will continue during the coming licence period.

11 Thank you.

12 **THE CHAIRMAN:** Thank you.

13 Mr. Henry Rabski, do you have any
14 representation to make?

15 **MR. RABSKI:** Good Afternoon President
16 Binder, Members of the Commission. For the record my name
17 is Henry Rabski, Acting Director General of the
18 Directorate of Nuclear Cycle and Facilities Regulation.

19 With me this afternoon is Mr. Kevin
20 Scissons, Director of Uranium Mines and Mills Division and
21 Mr. William Stewart, Project Officer for the Rabbit Lake
22 operations along with the rest of the CNSC Licensing Team
23 for this facility.

24 We are here to provide the CNSC staffs
25 assessment of the application and recommendations for the

1 renewal of the Rabbit Lake operation, Uranium Mine
2 operating licence which is due to expire on October 31st,
3 2008.

4 I will now ask William Stewart to present
5 an overview of CNSC staff's assessment of the application
6 and recommendations.

7
8 **08-H14**

9 **Oral Presentation by**
10 **CNSC staff**

11
12 **MR. STEWART:** Good Afternoon, Mr. Chairman
13 and Commission Members. My name is William Stewart. I am
14 the Project Officer for Cameco Corporation, Rabbit Lake
15 operations.

16 The following presentation is an overview
17 of the information that was provided in CNSC staff's CMD
18 08-H.11. The main topics that will be covered are
19 included on this slide.

20 Using this high level diagram, I would like
21 to identify the main areas of the Rabbit Lake site.

22 First, at the south end of the map we have
23 the above ground Tailings Management Facility and effluent
24 treatment area.

25 Effluent from the operation is discharged

1 to the Horseshoe Creek Drainage Basin. This basin drains
2 to Hidden Bay of Wollaston Lake.

3 Second, in the middle of the figure is the
4 location of the mill, historic waste rock piles and the
5 in-pit Tailing Management Facility.

6 The north section comprises the historic
7 and current mining areas. The A-Zone, B-Zone, D-Zone and
8 Eagle Point Mines are located along and under the eastern
9 shore of Collin's Bay.

10 These are pictures of the Rabbit Lake mill
11 and the Rabbit Lake in-pit Tailings Management Facility
12 with the mill in the background taken in March 2008. We
13 will discuss these areas in detail later on.

14 Cameco is seeking approval to continue to
15 carry out the following activities as indicated on this
16 slide and detailed in the staff CMD.

17 Ten program areas were assessed and rated
18 for content and implementation. The ratings for Rabbit
19 Lake are provided on this slide. One sub-program and the
20 implementation of three programs were rated C - below
21 requirements. Details on each program area is provided in
22 the following slides.

23 The first program area that I will speak to
24 is operations. Now, we have broken this down into five
25 sub-categories: mine operations, mill operations, waste

1 management, transport and packaging and fire protection.
2 As noted, all these were assessed as meeting expectations
3 for program and implementation except for fire protection.

4 In the 2003 application to licence the
5 Rabbit Lake Operation, it was indicated that the Eagle
6 Point mine would operate until 2005.

7 Cameco has since identified additional
8 reserves and provided a current five-year mine plan
9 indicating the Eagle Point mine has sufficient reserves to
10 mine through mid-2013 when it is expected that the Rabbit
11 Lake in-pit Tailings Management Facility with expanded pit
12 crest will reach capacity.

13 Any modifications to the mine plans,
14 ventilation system and support facilities are addressed in
15 accordance with Licence Condition 3.1 where required.

16 The extension of the life of Eagle Point
17 Mine is before the Commission during this renewal.

18 Two major events took place at the mine in
19 this licence term.

20 The first was during a CNSC inspection when
21 it was identified that insufficient fresh air was being
22 provided to the portal access to Eagle Point for the
23 current operating equipment. Mining activity was
24 suspended by the operator until sufficient air supply was
25 returned to the portal.

1 The second, the water in-flow event was
2 reported at Eagle Point mine was reported as an SDR on
3 December 6th, 2007 and was successfully addressed by the
4 licensee.

5 An ongoing program to revitalize the Rabbit
6 Lake mill with the goal of extending the life of the mill
7 until at least 2027 has been initiated.

8 When required, CNSC staff approved changes
9 to the facility under licence condition 3.1 and the DNCFR
10 Approval Process. In late 2006, SO₂ emissions were
11 significantly higher than normally reported for the Rabbit
12 Lake operation. These were attributed to a degradation of
13 the acid plant reactor system and were addressed during a
14 planned shutdown in the summer of 2007.

15 Since the repair work, the SO₂ emissions
16 have returned to the predicted levels. In accordance with
17 condition 2.4 of the current licence, Rabbit Lake
18 operation identified and implemented control measures to
19 reduce the amount of uranium in Rabbit Lake operations
20 effluent. The program to reduce uranium in effluent has
21 been successful in reducing the uranium level to less than
22 0.1 milligrams per litre during normal operation. An
23 opportunity to reduce molybdenum and selenium Rabbit Lake
24 effluent and control measures for these elements in the
25 effluent were also pursued. Process and facility changes

1 are being implemented to achieve these goals.

2 On January 26, 2008 contractors working on
3 construction and excavation near the mill encountered a
4 quantity of material and ice which was subsequently
5 confirmed as contaminated with uranium. This was reported
6 to the Commission as a significant development report on
7 April 2nd, 2008. The most recent report, including
8 information up to May 11th, indicates that the
9 contaminated solution recovered ranged 3.2 grams per litre
10 until about .2 grams per litre in mid-April.

11 Rabbit Lake operation conducted an
12 extensive resurfacing of concrete floor, sumps and
13 containment areas within the mill during a planned mill
14 shutdown which was extended until early April 2008 when
15 CNSC staff approved a restart of the mill.

16 Efforts to determine the extent of
17 contamination included the installation of 11 piezometer
18 nests and two recovery wells.

19 These images were taken during a March
20 25th, 2008 verification inspection and show how the
21 specialized epoxy used to seal the mill floor and sump and
22 critical process areas. On June 3rd, 2008 Cameco
23 submitted additional information to the Commission on the
24 mill seepage hydrogeological study. CNSC staff are
25 currently reviewing this additional information.

1 Hydrogeological work and monitoring results
2 are important in determining the extent of the
3 contamination and follow-up actions required. Further
4 information on this ongoing event will be presented at Day
5 Two in mid September.

6 The waste management facilities at Rabbit
7 Lake include Rabbit Lake In-Pit Tailings Management
8 Facility, the Above-Ground Tailings Management Facility,
9 Lined-Out Pits, various lined and unlined waste rock piles
10 where run-off water is captured and reports to the mill
11 for treatment.

12 Here we have two pictures of the In-Pit
13 Tailings Management Facility taken in 2006 where tailings
14 are currently deposited showing tailings deposition and
15 the pervious surround. And in the lower shot we see the
16 area that is included in the pit crust expansion discussed
17 in the Rabbit Lake uranium rib solution EA to be presented
18 later today.

19 Included in the waste management facilities
20 are three inactive and flooded open pit mines: A-Zone, B-
21 Zone and D-Zone; and their support or storage and waste
22 rock facilities.

23 A-Zone reclamation was approved in the
24 current licence period and completed in early 2008. An
25 as-built report has yet to be submitted. Here, in these

1 photographs, we see the remains of part of the A-Zone
2 berm. During an inspection in July 2007 it was identified
3 the breach between the shore and the A-Zone island did not
4 meet design requirements. Additional work was conducted
5 this winter to reshape the shoreline and expand the
6 breach.

7 The top picture on this slide is an image
8 of the Above-Ground Tailings Management Facility taken in
9 April 2008. The aboveground TMF was operational between
10 1975 and 1985. The plan to decommission the aboveground
11 TMF was submitted in 1992. Consolidation activities were
12 conducted from 1997 through 2002.

13 The ADTMF was to be closed and allowed to
14 consolidate under the current licence and to re-engineer
15 the two containment dams for the long term. However, it
16 continues to be used by Rabbit Lake operation as a
17 receiving facility for contaminated waste which further
18 delays its close-out.

19 The bottom image is of the B-Zone waste
20 rock pile. Cameco submitted an updated preliminary plan
21 for the B-Zone reclamation in 2006. CNSC staff reviewed
22 this plan and provided comments. Further discussion on
23 the best methods to reclaim this area continue.

24 As discussed in the 2003 licence
25 application, the D-Zone was to be addressed in a manner

1 similar to the A-Zone dyke. Cameco has yet to submit a
2 detailed plan to do this work.

3 Most reclamation activities at Rabbit Lake
4 have been deferred due to changing site priorities and
5 long-term plans. CNSC staff in Saskatchewan, Ministry of
6 Environment as well as key feedback from our stakeholders
7 encourages the ongoing reclamation of inactive waste
8 management areas of Rabbit Lake operation.

9 This will help to reduce contaminant
10 loading and take advantage of operational presence for the
11 post-reclamation monitoring. CNSC staff propose a new
12 licence condition to ensure the timely reclamation of the
13 inactive areas are being planned out and ensure its
14 importance retains a high profile throughout this next
15 licence period and beyond.

16 There were eight fires reported to the CNSC
17 during this licence period including one which destroyed
18 the Eagle Point electrical shop. CNSC staff's review of
19 the third-party review of the Rabbit Lake fire protection
20 program identified several non-compliances with the
21 operational requirements of the National Fire Code of
22 Canada. CNSC staff has requested the licensee to provide
23 an update on the status of the outstanding recommendations
24 to address the deficiencies identified.

25 Cameco currently has extensive fire

1 detection and suppression systems in place and a fully
2 trained and equipped fire fighting and emergency response
3 team. Rabbit Lake staff conduct regular drills of their
4 emergency response plans to reduce risks from fire.

5 In the interim, the fire protection program
6 and implementation are both rated as a C while the
7 deficiencies are being addressed.

8 In addition, program areas were assessed
9 against expectations and compliance. Ratings were
10 assigned for both program development and implementation.
11 All the programs were rated as B meaning these programs
12 meet expectations. The implementation of the quality
13 management and training programs rated C. Security is
14 also addressed in a separate CMD.

15 A Type 1 inspection of the quality
16 management system at Rabbit Lake operation was conducted
17 in June 2007. At that time, the audit concluded that the
18 most significant deficiencies identified with respect to
19 quality management were related to design control,
20 procurement, and non-compliance and corrective action
21 process. A follow-up inspection was conducted in May 14th
22 to 16th, 2008; found that although significant
23 improvements had been made, a number of programs still
24 require additional work.

25 The radiation protection program in a

1 nuclear facility is always important. A review of worker
2 dosimetry indicates that no workers at the facility
3 received an effective dose in excess of regulatory limits.
4 The maximum five-year effective dose for the 2001 to 2005
5 dosimetry period was 46.6 millisieverts.

6 The maximum five-year effective dose for
7 the first two years of the 2006 to 2010 dosimetry period
8 was 23.9 millisieverts. There were six weekly action
9 levels and three quarterly action levels exceeded in the
10 2003 to 2008 licence period. Investigation of these
11 events identified program weaknesses related to dust
12 control, dosimetry practices, siting of construction
13 trailers, contractor control, and preparation of work
14 areas for maintenance which were addressed.

15 Changes made to the radiation protection
16 program during the review period have improved the
17 program's ability to ensure that the radiation exposures
18 and doses are as low as reasonably achievable. The
19 radiation program meets requirements.

20 In addition to regular Type 2 inspections,
21 CNSC staff also conducted a Type 1 evaluation of the
22 Environmental Protection Program. Based on CNSC staff's
23 review, it is concluded that the Environmental Protection
24 Program meets requirements. Environmental spills range
25 from reportable hydrocarbon spills to the mill seepage

1 event. In all cases, the incidents were reported as
2 required and appropriate actions were taken.

3 Over the current licensing period, effluent
4 loading to the environment remains relatively stable with
5 the exception of reductions in uranium and molybdenum.
6 These reductions were related to the uranium reduction in
7 effluent project as previously discussed. The treatment
8 resulted in a reduction of greater than 85 percent in
9 uranium effluent concentrations and loadings for 2007
10 relative to the 10-year project baseline. A reduced value
11 for uranium in effluent has been added to the
12 Environmental Code of Practice.

13 CNSC staff considers this to be sufficient
14 to address licence condition 2.4 and recommends that this
15 condition be removed.

16 Near fields effects are evidenced within
17 the Horseshoe Creek, primarily arising from current and
18 historical releases of uranium, molybdenum, and selenium.
19 CNSC staff is monitoring the environmental performance and
20 considers continual improvements in effluent quality to be
21 imperative.

22 A location of historical contamination is
23 the Links Lakes System. CNSC staff believes that further
24 assessment of reclamation options to prevent contaminant
25 transport from Upper Link Lake are required. This

1 recommendation is captured in the new proposed licence
2 condition 2.4.

3 Rabbit Lake Occupational Health and Safety
4 program is designed to meet the regulatory requirements of
5 Saskatchewan advanced education, employment and labour.
6 Inspections and evaluations at the site by CNSC staff and
7 Saskatchewan Labour indicate that the program is being
8 carried out as required.

9 It is noted that there were an increase in
10 the number of lost time accidents in 2007 and a similar
11 trend exists for the first quarter of 2008. Incidents are
12 reported as per Section 29 of the General Nuclear Safety
13 and Control Regulations and investigated as required.
14 CNSC staff and Saskatchewan Labour will continue to
15 monitor this trend with the licensee.

16 A Type 2 inspection of the Rabbit Lake
17 training program was completed in April 2008 with the
18 purpose of evaluating the current training documentation
19 and practices and evaluating the progress made regarding
20 the implementation of the systematic approach to training
21 system onsite.

22 Rabbit Lake is currently implementing an
23 SAT onsite using a risk informed basis which ensures that
24 the positions within the organization that have the
25 greatest risk will be given priority for the new SAT-based

1 program.

2 Although the risk of performance falling
3 significantly below requirements in the short-term remains
4 low, improvements in performance are required to address
5 identified weaknesses and implementation is currently
6 rated a C.

7 Financial guarantees are in place for the
8 sum of \$36 million. These letters of credit are currently
9 in good standing. This financial guarantee was reviewed
10 based on the most recently submitted preliminary
11 decommissioning plan and preliminary decommissioning cost
12 estimate. The proposed decommissioning costs have
13 increased to approximately \$91 million.

14 Comments regarding the current PDP and PDCE
15 have been provided to Cameco for disposition. The updated
16 financial guarantee is expected to be addressed by Day 2.

17 Cameco Corporation is in good standing with
18 the Canadian Nuclear Safety Commission's cost recovery
19 fees regulations with respect to the payment of licensing
20 fees for its Rabbit Lake Operation.

21 Based on the criteria established in CMD
22 02-M12, CNSC staff recommends that the licence be issued
23 for a five-year term to cover ongoing site operations.
24 Overall, the programs are in place and the licensee has
25 demonstrated a history of competence. Therefore, a five-

1 year term as requested by the licensee is recommended. To
2 address the need to keep the Commission informed, CNSC
3 staff will report on the performance and status of the
4 facility at the midpoint of the proposed licence term.

5 In conclusion, it is staff's assessment
6 that the licensee is qualified to carry out the activities
7 requested in the application. They are expected to
8 continue to make adequate provisions for the protection of
9 the environment and health and safety of workers. The
10 licensee has programs in place to ensure the maintenance
11 of security and the international obligations with respect
12 to the *Nuclear Safety And Control Act* and its supporting
13 regulations.

14 For Day 2, CNSC staff plan to have
15 addressed any outstanding issues with the preliminary
16 decommissioning plant and the financial guarantee. We
17 shall also provide an update on the mill seepage event and
18 any other significant updates that may arise.

19 CNSC staff recommends that the Commission
20 accept CNSC staff's assessment that the applicant is
21 qualified to carry on the activities defined in the
22 licence; accept staff's recommendations of changes to the
23 current licence; accept staff's recommendations that there
24 is no C at rigour for the licence renewal; initiate the
25 proposed uranium mine operating licence for a five-year

1 term.

2 I would now like to turn the presentation
3 back to Mr. Rabski.

4 **MR. RABSKI:** Thank you. This concludes our
5 presentation this afternoon.

6 CNSC staff is available for any questions
7 that the Commission Members may have.

8 **THE CHAIRMAN:** Thank you. Let's open the
9 floor for questioning starting with Mr. Graham.

10 **MEMBER GRAHAM:** I am going to be brief on
11 this one, Mr. Chair. So I just have three or four direct
12 questions. First of all, to Cameco.

13 This licence is for 4.25 million kgs of
14 production per year. That's what you are going to --
15 that's what the licence is for; is that correct?

16 **MR. NEUBURGER:** Dave Neuburger for the
17 record.

18 Yes, I believe that's the number. You will
19 see a different proposed number in the EA discussion that
20 you will be hearing later.

21 **MEMBER GRAHAM:** Uh-hum. But this licence
22 is for 4.25.

23 The other question I have is: In your
24 processing, you say you have enough minerals -- enough ore
25 to take you to 2013 with what you are getting from Eagle

1 Point and also what you are getting out of Rabbit Lake.

2 Are you redoing any tailings that had been
3 deposited years ago when perhaps the ore wasn't as good a
4 price and so on? Are you redoing any tailings and re-
5 running them through the mill?

6 **MR. NEUBURGER:** Dave Neuburger for the
7 record.

8 We are not reprocessing any tailings;
9 however, we have processed some waste -- mineralised waste
10 material that we've had at the site that was left from
11 many years ago and have been processing some of that and
12 both extracting the uranium content and also cleaning up a
13 little bit of those waste piles.

14 **MEMBER GRAHAM:** Will those waste piles be
15 fully utilised by the end of this licence period?

16 **MR. NEUBURGER:** Dave Neuburger for the
17 record.

18 No, they will not.

19 **MEMBER GRAHAM:** You mentioned that you
20 spent \$42 million in new construction commitment with
21 regard to the extraction of moly and selenium and you're
22 achieving good results.

23 Is that from the process since it's
24 happening or are you going back and reprocessing some of
25 the tailings that are out in the ponds; or is that

1 extraction just from existing operations as they happen
2 from day to day?

3 **MR. NEUBURGER:** Dave Neuburger for the
4 record.

5 To clarify your question, it's whether the
6 moly/selenium work we're doing and the reduction in
7 uranium in effluent is from our day-to-day operation?

8 **MEMBER GRAHAM:** Yes.

9 **MR. NEUBURGER:** We treat all waters from
10 the site. It's basically from our day-to-day operation
11 that we generate those waters.

12 However, we also collect some waters from
13 -- seepage waters from the aboveground tailings management
14 facility and we collect water from around our waste rock
15 piles as well. So that's part of the water balance from
16 the site.

17 It's not from reprocessing those areas, but
18 it is we collect water from all areas on the site.

19 **MEMBER GRAHAM:** But the loading that has
20 happened over the years, you're not processing that
21 loading?

22 **MR. NEUBURGER:** No, we are not processing
23 the loading from the moly, selenium or uranium that's
24 deposited in the downstream environment from the years.
25 No, that's not the case.

1 And to clarify as well, the moly and
2 selenium reduction that we are aiming towards through
3 construction of the low pH clarifier, that project is in
4 construction so we have not seen any results yet from
5 that, but I would be expect to be commissioning that in
6 2009.

7 **MEMBER GRAHAM:** The only other question I
8 have is with regard to fire protection.

9 I understand that you are going to 2005
10 National Building Code, which we were told that before,
11 not a very good record in this period of time.

12 The fire at the electrical shop, did it
13 cause -- at any time, did that cause any harm to workers
14 at either Eagle Point or Rabbit Lake mine because of lack
15 of electricity and so on?

16 Or that fire, did it cause any harm or was
17 there any immediate danger to workers?

18 **MR. NEUBURGER:** Dave Neuburger for the
19 record.

20 No, it did not cause any harm to anyone and
21 I'll ask Kim Sparling to provide any further information
22 on that fire.

23 **MR. SPARLING:** Thank you, Dave. Kim
24 Sparling for the record, Superintendent of Systems and
25 Training at Rabbit Lake.

1 The fire at the electrical shop at Eagle
2 Point was -- in fact, the shop itself was unoccupied at
3 the time of the fire during a shift change, and the cause
4 of that fire it shows in the CMD from staff that it was
5 not determined.

6 But it has since been determined to be a
7 bearing in a heating motor that caused the fire. And
8 because the building was unoccupied, it wasn't captured
9 quickly enough to put it out.

10 **MEMBER GRAHAM:** But there wasn't any loss
11 of power to any of the equipment for mine ventilation or
12 anything else? That didn't cause any problems?

13 **MR. SPARLING:** Kim Sparling for the record.
14 No, sir.

15 **MEMBER GRAHAM:** Day 2, will you be bringing
16 forward some of the processes with regard to improving
17 your both implementation and program activities with
18 regard to fire protection?

19 Will you be bringing forward a plan to
20 improve the C rating in both of those?

21 **MR. NEUBURGER:** Dave Neuburger for the
22 record.

23 I think, similar to the commitment from the
24 other sites, we'll look at that commitment for all three
25 sites and ensure we are working towards having a fire

1 protection program in place, and we'll be able to speak to
2 what the improvement plan is for implementation.

3 **THE CHAIRMAN:** Thank you.

4 Dr. Barnes?

5 **MEMBER BARNES:** A couple of general
6 comments and then just a few specific requests or
7 clarification that we will get information for Day 2. I
8 think some of these have been mentioned in the
9 presentations, but I just want a clarification.

10 So likewise, I notice eight fires and 10
11 spills and significant groundwater contamination from the
12 mill and ventilation issues, and three C's overall. So I
13 don't think this is -- again, there's some significant
14 issues here.

15 But coming back to the clarifier issue and
16 the contamination from the mill, in hindsight -- and I put
17 this to both Cameco and to CNSC staff -- wouldn't we
18 expect the Cameco staff and CNSC staff, through their
19 vigilance and inspection procedures, have seen the
20 potential for leakage and contamination from the mill
21 through these various spills, many of which have been
22 reported and presumably, this is due to a poor containment
23 system?

24 So to Cameco first.

25 **MR. NEUBURGER:** Dave Neuburger for the

1 record.

2 I'll ask Dave Rezanoff to speak as he's
3 most familiar with, certainly the taproot results. And I
4 think that probably perhaps is the best indication we have
5 right now of should we have seen some of the potential.

6 **MEMBER BARNES:** Well then -- and also, if
7 you weren't building to clarify I presume that this may
8 well have gone on for some time. In a sense you were
9 lucky to have discovered this almost accidentally. It
10 wasn't discovered through realizing there were spills and
11 therefore leakage under the mill. It was only when you
12 were digging under the mill, to scale, that this
13 contamination was really found.

14 **MR. NEUBURGER:** Dave Neuburger for the
15 record.

16 That is correct. The excavation is what
17 led to the discovery.

18 **MR. REZANSOFF:** Dave Rezanoff for the
19 record.

20 With respect to identifying potential for
21 leakage from the mill, this is something that our
22 operations staff look at each and every day as part of
23 their routine practices. Areas are inspected through a
24 walk-through visual inspection. And as well, given the
25 history and age of the facility, this is its 33rd year of

1 operation, we have recognized deterioration just through
2 the age of the operation.

3 To address that over the last few years,
4 well prior to this event, a process to upgrade several of
5 the sumps in the mill was undertaken. That process was
6 based largely on visual inspection by experienced staff
7 and that work was underway.

8 So in terms of knowing the potential for
9 seepage, absolutely, and we take that potential condition
10 quite seriously.

11 In this case, as Mr. Neuburger mentioned,
12 the seepage was discovered following the excavation of
13 this project and given the nature of the seepage,
14 relatively low flow and deep within the soil, right
15 proximate to the mill; it's not likely that we would have
16 discovered that without digging the excavation that we
17 did.

18 And as we've discovered that condition, as
19 we've described, have taken swift and thorough action
20 towards it.

21 As well, one of the learnings through the
22 taproot, that was carried out. We did identify a
23 deficiency in systematic preventative maintenance. And to
24 address that, we've put forth a more comprehensive
25 preventative maintenance processes to address this type of

1 condition.

2 And as well, we've added a process where at
3 least on an annual basis a third party qualified person
4 will come and carry out an appropriate structural
5 integrity assessment of the plant and provide
6 recommendations that we will take action on.

7 **MEMBER BARNES:** So to staff, in your normal
8 inspections would you have expected to have -- suspected
9 this potential problem or courted it at certain times;
10 especially when they were spills that you might have been
11 investigating?

12 **MR. SCISSONS:** It's Kevin Scissons,
13 Director of the Uranium and Mines and Mill Division.

14 Of all the staff here, I probably got some
15 of the most history. My first inspection up at the Rabbit
16 Lake site was 1978. The facility of course came into play
17 in the early '70s.

18 Through the course of these inspections and
19 the operation of the facility, it has been normal practice
20 for the handling of waters, overflow of waters, sumps and
21 sumps floor; it's all inherent with the original design of
22 the mill. Of course, now today's modern designs does not
23 incorporate that type of approach on secondary containment
24 or normal operating practices.

25 So observing these containment sumps and

1 collection sumps was a normal observation through the life
2 and the design of the mill.

3 Overall though, to you expect that there
4 was actual seepage or leakage from the mill was also
5 something we would pick up under our normal inspections of
6 the surrounding environment.

7 If I can trouble you for the slide picture,
8 just maybe to illustrate, and I hope you can make this
9 out. But I believe the elevation difference between the
10 mill and the ImpAct tailings is over 70 metres. There's
11 quite a slope coming down. There's also a south drainage
12 ditch, a collection ditch.

13 So any contaminated runoff either didn't
14 report into the pit or seepage was also going to be
15 detected in what's called the south surface drainage
16 ditch. And there's ongoing monitoring of that to
17 determine if there was any contaminants that we could
18 reflect back to the mill.

19 The operational history of the mill had
20 special waste rock and/or stockpiled in and around the
21 mill on unlined pads. That was a practice of the '70s.
22 That has now changed, of course, subsequently.

23 So contamination from the mill, mill area
24 has been reporting down either to the pit or would have
25 been detected by other monitoring methods.

1 So our observations of the past operations
2 -- past practices in the mill did not really identify that
3 as a high-risk or a certainly a high-risk to the receiving
4 environment; it's only the subsequent investigation or
5 excavation beside the mill detected there were these past
6 and slightly historical spill.

7 So it's a different approach of this
8 historical mill versus a new modern designed mill that
9 meets today's standards.

10 **MR. GITZEL:** Dr. Barnes, Tim Gitzel for the
11 record.

12 If I might add just a piece to the
13 conversation; you said that might never have been
14 discovered.

15 Part of our learnings from the Port Hope
16 experience and we've been in front of this Commission
17 numerous times on that piece, is to share our learnings
18 there with the other divisions, departments, divisions in
19 the operations group.

20 We have put together an operations senior
21 management team; seven vice-presidents, including Mr.
22 Neuburger and Mr. Oliver from Fuel Services and others,
23 that meets every two weeks, in person, for a day, a one
24 day and then a second time during the month is a half-day
25 videoconference. We share these learnings. We've shared

1 the Port Hope taproot results; the Port Hope findings with
2 the mining division.

3 And instructions were given to all of our
4 sites, including fuel services, Blind River, to check
5 their sites, check the trenches, check the containment in
6 the buildings to see what we're at.

7 And in addition to Blind River, we've
8 drilled some holes through the floor. At Port Hope, we
9 continue to do that and work was going on at the mining
10 division.

11 So we were trying to spread that piece
12 around; learn from our situation at Port Hope in the
13 mining division. So hopefully that would have detected
14 it.

15 Now, in the interim, the new building and
16 excavation had discovered that. So I just wanted to let
17 you know that we do have that piece in place to share
18 learnings across the operations division.

19 **MEMBER BARNES:** Thank you. No, I
20 appreciate that. You've mentioned that before, Port Hope
21 looking back here, so that's good news.

22 I notice that one of the ventilation
23 problems was actually found by the CNSC inspector as
24 opposed to Cameco staff and so to staff -- to Cameco, do
25 you feel you have enough vigilance on ventilation

1 analyses, basically, as opposed to CNSC inspectors finding
2 this problem?

3 **MR. NEUBURGER:** Dave Neuburger for the
4 record.

5 We -- Cameco, we don't consider it
6 acceptable that CNSC finds ventilation issues for us.

7 In this case, it was not an issue of the
8 design capability, it was -- it's an implementation issue
9 fundamentally. And that has been corrected and addressed
10 following the -- following the staff's actions on that
11 finding. And we've addressed it as Cameco and certainly
12 recognize that compliance with standards and with
13 expectations is paramount importance.

14 **MEMBER BARNES:** So a few quick other things
15 here. Under Cameco's text on page 16, you have a section
16 on the environmental management systems. You have five
17 bullets there which essentially say these are the
18 activities you're going to complete over the next licence
19 period. But again, they're just bullets, they don't have
20 any schedule or framework for actions.

21 So I'd just like to ask if that could be
22 for Day Two, page 16 of your document, those bullets. But
23 I suspect this is going to be accommodated in our Gantt
24 Charts that you've agreed to give for each of the licence
25 activities.

1 Under environmental quality, to staff, both
2 in your -- in your Executive Summary and also elsewhere in
3 the text, you have the following statement. "CNSC staff
4 is monitoring environmental performance and considers
5 continued improvement in effluent quality to be
6 imperative."

7 That's a pretty firm hard statement. So
8 when someone -- when it's written like that, so firmly,
9 and on the basis of some problems in this, I wonder why it
10 isn't converted into some form of licence condition. Is
11 there a reason why it wouldn't be?

12 **MR. MCKEE:** Malcolm McKee for the record.

13 The reason we've not shifted to using
14 licence conditions in this situation is that, with the
15 Rabbit Lake operation, we have here a very good example
16 of, in the uranium reduction program, a program that was
17 run very efficient; met all targets -- timing targets and
18 performance targets, also met all timelines, with respect
19 to -- I've forgotten the name for meeting design criteria
20 and et cetera.

21 As a result of that, the licensee, without
22 before us having to start discussing licence conditions on
23 molybdenum and selenium, which has been percolating in the
24 background at all the facilities, used the uranium
25 reduction project as a time to also investigate overall

1 molybdenum and selenium performance in their system and
2 has moved ahead and already had approval for installation
3 of an molybdenum treatment system.

4 So this really was sort of a situation
5 where we felt, in recognition of those -- of a good
6 performance activity, that we could handle it in this
7 manner.

8 **MEMBER BARNES:** To Cameco, under the mill
9 seepage section, you've obviously done quite a bit more
10 groundwater studies; 11 wells put in and so on. And maybe
11 for Day Two, we could have the details and some of the
12 results, the analysis for that. I would think it's a bit
13 early at this stage.

14 And there are conventional safety -- and
15 I'd say this would -- should really apply to all three
16 hearing that we've had today, and it may not be an issue,
17 really, but you're giving statistics, and by Day Two, we
18 should have statistics for the year 2008.

19 So it would be helpful to have those
20 tables, either in the PowerPoint's or whatever, bringing
21 us up to speed for as much of 2008 as we can.

22 To Cameco, staff report that you have yet
23 to submit a plan for the reclamation of the D Zone mining
24 area. I may have missed this, but will this be available
25 by day two?

1 **MR. NEUBURGER:** Dave Neuburger for the
2 record.

3 If I can just back up for a moment, to
4 address the point you raised about -- earlier about the
5 EMS targets and requesting an update for Day two, what the
6 plan was around those. Those are actually -- those were
7 plans that were implemented in the past licence period ---

8 **MEMBER BARNES:** Sorry, I'm ---

9 **MR. NEUBURGER:** --- just to clarify it.

10 **MEMBER BARNES:** I misread that.

11 **MR. NEUBURGER:** So all that was actually
12 done.

13 **MEMBER BARNES:** Okay.

14 **MR. NEUBURGER:** To your point about safety
15 stats, we'd be happy to provide an update on all the sites
16 on the 2008 year to date and it will actually allow us to
17 put a small correction on the Key Lake numbers that were
18 discussed earlier, as the severity numbers we've -- we
19 realize we're actually incorrect and they're significantly
20 lower.

21 Reclamation plan for D Zone, I don't expect
22 we would have that for Day Two at this point in time, but
23 I'll ask Mo Balych to tell you what are plans are with D
24 Zone right now.

25 **MR. BALYCH:** Mo Balych for the record.

1 Good afternoon, ladies and gentlemen.

2 Cameco's intention was to use the use of
3 experience from the A Zone project in developing the D
4 Zone plan.

5 A Zone reclamation project initially was
6 intended to take approximately two years, which started in
7 2004. Cameco's principles of environmental protection and
8 community support were followed during the A Zone project
9 and in so, part of our public consultation process
10 included going out to the northern communities and getting
11 feedback on the A Zone project. And during that process,
12 public consultation process, members of the Wollaston
13 community had raised some concerns that there were -- they
14 would like a third-party review of Cameco's projections as
15 far as potential impacts to the project.

16 Cameco supported this third-party review,
17 but that process, in turn, added over a year to the actual
18 project, which was mentioned earlier with the final
19 reclamation activities occurring as recently as over this
20 winter period.

21 That in fact was -- there was two reasons
22 for that, as well. The initial application noted that we
23 would either match the breaching of the shoreline, of the
24 A Zone abutments to existing lake bottom levels or we
25 would excavate to the 15 metres, to a maximum depth of two

1 metres.

2 During the EQC visit of 2007, we'd
3 completed the first option and after discussions with the
4 ECQ members, it was noted at that time that they would
5 prefer for us to extend that breach area and proceed to
6 the maximum two.

7 So, through that entire process, it has
8 taken from 2004 until actually recently, this summer, the
9 EQC visits that we had planned this summer. We intend to
10 again have a look at the overall A Zone projects, get
11 feedback from the communities and incorporate that into
12 our D Zone application.

13 So to date, we have essentially a first
14 draft of that application internally completed, but we
15 want to ensure that we incorporate all the lessons learned
16 on the A Zone project before we present that to the CNSC.

17 Also, a second point, if I can make that,
18 is that we do have submission planning meetings with the
19 CNSC staff and that was discussed last year.

20 The number of presentations and
21 applications projects that we have in front of the
22 Commission now, trying to schedule CNSC specialist staff
23 time to review these projects, we're required to put
24 together essentially a priority list of all the
25 submissions we have and D Zone was one of those projects

1 where, based on the use of experience, time required and
2 the applications in front of the Commission, it was
3 committed to providing the Q4 of 2008.

4 **MEMBER BARNES:** And just a final comment on
5 that, on the Rabbit Lake TMF; since there's additional
6 mining through Eagle Point et cetera, and since you
7 indicate that the remaining capacity in that TMF is
8 840,000 cubic metres, with an expected life of going up to
9 213, as I recall, and one of the issues is the -- trying
10 to thaw the residual -- some of the frozen layers in there
11 for which you have some trials this spring and summer --
12 it would be appreciated if you could give us the results
13 of those trials obviously, in Day Two which I think you
14 allude to. But also, in the context of the capacity of
15 this TMF to keep going to 2013 or if the trial isn't
16 successful, what would that mean, in terms of the final
17 life expectancy?

18 **MR. NEUBURGER:** Dave Neuburger for the
19 record.

20 I think we can answer some of that right
21 now. I'll try to be brief but essentially, the Rabbit
22 Lake In-Pit Tailings Management Facility capacity -- if we
23 get the approval for the EA that you'll be hearing
24 subsequent to this, which includes an expansion of that
25 facility, the facility will have capacity to -- for all of

1 the reserves and resources that we would expect to mine
2 until approximately 2013 and for a reservation of space
3 for the residue from Cigar Lake uranium solution
4 processing.

5 The capacity isn't much greater than that,
6 is perhaps a little bit more at that point. So one of the
7 things I think you should also be aware of is, just like
8 at Key Lake, we are working on a tailings option study at
9 Rabbit Lake as we fully recognize that to have a vision
10 for regional mills with a long-term life, we need to
11 ensure that we secure long-term tailings capacity.

12 So that's been -- that tailings option
13 study has been in progress and we would fully expect that,
14 within this next licence term, we'll be -- we'll likely be
15 in front of the Commission with an environmental
16 assessment for a new tailings facility as well,
17 eventually.

18 So that gives a little bit of a view
19 towards the total capacity, and I can ask Barry Esford
20 who's here right now, to speak briefly to the tailings
21 thawing project.

22 **MR. ESFORD:** Barry Esford for the record.

23 Yes, the thawing program at Rabbit lake it
24 did commence this spring and so far we're operating four
25 injection wells, which is the scope of the initial trial

1 program.

2 That operation will continue here for a few
3 more months and we should have some interim results, at
4 least, from that. And so far they're operating
5 successfully.

6 **MEMBER BARNES:** Thank you.

7 Mr. Chair?

8 **THE CHAIRMAN:** Thank you.

9 Mr. Tolgyesi?

10 **MR. TOLJYESI:** Thank you, I have just very
11 short one.

12 You are reporting tailings 6.7 million in
13 place and you are saying that there is 840,000 cubic
14 metres remaining capacity.

15 If you have that in tonnes also, it will be
16 easier to compare, okay?

17 Number two is, you are talking about total
18 suspended solids and I see since 2002 it's increasing
19 quite a bit. It's increasing faster than the total flow;
20 that means there is somewhere a discrepancy between what's
21 the reason why the total suspended solids are increasing
22 faster.

23 **MR. NEUBURGER:** Dave Neuburger for the
24 record.

25 I'll ask Barry Esford to provide you the

1 translation from tons to cubic metres right now and then
2 Dave Rezansoff will speak to the issue of TSS.

3 **MR. ESFORD:** Barry Esford for the record.

4 As far as our capacity goes in tons --
5 right now the average density of our tailings in the
6 Rabbit Lake In-pit TMF is about 1.08 tons per cubic metre.
7 In addition to that, we generate approximately 1.06 tons
8 of tailings per ton of ore. So if you're -- depends
9 whether you're talking ore tons or tailings tons.

10 So we have capacity for approximately the
11 same ore tonnage as cubic metres.

12 **MEMBER TOLGYESI:** Okay.

13 **MR. REZANSOFF:** Dave Rezansoff for the
14 record.

15 With respect to total suspended solids,
16 concentration and total load increasing in the final
17 treated effluent, we've monitored and noted the same.

18 We do relate this effect, although effluent
19 discharges are still well within regulatory limits and are
20 generally historic operating ranges for our facility. We
21 believe this relates directly to our need and our practice
22 that we have in place now to clean out our effluent
23 treatment settlement ponds in our final polishing area.

24 This is likely related to some minor
25 carryover of suspended solids into the final treated

1 effluent.

2 Again, we don't see this displayed at any
3 particular negative exceedances or trends in other
4 contaminants but noted as an indicator of needed
5 maintenance. And that maintenance, we are carrying out
6 right now in our effluent treatment ponds.

7 **MEMBER TOLGYESI:** That's all, Mr. Chairman.

8 **THE CHAIRMAN:** Thank you.

9 Dr. Barriault?

10 **MEMBER BARRIAULT:** Thank you, Mr. Chairman.

11 Just a few brief questions. When I look at
12 your lost time injury record, I noticed the trend between
13 2006 and '07. It seems to change and I think you're
14 headed the same way in 2008.

15 And I guess the quick question I have is
16 what changed between 2006 and 2007, if anything changed in
17 your policies towards safety?

18 **MR. NEUBURGER:** Dave Neuburger for the
19 record.

20 It's a trend we've been very concerned with
21 as well and I'll ask Dave Rezansoff to speak to that a
22 little bit.

23 **MR. REZANSOFF:** Dave Rezansoff for the
24 record.

25 Again, a trend noticed a strongly and of

1 concern to Rabbit Lake and to Cameco overall.

2 This trend, in 2008, those lost time
3 injuries have been associated exclusively with our
4 contractors in a couple of different groups. Four of
5 those lost time injuries were with our contract mining
6 group, various injuries, including ankle injuries, leg
7 injuries and hand injuries and so forth.

8 And then also in our camp catering, we had
9 a couple of lost time injuries; cleaning staff falling
10 down stairs; that type of injury, so a variety of injuries
11 at site.

12 Some of it may be attributable both to the
13 much increased number of persons that we have onsite now
14 that we are ramping up for construction and continued
15 operations but all that isn't entirely attributable to
16 that. As a result of that, the Rabbit Lake management
17 team has decided to undertake a causal assessment of that
18 specific trend. That process is currently underway right
19 now, actually as we speak. We have a third party expert
20 in from Manitoba who is assisting us right now in that
21 trend review.

22 **MEMBER BARRIAULT:** Thank you. Just a brief
23 question to CNSC staff. I know that you're not
24 responsible for overseeing the whole of non-radiological
25 safety. But is there any way that we can maybe keep a

1 closer watch on what's going on in terms of safety
2 training and statistics in the future?

3 **MR. SCISSONS:** It's Kevin Scissons
4 speaking.

5 Yes, we actually do look at that in
6 harmonization with the provincial government and as part
7 of training and training methods, overall training and
8 worker health and safety; we do incorporate that as an
9 activity for us as well. And we do it in conjunction with
10 -- and complementary with the provincial government. So
11 yes, that is a role for us to play as well.

12 **MEMBER BARRIAULT:** Thank you.

13 The next one is to Cameco. Do you have a
14 safety glass policy on your plant site? Do you have to
15 wear safety glasses at all times?

16 **MR. REZANSOFF:** Dave Rezansoff for the
17 record.

18 For staff in any -- I would say work area
19 because in the administration areas or in our camp, they
20 do not but otherwise yes, we do.

21 **MEMBER BARRIAULT:** Maybe I'm wrong but I
22 think your truck driver doesn't have safety glasses. He
23 looks awful pretty but I don't think he's got them on;
24 from your presentation on your slides.

25 **MR. REZANSOFF:** Dave Rezansoff for the

1 record.

2 I think he was on a break at that time.

3 **THE CHAIRMAN:** Dr McDill?

4 **MEMBER McDILL:** Thank you.

5 I'm going to return to a question that Dr.
6 Barnes raised and I find it a little incredulous that
7 Cameco didn't discover the insufficient ventilation in a
8 portal ramp; insufficient ventilation to do the diesel
9 exhaust.

10 So you've told me it was an implementation
11 error but please explain to me why it wasn't detected by
12 Cameco in their normal procedures, day-to-day, week-to-
13 week? This is something that's normally verified each
14 shift is it not, typically, in most mines? Certainly in
15 hard rock but this is uranium, I'll grant you.

16 **MR. NEUBURGER:** Dave Neuburger for the
17 record.

18 I'll pass it over to Dave Rezansoff to
19 provide some more details. But we do -- the practice is
20 typically weekly ventilation surveys of the entire mine
21 that establish what the ventilation regime is and it's
22 certainly -- the ventilation or any time after there's a
23 major change.

24 The ventilation had been changed
25 intentionally and there'd been some follow-up surveys.

1 The ventilation survey certainly recognized that there was
2 insufficient volume of air on the ramp for full vehicle
3 traffic there and I -- I would note there was sufficient
4 air if we had restricted or if the site had restricted
5 vehicle traffic but there would -- you know, where the
6 implementation fell though is there was no restriction on
7 vehicle traffic and there was no corrective measures taken
8 quickly enough to address the insufficiency in
9 ventilation.

10 That perhaps -- I only raise the issue of -
11 - that there would have been enough for one vehicle at a
12 time, to give you an idea of the magnitude of the issue.
13 But for us, the key piece which I think for staff as well,
14 is the fact that there -- we weren't in compliance with
15 the standards.

16 We weren't in compliance with our own
17 expectations and we weren't in compliance essentially with
18 the mine's regulations because there had not been any
19 restriction put on the amount of vehicle traffic and that,
20 Dave perhaps can talk to a little bit more.

21 There's some cultural issues and some other
22 issues that a taproot may have noted that we certainly
23 have been addressing.

24 **THE CHAIRMAN:** Let me jump in again and
25 demonstrate my ignorance.

1 When the air conditioning get turned off
2 here in probably an hour, in five minutes you'll notice
3 it. So what kind of interaction are we talking about and
4 how come our staff were able to -- what did our staff did
5 to detect it? Did they have to go and measure something?

6 I still don't understand how you don't
7 detect ventilation deficiencies.

8 **MR. REZANSOFF:** Dave Rezansoff for the
9 record.

10 First I'll just -- I'll give a bit of a
11 background on the Eagle Point management structure.

12 At Eagle Point, we have a mine engineering
13 team; we have a geology team; we also have a mine
14 operations team. In the mine engineering team, we have
15 specialized ventilation engineers that assist with the
16 design and oversee changes to ventilation.

17 We have a process as well, as part of our
18 own learnings from previous events in Cameco. Several
19 years ago there was an inflow at the McArthur River
20 operation and one of the outcomes from that was the use of
21 ventilation directives to manage and control ventilation
22 and changes with associated -- associated to that in the
23 field.

24 So as part of the practices that our
25 ventilation engineers carry out, there are routine

1 ventilation surveys that are conducted. And all that
2 information is provided in mine plan updates that are
3 issued on a -- at least on a bi-weekly basis, circulated
4 and distributed, posted at the site as well.

5 In this case, this condition was actually
6 detected by our CNSC project officer who in reviewing the
7 -- the documentation found a ventilation flow on our
8 portal which was very much below a modelling number that
9 we put forward in a 2001 submission. That submission
10 indicated, I believe, 159,000 cfm of airflow at the ramp
11 and we were below a 100,000 I believe at the time. And
12 this was noted clearly by our ventilation engineers and
13 monitoring staff as low on the ventilation surveys.

14 So going back to the tap route on that,
15 there were a few causal factors identified and I'll just
16 note them briefly.

17 Ventilation changes required for winter
18 operation resulted in the portal airflow being below an
19 appropriate volume based on horsepower requirements and
20 expected equipment. So we have a different method of
21 operating the ventilation systems between winter and
22 summer conditions. We had a change in ventilation
23 condition as part of a routine practice but, and as a
24 result, we ended up with some low flow conditions
25 temporarily on the ramp.

1 Upon becoming aware of the airflow
2 deficiency below the portal, no immediate corrective
3 action was taken to restore the airflow volume below -- to
4 an appropriate level.

5 So the information was picked up by our own
6 staff but the operation staff didn't react sufficiently
7 quickly to restore the ventilation. When that condition
8 was identified in the field, and as I mentioned in my
9 presentation, we shut down the mining operations
10 completely and worked to restore the ventilation to the
11 2001 design flow within 24 hours.

12 And then the third component to that was
13 that there is no formal process in place to limit the
14 total equipment break horsepower allowed to assess the
15 area of limited -- to access areas of limited ventilation
16 in the mine. Mainly, this has to do with an operational
17 control practice.

18 I would say perhaps as a safety culture
19 aspect and one that -- and we're continuing to grow the
20 mine towards is -- is I would say that our mine operations
21 and engineer folks are very much radiation-centric in
22 their focus and in this case I believe, although all the
23 monitoring numbers in the mine were showing to be quite
24 sufficiently low so no elevated radiation conditions in
25 the mine, they weren't seeing the potential in terms of

1 decreased airflow in terms of concerns for vehicular
2 emissions.

3 (SHORT PAUSE/COURTE PAUSE)

4 **MEMBER McDILL:** It's troubling. Staff?

5 **MR. SCISSONS:** This is Kevin Scissons.

6 I'll just speak first before I pass it over
7 to Wayne Stewart the inspector or project officer who
8 discovered this.

9 Basically, what it comes down to is we
10 utilized the information and ventilation results the
11 licensee had done on the surveys. I believe that may have
12 been done probably two weeks previous, somewhere in that
13 timeline. I'll let Mr. Stewart speak to it.

14 The data clearly showed that they had air
15 volumes far short of what was required. They did not have
16 restrictions on the travelway, and the protection of the
17 worker is beyond radiation protection as well as
18 emissions, the bare emissions are for the worker health
19 and safety, and it simply comes down to two actions when
20 that is discovered. Either we will shut them down or the
21 operator shuts it down and makes the corrective action.
22 They chose option B immediately.

23 Now, I'll pass it on to Mr. Stewart to give
24 you a bit more details surrounding the incident if you'd
25 like that?

1 **MR. STEWART:** William Stewart.

2 **MEMBER McDILL:** Maybe I could just
3 interrupt for just a second.

4 How much diesel exhaust was an average
5 worker -- I mean diesel exhaust is non-carcinogen, so how
6 much exposure was there in this period of time to any
7 given worker? Was that in the ---

8 **MR. NEUBURGER:** Dave Neuburger for the
9 record.

10 I don't believe actually that there was
11 much of a quality impact. We do have very high
12 ventilation flows in the mine, typically, and we ventilate
13 an area like the portal in the ramp for multiple vehicles
14 travelling in it and typically they are staged so there's
15 not usually a significant amount at once.

16 So I personally don't believe it's at all a
17 human health issue. It very much speaks to -- and it's as
18 big an issue because it very much speaks to a compliance
19 issue. And compliance to standards and to procedures
20 needs to be there consistently for all procedures because
21 some of them will affect human health.

22 In this case, I don't believe there's any
23 human health impact.

24 **MEMBER McDILL:** Thank you.

25 I'm sorry for interrupting.

1 **MR. STEWART:** It's okay.

2 Again, William Stewart for the record.

3 The ventilation at Eagle Point has been a
4 long-term term issue and it was raised at the previous
5 licence application. There have been a number of action
6 items related to ventilation, so it's something that I
7 constantly check when I'm on site.

8 What I did is I took a look at the last
9 month's -- before this period -- worth of weekly
10 ventilation records and noted an extreme drop in the
11 ventilation at the portal, and actually on the weekly
12 ventilation report it indicated -- written right on the
13 report the number was low.

14 So I did discuss with the people at Eagle
15 Point at the engineering department at that time, as well
16 discussed the issue with CNSC staff in Saskatoon to
17 determine the appropriate course of action, and Cameco
18 acted to shut down operations at Eagle Point until the
19 situation was rectified.

20 The reason that it was noted that it was
21 low is it wasn't the -- it wasn't the previous model
22 number that was high. It was actually -- it was a
23 significant drop in the previous month's -- then portal
24 number. And that's what brought it to my attention, was
25 that it was a large drop.

1 **MEMBER MCDILL:** My other question, if I
2 may, is with respect to the full-time equivalent dosages
3 and I asked this question with the previous mine Key Lake
4 at 1.58 and Rabbit at 3.49, so roughly double. Some of
5 that was due to the positioning of trailers.

6 So can you tell me again why it was that --
7 I think if I heard correctly -- CNSC staff determined that
8 the trailers were mis-positioned, not Cameco.

9 So could Cameco explain why that was not
10 discovered by Cameco? I realize that the numbers are well
11 below, I just ---

12 **MR. NEUBURGER:** Dave Neuburger for the
13 record.

14 Just to clarify, the full-time equivalent
15 dose is just -- that's a summary of the entire dose for
16 the site.

17 The trailers, I think you are referring to
18 the location of contractor trailers which, was one of the
19 action -- or the action level exceedances for the licence
20 term.

21 I believe that perhaps that is what you are
22 referring to there. They're two slightly different issues
23 or very different issues, but both obviously part of
24 radiation.

25 Is that -- were you referring to that

1 trailer location incident?

2 **MEMBER McDILL:** I think there were several
3 things contributing to it, so I picked it up when I was
4 reading through that the full fft's were different.

5 And then I asked for it to be clarified and
6 then I heard a little bit more about it today, so -- for
7 this licence, so perhaps there's some more complex picture
8 but ---

9 **MR. NEUBURGER:** I believe the Commission
10 Member document -- I don't remember which one it was now,
11 staff's or ours speaks to the number of report -- of
12 action levels that were reported as well and we have both
13 quarterly action levels.

14 Where somebody is exposed to more than five
15 millisieverts in a quarter or more than one millisievert
16 in a month, it's reported as an action level. I think
17 there was perhaps 10 for the period that was commented on
18 and that trailer point was one of those, if I recall.

19 So if you would like, I would ask Kim
20 Sparling to perhaps comment on that one briefly.

21 **MR. SPARLING:** Kim Sparling, for the
22 record.

23 Actually, I'd like to defer this to John
24 Takala.

25 **MR. TAKALA:** John Takala, for the record.

1 The two are separate incidents. The
2 trailer issue was related to an action level and as noted
3 in the staff CMD, would point more to a program weakness
4 in their radiation program.

5 A very minor contributor in terms of that
6 particular incident to the overall full-time equivalent
7 dose, the full-time equivalent dose has been relatively
8 stable, slight downward trend over the licence period and
9 within the predictions that we made when we restarted
10 Eagle Point.

11 **MEMBER McDILL:** Thank you. That helps with
12 the -- I saw that they were more or less stable and
13 somewhat reduced and you didn't point that out.

14 Why was it that staff discovered the
15 trailers, not Cameco? Why did it come from that? Am I
16 correct in making that statement? No, I'm not correct in
17 making that statement. Okay.

18 So how was it determined that the trailers
19 were mis-positioned? Maybe I could ask Cameco?

20 **MR. BALYCH:** Mo Balych for the record.

21 The contractor trailer placement --
22 typically you can imagine contractors wish to be
23 efficient. At Rabbit Lake with the revitalisation
24 projects that we have on the go, we have several
25 contractors. Each contractor requires an office to work

1 out of and typically they like to place the trailer
2 adjacent to their construction activity.

3 In this case, that was exactly what
4 happened. We had a couple of projects developing in the
5 area. We had a couple of different contractors and there
6 was a convenient area that was close to their project that
7 they chose that they wish to put it in that area. It
8 happened to be adjacent between a low page clarifier area
9 and some of the CCD tanks as well with the mill ore pad a
10 little bit further distance behind them.

11 So as far as selection a location which
12 would be the least desirable as far as the radiation
13 exposure versus their tendency to place their trailers
14 close to their operating areas, there was a balance there
15 that we had to push them a little bit further away from
16 that most convenient area.

17 **MEMBER McDILL:** I'll ask staff for a brief
18 comment and then I'm done after that.

19 **MR. SCISSONS:** Yes. It was actually in
20 reviewing some of the dose or the action levels and
21 especially to the contractors that we established -- it
22 was confirmed that their background numbers actually in
23 their work trailer was in issue and that they should not
24 be exposed to that kind of normal background in this
25 trailer and it needed to be moved to an area.

1 This is actually one of those examples
2 where we are -- went after our licensee, or Cameco in this
3 case, for oversight contractor management and safety and
4 oversight of them, and this was one of those examples that
5 illustrated the need for that increased scrutiny and
6 oversight and protection of all workers, especially
7 contract workers.

8 **MEMBER McDILL:** Thank you, Mr. Chair.

9 **MR. NEUBURGER:** Dave Neuburger for the
10 record.

11 If I -- and I perhaps missed before, but
12 just to clarify, if my memory's correct, now I think --
13 and it could be off, so staff can verify, but I believe
14 that this -- that the reason for this was identified
15 through Cameco's investigation of why the action limit was
16 reached.

17 Is that correct? Okay.

18 **MEMBER McDILL:** So it was Cameco that found
19 the problem?

20 **MR. NEUBURGER:** Through the mechanism of an
21 action -- an action level being reached, yes.

22 **MEMBER McDILL:** Thank you for that
23 clarification.

24 **THE CHAIRMAN:** Thank you.

25 Monsieur Harvey?

1 **MEMBER HARVEY:** I'll be very short.

2 In page 18 in the staff submission, about
3 Horseshoe Creek, it is -- I can read that. That creek,
4 Horseshoe Creek waters exceed the relevant surface water
5 quality objectives or guidelines.

6 I'm surprised because I thought from
7 earlier discussion that such guidelines, well, were not in
8 the picture. So I don't know if I missed something this
9 morning or this afternoon.

10 The other element of my question -- well,
11 maybe you should answer that part and I'll come back to
12 that just after that?

13 **MR. MCKEE:** Malcolm McKee for the record.

14 Canadian surface water quality objectives
15 or guidelines and provincial surface water quality
16 objectives and guidelines, in this case for protection of
17 aquatic life, are just that; they are not regulatory
18 limits. They are essentially criteria that indicate if
19 you are below those levels. You can consider that there
20 is little likelihood of risk. If you are above those
21 levels, it does not necessarily indicate a risk. It
22 indicates that there's a potential and you would do risk
23 assessment work and so on.

24 But the actual -- they are not actually
25 legal regulatory limits.

1 **MEMBER HARVEY:** But there exists for
2 selenium, uranium, and molybdenum?

3 **MR. MCKEE:** There is just recently a
4 Saskatchewan surface water quality objective for aquatic
5 life for uranium or an interim number which was just, I
6 believe, last year developed and there is one, a CCME
7 number, Canadian federal number for selenium as well as
8 molybdenum.

9 **MEMBER HARVEY:** Okay, thank you.
10 Below you can read it is expected that the
11 recently achieved substantial reduction in uranium
12 concentrations and loading to the system would help
13 address these near fill effects.

14 Are those changes actually -- is it
15 completed? I'm a little bit mixed up with what has been
16 said before for other treatment. It was something that it
17 was not yet -- in that case, is it working?

18 **MR. MCKEE:** Malcolm McKee for the record.

19 With respect to the uranium reduction
20 program, we have seen a more than a five-fold reduction in
21 concentrations. More importantly, we saw an 85 percent
22 reduction in loadings based on a full year of performance.
23 So we have a full data set for 2007 and that loading
24 reduction occurred over a year that was one of the highest
25 flow -- water flow management years for the treatment

1 facility, so ---

2 **MEMBER HARVEY:** Would that have a
3 significant effect on the Horseshoe Creek water?

4 **MR. MCKEE:** Malcolm McKee for the record.

5 The water -- the effluent point of release
6 is actually into the headwaters essentially of this
7 stream, so the stream itself responds quite rapidly to
8 effluent quality. So there's a substantial reduction in
9 stream water concentration for those analyts as well.

10 The other issue in this system, though, is
11 that the stream was also responding to the historical,
12 long-term loads that are already present within the
13 sediments as well, so we're not sure how the dynamics of
14 responding to the reduction in effluent may quite not be
15 as rapid as if we didn't -- as it would be if we didn't
16 already have a substantial sediment load. So that will
17 have to be followed up on.

18 **MEMBER HARVEY:** Thank you.

19 One last question: In page 19 here, based
20 on the results, the Rabbit Lake Environmental Protection
21 Program, its implementation meet requirements. And lower,
22 the other paragraph:

23 "Delays in completing significant
24 reclamation activities may result in
25 reduction of this rating."

1 How are you going to deal with that because
2 delays, you have dates or what would be a delay that will
3 come to -- that would lead to downgrading the rating?

4 **MR. SCISSONS:** This is Kevin Scissons
5 speaking.

6 That is related to the proposed licensing
7 condition regarding reclamation activities and it's all
8 about removing the longer-term liability or footprints for
9 the facility. Even our -- you'll note in the
10 decommissioning financial assurances and guarantees that
11 number keeps building every year and that's because the
12 liabilities are not going down.

13 So part of this approach on overall
14 environmental management between ourselves, our co-
15 regulators, Ministry of Environment, also with our
16 stakeholders and community consultations we've had with
17 Wollaston Post across the lake and clearly with our
18 licensee as well is an opportunity to minimize those
19 impacts and start putting things to bed that are done or
20 inactive and you can start measuring success over the long
21 term.

22 When you've reclaimed a pile or worked with
23 flooded pits in the case of the A-Zone breach in dyke, if
24 they are indeed going to be operating here until 2027,
25 you'll have an opportunity for 15, 20 years of historical

1 data of reclaimed areas and that goes a long way to
2 providing success towards the overall decommissioning plan
3 of the entire facility.

4 We used this approach for Cluff Lake
5 decommissioning. The Commission issued that
6 decommissioning licence in 2004. And prior to that whole
7 process, it was about reclaiming areas that were inactive,
8 flooded pits, waste rock covers, re-vegetation, re-
9 grading, re-sloping, and removing liabilities.

10 In our view, this we feel is important for
11 this historical operation and I think the licensee has
12 confirmed it with us, that they also believe that there's
13 opportunities here to remove these liabilities as they
14 move forward through the licensing period and to us,
15 that's part of environmental protection. If that efforts
16 are not successful, we believe that part of the
17 environmental protection may have a reflection on the
18 rating.

19 **MEMBER HARVEY:** Yes, but my question was,
20 you have some criteria or some belief that will indicate
21 that you're going, well, too slow or fast enough or not
22 too fast?

23 **MR. SCISSONS:** This is Kevin Scissons.

24 Part of that measurement is also an example
25 of the work that was done, we'll say, at A-Zone and the

1 water quality sampling and inspections done with our
2 regulators as well as the community members that visit the
3 site. That is a measure of that success.

4 And looking at the overall plan of the
5 amount of activities in balance with this is an operating
6 site, it is something we will use to manage the overall
7 approach for the life of this facility as this facility
8 moves on through licensing.

9 So we are looking for definitive actions
10 and outcomes and successful results, and that will be part
11 of this licence condition; and most importantly, if
12 discussions with the licensee or negotiations with the
13 licensee on the proposed action plan and a schedule for
14 implementation.

15 So that's part of the whole complex picture
16 on the measurement of that success.

17 **MEMBER HARVEY:** Because to my point of
18 view, it's very important that the licensee knows about
19 the criteria that will be used to rate or to rank their
20 progress.

21 That's okay. I mean, unless you have some
22 comments for the ---

23 **MR. NEUBURGER:** Dave Neuburger, for the
24 record.

25 I'll just make a few general comments and

1 ask Dave Rezansoff to provide a little bit more as well.

2 I would say that as part of our
3 environmental leadership focus that both Gerry and Tim
4 talked about, one of the thrusts of that is to ensure that
5 we minimize the -- we control and minimize and eventually
6 reduce the amount of waste liabilities that we've created.

7 So in concept, it's about as we mine new
8 areas in the future, whether that be new facilities or new
9 mining on existing facilities, we need to eventually be
10 starting to reclaim as much and then more than we're
11 actually mining again. So we have recognized that in our
12 environmental leadership piece.

13 We've also been challenged a couple of
14 years ago by, actually, Barclay Howden, the previous
15 Director General, to say -- his point was if we want to
16 operate for another 20 years, what's our vision for our
17 older facilities to operate, and I think we've begun
18 expressing that in the Mining Division. It's a vision
19 about revitalizing our existing mills and that's changing
20 processes to improve reliability.

21 It's very much a vision about reducing our
22 environmental impacts as we operate and we think of that
23 in terms of some of the effluent improvement projects,
24 things like improved -- reduced SO2 emissions with new
25 acid plants. But it's also very much a vision where we

1 recognized about getting long-term tailings capacity in
2 place, and that speaks to the whole strategy around the
3 DTMF at Key Lake and around the new facility at Rabbit,
4 but we also recognize, and the part we still have to do a
5 lot more work on describing is it's a vision about
6 ensuring that we address our historic liabilities, very
7 much as Kevin described.

8 So in principle, we're quite supportive of
9 something like that, but some of your questions to staff
10 were, should it be pushing towards a "C"? I think our
11 view is that some of this speaks to environmental
12 leadership and perhaps is the point that takes us from a
13 "B" to an "A", but I'll leave for others to judge and I'll
14 ask Dave Rezansoff to provide a little more input in the
15 Rabbit Lake example in particular.

16 **MR. REZANSOFF:** Thanks, Dave.

17 Dave Rezansoff, for the record.

18 Just a couple of other additional comments
19 to that. The proposed licence condition as part of that
20 requires a schedule to be developed and presented to the
21 CNSC and a schedule that we will hold ourselves to. And
22 so we look forward to developing that.

23 As I had mentioned in my presentation, the
24 current proposed licence puts that forth, the date for
25 that to be provided or that plan and schedule by February

1 of next year. And at least at this point we're suggesting
2 that that be moved ahead to allow that planning to be
3 quite thorough but, again, there will be more discussion
4 around that and that will be presented to you in Day Two.

5 Just over the last several years, I'd like
6 to note as well that Cameco has been and continues to be
7 quite proactive in reclaiming the Rabbit Lake site, most
8 recently again, A-Zone and thorough and extensive planning
9 for the B-Zone area and also the above-ground tailings
10 management facility.

11 As well, through our provincial licence to
12 operate, we have in place and have had in place for many
13 years a one and five-year reclamation plan where it will
14 set forth general plans proposed for the next five-year
15 period and then more details in terms of what we are
16 planning to achieve in the next one year.

17 So this type of activity has been in place
18 for many years at Rabbit Lake and we work towards that
19 each and every year both in terms of our budgeting the
20 monies we're actually committing to carry out activities,
21 and then in our objectives that we're working towards
22 achieving.

23 On the issue of criteria, I would like to
24 note, though, that there has been some uncertainty as to
25 the acceptance criteria for N-states with respect to, for

1 example, water quality and our surface gamma radiation
2 criteria for close out, and this does result, I believe,
3 in some delay and uncertainty as to what an acceptable N-
4 state might look like.

5 For example, I mean by that if an activity
6 or an area is closed out today inside of an existing
7 licence period, many years down the road, that facility
8 may be subject to different criteria and additional work
9 may be required.

10 So as part of this activity, we look
11 forward to the discussion on acceptable close-out
12 criteria.

13 **THE CHAIRMAN:** I think it's a good time to
14 stop here. I think we've discussed -- unless somebody has
15 a particularly urgent question, I'd like to thank
16 everybody for this.

17 We have questions about the time. We have
18 one more hearing which actually will deal with some of the
19 environmental issues.

20 So why don't -- you know, here is where
21 people were supposed to break for dinner, but I'm going to
22 skip -- I was going to suggest skipping dinner and coming
23 back in about 15 minutes and get on with the last hearing.

24 How is that?

25 **MR. GRANDEY:** Dr. Binder, if I could just

1 make one concluding remark? I will have to leave, so I
2 won't be here for the finality of the last hearing, but it
3 has been a long day and I want to compliment everyone on
4 the patience that you demonstrate.

5 I think through this, we sit here as the
6 licensee and it is a time when all the five-year and
7 perspective issues are raised and answering questions and
8 trying to describe to everybody plans that we have and,
9 unfortunately, I think you get a sense that we're plagued
10 by nothing but problems and troubles. And again, I want
11 to assure you that that's not quite an accurate picture of
12 the way we view our performance and the way we kind of
13 conduct our operations.

14 If there's one thing that I would say, as
15 part of the whole notion of environmental leadership,
16 unless you're willing to stand up and admit there are
17 problems and things that need to be corrected and admit
18 mistakes and failings along the way, and do it internally
19 and publicly, which in this industry you are forced to do,
20 unless you're willing to do that and it becomes part of
21 your culture, which I think it is, you will never arrive
22 at a position of being an environmental leader.

23 So, you know, we're very much within the
24 culture now, standing up and admitting when we have made a
25 mistake and then trying to address it, and when we think

1 we're on the right side of the issue, then we're bound to
2 tell you, but we do thank you for wading through the
3 stacks and volumes of material, for the questions and the
4 patience and your deliberations.

5 So thank you very much.

6 **THE CHAIRMAN:** Thank you.

7 **MR. LEBLANC:** So I will be closing this.

8 So this hearing is to be continued with Day
9 Two on September 18, 2008 in Saskatoon. The public is
10 invited to participate either by oral presentation or
11 written submission on Hearing Day Two.

12 Submissions are due by August 18, 2008.
13 Cameco and CNSC staff CMDs are to be filed by no later
14 than September 10th, 2008.

15 So the hearing is now adjourned to
16 September 18. Thank you.

17 **THE CHAIRMAN:** So we'll come back in 20
18 minutes. Okay. So we're talking about 18h40.

19 --- Upon recessing at 6:20 p.m. /

20 L'audience est suspendue à 18h20

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