

1           **ONE-DAY HEARING**2           **Cameco Corporation: Application for revocation of**  
3           **Mining Facility Removal Licence for the Dawn Lake**  
4           **Project**

5                           THE CHAIRPERSON: The next item on  
6           the agenda is a one day hearing on the matter of  
7           an application by Cameco Corporation for the  
8           revocation of its Mining Facility Removal Licence  
9           for the Dawn Lake Project.

10                           January 29th was the deadline set  
11           for filing by the applicant and by CNSC staff.  
12           The public was invited to participate, either by  
13           oral presentation or written submission. January  
14           29th was also the deadline set for filing by  
15           intervenors. Two requests for intervention were  
16           filed and one was accepted. A letter from  
17           Tamarick Developments Limited was refused as it  
18           was received after the deadline for interventions.

19           The secretary has informed Tamarick Developments  
20           Limited that their comments will not be added to  
21           the agenda for this hearing.

22                           February 21st was the deadline for  
23           filing of supplementary information and I note  
24           that the applicant has filed supplementary  
25           information CMD 02-H3.1A.

1 I understand Mr. Jarrell that you  
2 will do the presentation for Cameco. This is  
3 noted in CMD Document -- CMD 02-H3.1,  
4 CMD 02-H3.1A.

5 Mr. Jarrell.

6

7 **02-H3/02-H3.1A**

8 **Oral Presentaion by Cameco Corporation**

9 MR. JARRELL: Good morning, Madam  
10 Chair, Members of the Commission, Commission  
11 staff, ladies and gentlemen.

12 For the transcript of today's  
13 proceedings I am John Jarrell and I am Cameco's  
14 Vice President of Environment and Safety. I have  
15 with me today, Mr. Mark Wittrup who is Cameco's  
16 Director of Environment. I should also point out  
17 that Mark began his nuclear industry career some  
18 22 years ago as an exploration geologist and  
19 therefore has developed a first-hand appreciation  
20 for some of the topics that are before us today.

21 Before turning things over to  
22 Mark, I would like to say a few words about why we  
23 have made this application to revoke the Dawn Lake  
24 removal licence.

25 The request arises from the change

1 in regulations which led to the formation of the  
2 Canadian Nuclear Safety Commission. What we hope  
3 to gain from this process is as follows.

4 First, a better understanding or a  
5 regulatory clarity, if you will, about when in a  
6 project's life formal CNSC licensing is required.

7 Second, a reduction in the degree of regulatory  
8 involvement in the very early stages leading to  
9 the uranium fuel cycle since we believe existing  
10 provincial regulations and guidelines provide  
11 sufficient regulatory oversight. Third, with  
12 reduced regulatory involvement, simpler regulatory  
13 approval processes to undertake early stage  
14 exploration work, a simpler process should  
15 translate into reduced process time. And finally,  
16 of course, to eliminate the cost of a removal  
17 licence.

18 Dawn Lake is a somewhat unique  
19 project insofar as it is a relatively old  
20 exploration project, having had in the past  
21 removal licences, a decommissioning licence and  
22 most recently a removal licence again.

23 Our purpose here today is  
24 four-fold. First, to give you a brief background  
25 on this exploration project. Second, to give you

1           our interpretation as to the point in the  
2           exploration cycle when formal CNSC removal  
3           licensing is wholly appropriate. Third, to give  
4           you our views as to why provincial regulations and  
5           existing guidelines provide sufficient oversight.

6           And finally, to answer any questions you may have  
7           in making your deliberations on our request for  
8           licence revocation.

9                               I would now like to turn the  
10           presentation over to Mark Wittrup. We would, of  
11           course, be glad to answer any questions either  
12           now, after Mark's presentation or at any other  
13           time in these proceedings.

14                              Mark.

15                              MR. WITTRUP: Thank you, John.

16                              Madam President, Commissioners.

17                              For the record, my name is Mark  
18           Wittrup. I'm Director, Environment for Cameco  
19           Corporation.

20                              The Dawn Lake Project is a surface  
21           mineral exploration project located in the eastern  
22           Athabasca Basin in northern Saskatchewan. It's  
23           centred about halfway between the Midwest project  
24           and the McClean Lake projects and that is the star  
25           on the slide.

1                   Access to the site is currently by  
2 float or ski-equipped aircraft or by trails off of  
3 Highway 905 or the Stony Rapids, Black Lake winter  
4 road. And just as an aside, there has been a few  
5 questions on the type of aircraft in the picture.

6           It's a single Otter, the north's slowest and  
7 noisiest but most reliable aircraft.

8                   The Dawn Lake project is comprised  
9 currently of over 20 mineral claims and claim  
10 blocks of which only four currently comprise the  
11 removal licence. Those four claims cover the  
12 LaRocque Lake area at the north of the project, I  
13 will point the arrow to it there, and the Dawn  
14 Lake and Collins Creek areas in the east central  
15 portion of the mineral claims.

16                   The only current activity on the  
17 site is surface mineral exploration, which may  
18 include prospecting, sampling, linecutting,  
19 geophysical surveys and diamond drilling in an  
20 effort to locate and define some resource.

21                   Over the next series of pictures,  
22 I'm just going to show a few scenes and try to  
23 give a sense of the scale of the activities at  
24 Dawn Lake associated with the mineral exploration.

25                   This is a typical diamond drill

1        setup. A small clearing connected by a trail or  
2        series of trails that sits on the grid area. Of  
3        note are Saskatchewan Environment and Resource  
4        Management permits require us to keep clearing to  
5        an absolute minimum, largely in response to some  
6        of the excesses of mineral exploration in the  
7        early eighties.

8                    Drilling is often best done in the  
9        winter as it provides easier access to wet areas,  
10       bogs, muskegs or drilling off lakes. As an aside  
11       again, winter drilling also minimizes impacts to  
12       soils.

13                   This is the LaRocque Lake  
14       exploration camp, in winter obviously. A typical  
15       drill camp for this type of work. Here we would  
16       have two tents for the drillers and the cook to  
17       live in. Two tents for the geologists. One  
18       cook/dining tent and one wash tent or dry. Water  
19       is pumped from the nearest lake, electricity is by  
20       generator and heating is by fuel oil.

21                   Now, we are standing in the same  
22       spot and we have turned around 180 degrees both in  
23       direction and season, in the centre is the logging  
24       shack for the cold core or the non-radioactive  
25       core in the mineral exploration. Off in the far

1 distance just visible on the right-hand side by a  
2 reflection off the roof of the tent is the hot  
3 core logging tent or that tent in which we log the  
4 radioactive core. And it should be noted that it  
5 is well away from the living areas.

6 Now, this is one of our project  
7 geologists logging core at Dawn Lake. This is the  
8 logging of non-radioactive core. For radioactive  
9 core, the geologists log -- have a log-in sheet.  
10 They log in and out, record the gamma levels, wear  
11 coveralls, safety glasses, TLD badges and minimize  
12 time spent with the core.

13 Now, one would think they would  
14 spend more time with the mineralized sections than  
15 the non-mineralized sections because that is the  
16 object of interest. But in contrary, they  
17 actually spend very little time with the  
18 radioactive core because it tends to be black,  
19 amorphous and doesn't provide very much  
20 information with respect to locating more of the  
21 same. They tend to be looking above and below the  
22 deposit for signs of alteration, structure and  
23 other things that might lead them in a more  
24 fruitful direction. More information about the  
25 radioactive core is actually obtained from down

1 hole gamma logging and mineral geochemical  
2 analyses.

3 At Dawn Lake the original removal  
4 licence was obtained in the early 1980s when site  
5 activity was at its peak. This was the intensive  
6 work that ultimately produced measured resources  
7 for the Dawn Lake project, that is delineation  
8 drilling. With the end of high uranium prices,  
9 work on the project dropped steadily until the  
10 removal licence fee was a substantial part of the  
11 overall operating budget. At that point we  
12 converted it, this is the mid-eighties, into a  
13 decommissioning licence.

14 The effect of going to a  
15 decommissioning licence meant that the site was  
16 cleaned up from a radiological standpoint and the  
17 radioactive core, mostly a core greater than about  
18 0.05 per cent  $U_3O_8$  was transported to Rabbit Lake  
19 for storage where it stays now and that is the  
20 practice we continue to this day. We reinstated  
21 the removal licence in 1999, because there was a  
22 good chance that drilling at LaRocque would  
23 intercept greater than 10 kilograms U, which under  
24 the old act and regulations was the trigger point  
25 for a removal licence.



1                   At Dawn Lake historic area,  
2                   exploration has occurred on the site since about  
3                   1975 when the properties were staked. Work on the  
4                   site eventually delineated about 13 million pounds  
5                   U<sub>3</sub>O<sub>8</sub> in several small ore pods. Under the removal  
6                   licence, redrilling of the original deposits was  
7                   done in the year 2000, but that drilling added as  
8                   many reserves as it subtracted and so overall  
9                   there was no net gain. As such, the original Dawn  
10                  Lake deposit continues to remain uneconomical  
11                  under current conditions and there is no plan in  
12                  the near future to do any work in this.

13                  The work at Dawn Lake is still at  
14                  the exploration level and while we have  
15                  intersected mineralization at LaRocque Lake and  
16                  Collins Creek, there is no defined ore zone, ore  
17                  body or even anything with any continuity at all  
18                  or as per the Ontario Securities Commission's  
19                  definitions, we have no inferred or indicated  
20                  resources at the sites and as such, exploration at  
21                  Dawn Lake continues. Currently planned future  
22                  work includes some drilling on LaRocque Lake,  
23                  which is ongoing right now and nothing on the  
24                  Collins Creek showings until the year 2003 at the  
25                  earliest.

1                   I would just like to show a couple  
2 of slides here. I'm afraid the clarity is not as  
3 great as I would have liked. But the legend on  
4 these diagrams, we are showing about a kilometre  
5 along the grid at LaRocque Lake here, and the  
6 legend shows the grade tonnage, which is simply a  
7 multiple of the grade of the intersection times  
8 the distance along that intersection in metres.  
9 Of course, from an economic standpoint, yellows  
10 and reds would be of the most interest but we can  
11 see, as you look along the grids, that there are  
12 very few of those and they are widely spaced and  
13 separated with a lot of, unfortunately, with a lot  
14 of blues and tans amongst them. The point being  
15 is that we still don't have any continuity or form  
16 to the showings on site.

17                   We are showing about two  
18 kilometres on this slide along the Collins Creek  
19 deposit. Again, the same thing. We note the blue  
20 is the lowest grade tonnage, essentially that is  
21 background or lower and we can see that in this  
22 case blues dominant. It's a little clearer shot.

23                   Again, no form or continuity. We are simply  
24 still looking for that.

25                   Under the new act and regulations

1 a licence is not required because we are not  
2 evaluating an ore body and we are not examining it  
3 at all for any form of commercial exploitation at  
4 this stage. We draw the line between licensable  
5 and unlicensable at the point where a decision is  
6 made to do delineation drilling to move from an  
7 indicated resource, which marks the end of  
8 exploration, to the large amount of work required  
9 to move to a measured resource.

10 Current activities are fully  
11 regulated by SERM, Saskatchewan Labour,  
12 Saskatchewan Health and the Department of  
13 Fisheries and Oceans. SERM is involved mostly in  
14 the environmental protection through their mineral  
15 industry environmental protection regulations and  
16 associated guidelines. And for permitting at the  
17 level of mineral exploration, we are required, as  
18 part of our applications, to supply an  
19 environmental protection plan and decommissioning  
20 plan.

21 There are frequent inspections of  
22 our sites by conservation officers who have the  
23 resources of the centralized SERM mine inspections  
24 branch in La Ronge as part of their resources as  
25 well as their fisheries experts and land experts.

1                   Saskatchewan Labour inspects for  
2 conventional safety, especially for the diamond  
3 drillers, which is a fairly -- what is the word  
4 I'm looking for? -- it can be a dangerous  
5 occupation. Radiation is indirectly regulated  
6 through the use of NORM guidelines and due care  
7 clauses.

8                   Saskatchewan Health inspects camp  
9 living conditions, although infrequently, but they  
10 do review our environmental protection plans to  
11 ensure that our sewage and water supplies are  
12 adequate.

13                   Department of Fisheries and Oceans  
14 issues fish habitat authorizations and reviews our  
15 applications for stream crossings.

16                   The CNSC continues to regulate our  
17 operations through the packaging and transport of  
18 radioactive materials regulations and at Cameco we  
19 have standard procedures for handling radioactive  
20 core and these procedures, actually are found in  
21 Appendix D of our current Dawn Lake Mining  
22 Facility Licensing Manual, and these were the  
23 procedures we use at all of our other greenfields  
24 exploration sites and we will continue to use if  
25 the license is revoked. And TLD badges are used

1 by all of our field staff.

2 In conclusion, I believe the  
3 licence is no longer applicable because it's not  
4 required by the regulations and that we are a  
5 precursor and one would argue, a speculative  
6 activity, prior to any activity within the  
7 licensed nuclear fuel cycle. However, we  
8 recognize that a CNSC licence is required once the  
9 drilling has defined an indicated resource and at  
10 that stage the activity moves to delineation  
11 drilling. And that delineation drilling marks a  
12 large increase in spending in order to work to  
13 define a measured resource as defined again by the  
14 Ontario Securities Commission.

15 Now, as a publicly traded company,  
16 Cameco is obligated to notify our stakeholders,  
17 because a move from the indicated to work towards  
18 measured is a material fact. And what it does is  
19 it provides a relatively easy means for the CNSC  
20 to judge whether we are in the right range for  
21 having a removal licence on a particular project.

22 In conclusion, we believe that not  
23 having a licence provides no unreasonable risk to  
24 the environment. This is a low footprint  
25 activity. There are no unreasonable risks to

1 workers or the public as we have documented in our  
2 CMD the low radiation exposure activity, and we  
3 will continue to use the same procedures that we  
4 have used in the past.

5 In addition, there is an effective  
6 regulatory structure surrounding this early stage  
7 of exploration. As such, we respectfully request  
8 revocation of the Dawn Lake licence until such  
9 time as a definitive removal licence is required  
10 to develop a mineral reserve.

11 I thank you for your attention.

12 THE CHAIRPERSON: Thank you.

13 With the permission of the  
14 Commission members, I would like to turn to the  
15 CNSC staff for their presentation before we open  
16 the floor for questions. With that regard, I would  
17 like to turn to the oral presentation by CNSC  
18 staff as noted in CMD Document 02-H3 and I will  
19 turn to Mr. Howden.

20

21 **02-H3**

22 **Oral Presentation by CNSC Staff**

23 MR. HOWDEN: Madam Chair and  
24 Members of the Commission, for the record my name  
25 is Barclay Howden. I am the Acting Director

1 General of the Directorate of Nuclear Cycle and  
2 Facilities Regulation as well as the Director of  
3 the Uranium Facilities Division.

4 With me today is Mr. Rick McCabe,  
5 Head of the Uranium Mines Section of the Uranium  
6 Facilities Division.

7 Cameco Corporation has applied for  
8 the revocation of their mining facility removal  
9 licence for the Dawn Lake project on the basis  
10 that the current activities being carried out on  
11 this project and for the foreseeable future are  
12 strictly surface mineral exploration activities  
13 which are exempt from the Uranium Mines and Mills  
14 Regulation under the Nuclear Safety and Control  
15 Act.

16 CNSC staff has assessed the  
17 application and has developed a position which is  
18 documented in CMD 02-H3.

19 I will now pass over the  
20 presentation to Mr. McCabe, who will outline our  
21 assessment and recommendations.

22 MR. McCABE: Thank you,  
23 Mr. Howden.

24 Madam Chair, Members of the  
25 Commission, for the record my name is Rick McCabe

1 and I am Head of the Uranium Mines Section.

2 Cameco Corporation has applied to  
3 the Canadian Nuclear Safety Commission to have the  
4 Dawn Lake Mining Facility removal licence revoked  
5 because a licence under the Nuclear Safety and  
6 Control Act is not required for the surface  
7 mineral exploration activities currently being  
8 carried out on this project.

9 Exploration is the search for  
10 minerals using geological surveys, geophysical  
11 prospecting, bore holes, trial pits or surface or  
12 underground headings, drifts or tunnels.

13 Exploration aims at locating the  
14 presence of mineral deposits and establishing  
15 their nature, shape and grade. Surface  
16 exploration refers to those activities carried out  
17 from the surface, primarily by collecting  
18 information from drill cores.

19 The Uranium Mines and Mills  
20 Regulations do not apply to uranium prospecting or  
21 surface exploration activities, therefore a CNSC  
22 licence is not required for surface exploration.

23 A project to discover and collect  
24 information about an ore body follows a  
25 progression that eventually leads to the decision



1 to construct a mine.

2 As the exploration project  
3 progresses, confidence is gained in the  
4 reliability of the resource description  
5 interpreted from the information gathered.  
6 Eventually the exploration company will have  
7 enough information to enable them to produce  
8 resource estimates.

9 It is at this point that the  
10 company will begin to evaluate possible mining  
11 scenarios. This activity will trigger the  
12 requirement for a CNSC licence.

13 The Nuclear Safety and Control Act  
14 and the Uranium Mines and Mills Regulations do not  
15 define when exploration ends and evaluation  
16 begins. CNSC staff is examining a number of ways  
17 to define this point with certainty.

18 A CNSC mine site preparation  
19 licence will be required once enough information  
20 has been collected about a mineral deposit to  
21 support mine planning and evaluation of the  
22 economic viability of the deposit.

23 I wish to assure the Commission  
24 that any work that involves underground  
25 development is considered to be for the purposes

1 of evaluating a potential ore body. A CNSC  
2 licence would be required for any underground  
3 activities, however the discussion for this  
4 licensing action only relates to surface  
5 activities.

6 The Dawn Lake project was licensed  
7 under the Atomic Energy Control Act and Uranium  
8 and Thorium Mining Regulations. Exploration  
9 activities were exempted from provisions of the  
10 Uranium and Thorium Mining Regulations, however a  
11 licence was required to remove more than  
12 10 kilograms of uranium in a calendar year.

13 The 10 kilogram provision was in  
14 conflict with the exemption of exploration  
15 activities, because this limit can easily be  
16 exceeded during exploration.

17 The Atomic Energy Control Board  
18 staff, while recognizing the conflict, implemented  
19 the more restrictive provision and required a  
20 licence for the Dawn Lake project, even though the  
21 activities carried out were clearly for  
22 exploration.

23 The Atomic Energy Control Act and  
24 Uranium Thorium Mining Regulations were replaced  
25 by the Nuclear Safety and Control Act and the

1 regulations made under that Act.

2 Under the new legislation, a  
3 licence is not required until a company's  
4 activities change from exploration to evaluation  
5 of a potential ore body.

6 The 10 kilogram requirement was  
7 removed from the legislation because it was in  
8 conflict with the intent to exclude exploration  
9 from the CNSC mandate.

10 In addition to the exclusion in  
11 the Uranium Mines and Mills regulations, naturally  
12 occurring nuclear substances, other than those  
13 that are or have been associated with the  
14 development, production or use of nuclear energy,  
15 are exempt from the provisions of the NSCA and the  
16 regulations made under the Act. This exemption  
17 applies to exploration projects because they are  
18 not, nor have they been, associated with the  
19 development, production or use of nuclear energy.

20 Uranium recovery during  
21 exploration is a naturally occurring nuclear  
22 substance. Even though the amount of uranium  
23 removed during exploration may exceed exemption  
24 quantities found in the Nuclear Substances and  
25 Radiation Devices regulations, section 10 of the

1           General Nuclear Safety and Control Regulations  
2           exempts it from the provisions of the Act and  
3           regulations.

4                        CNSC staff is satisfied that the  
5           activities that have been undertaken at the Dawn  
6           Lake project to date are clearly associated with  
7           surface exploration.

8                        It is our assessment that,  
9           according to the Nuclear Safety and Control Act  
10          and the regulations under that Act, the surface  
11          exploration activities that are being carried out  
12          at the Dawn Lake project are not within our  
13          mandate. These activities fall under the  
14          jurisdiction of the Province of Saskatchewan.

15                       Surface mineral exploration  
16          activities in Saskatchewan are overseen by  
17          Saskatchewan Environment and Resource Management  
18          on behalf of several provincial departments. The  
19          Saskatchewan Environment and Resource documents,  
20          Surface Exploration Guidelines for the Mining  
21          Industry provides guidance on how a minimum  
22          exploration program should be planned, implemented  
23          and completed in a manner that minimizes  
24          environmental impacts and meets Saskatchewan  
25          legislation.

1                   A surface exploration permit  
2           issued by SERM may contain conditions for  
3           exploration activities, site access, work camps,  
4           land clearing, drilling and reclamation of  
5           disturbed areas.

6                   Saskatchewan's Occupational Health  
7           and Safety Act and regulations apply to  
8           exploration activities. They are administered by  
9           the Saskatchewan Department of Labour. There are  
10          a number of provisions in the Act that allow for  
11          the application of the Canadian Guidelines for the  
12          Management of Naturally Occurring Radioactive  
13          Materials published by Health Canada in the event  
14          that the safety of workers is found to be at risk.

15                  The basic principle of these  
16          guidelines is that the same protection should be  
17          applied to workers or the public exposed to  
18          radiation from activities involving naturally  
19          occurring nuclear substances as is applied to  
20          workers or the public exposed to radiation from  
21          CNSC-regulated activities.

22                  The Atomic Energy Control Board  
23          required the posting of a financial guarantee to  
24          fund the decommissioning of the Dawn Lake project.

25                  Cameco has provided an irrevocable letter of

1 credit for \$60,000 for this purpose.

2 Saskatchewan has indicated that  
3 this financial guarantee will be no longer  
4 required if this licence is revoked. Instead,  
5 SERM uses permits to ensure the cleanup and the  
6 decommissioning of surface exploration sites.  
7 Conditions related to the restoration of sites are  
8 included in the surface exploration permit issued  
9 for each drilling campaign.

10 Once the cleanup has been  
11 completed the site is inspected by the province.  
12 Requirements for decommissioning are included in a  
13 general use permit for the Dawn Lake Exploration  
14 Camp. This permit must be renewed annually.

15 CNSC staff recommends that the  
16 Commission:

17 Accept CNSC staff's assessment  
18 that pursuant to the Nuclear Safety and Control  
19 Act and the regulations made under the Act a  
20 licence is not required for the Dawn Lake project.

21 Accept CNSC staff's determination  
22 that the proposal does not require an  
23 environmental assessment under the Canadian  
24 Environmental Assessment Act.

25 And, revoke Mining Facility

1 Removal Licence AECB-MFRL-180-0.1.

2 Thank you.

3 THE CHAIRPERSON: Thank you.

4 The floor is now open for  
5 questions from the Commission Members.

6 Ms MacLachlan.

7 MEMBER MacLACHLAN: Mr. McCabe, I  
8 received your CMD 02-H3 last night and it is the  
9 slides that you presented. It consists of the  
10 slides you presented today. Is there a written  
11 submission? Much of the text that you provided to  
12 us was not contained in this presentation. Is  
13 there a written text as backup to your  
14 presentation? I didn't receive anything.

15 MR. HOWDEN: We haven't submitted  
16 a written one. We just have the text that he is  
17 working from here.

18 MEMBER MacLACHLAN: Okay. I will  
19 come back later. Thank you.

20 THE CHAIRPERSON: Mr. Graham.

21 MEMBER GRAHAM: A couple of  
22 questions with regard to the exploration.

23 When you are drilling up on this  
24 project, do you cap all the holes after you are  
25 done drilling? Are they all capped, or just the

1 ones where there was radioactive material found?

2 Could you explain that process?

3 MR. JARRELL: Yes. They are  
4 capped if they are artesian, for sure.

5 MEMBER GRAHAM: Yes, for sure.  
6 Yes.

7 MR. JARRELL: Regardless. We have  
8 requirements to cap all holes within a certain  
9 distance above and below the intersection if we  
10 intersect any radioactive mineralization  
11 whatsoever. That is in the SERM regulations.

12 MEMBER GRAHAM: That is what I was  
13 coming at. Do you cap those where you found --

14 MR. JARRELL: Right. So there is  
15 no --

16 MEMBER GRAHAM: Yes. So who  
17 inspects those? It is not CNSC staff, it is SERM  
18 that does that inspection?

19 What assurances are there and what  
20 safeguards are there to make sure that all those,  
21 where there may have been a positive find of  
22 mineral, were capped? How is the tracking?

23 MR. JARRELL: Sure. No, I  
24 understand.

25 There are two things. One, we



1           have to submit the reports from the diamond  
2           drilling. There is no way to visually examine  
3           that the work was done, but the work is reported  
4           and done and you do bag count on the cement.

5                           I had a second point.

6                           MEMBER GRAHAM: It is SERM that  
7           does that inspection?

8                           MR. JARRELL: It would be SERM,  
9           yes.

10                          MEMBER GRAHAM: The method of  
11           drilling, you have indicated when you do encounter  
12           positive ore body or positive ore bodies, those  
13           core samples are then taken off the site. They  
14           are not left in the core shacks there, they are  
15           taken directly to -- they are flown out, are they,  
16           or how are they transported off the site?

17                          MR. JARRELL: Generally they are  
18           driven off site in the back of a pick-up truck,  
19           packaged --

20                          MEMBER GRAHAM: There are roads in  
21           enough that you can get --

22                          MR. JARRELL: We have trails, yes.  
23           This is not a fast process of getting in and out,  
24           that is for sure.

25                          No, all of the core is removed to

1 a licensed site progressively over the course of  
2 the winter. Or if it is a very remote site, it  
3 could be flown out.

4 MEMBER GRAHAM: Then a question to  
5 CNSC staff.

6 When does your staff start  
7 examining radioactivity in the transportation or  
8 in the transportation methods, and so on? Do you  
9 have a way of monitoring that?

10 MR. HOWDEN: I will ask Rick  
11 McCabe to respond.

12 MR. McCABE: In the general  
13 regulations under the definition of naturally  
14 occurring nuclear substances, which is the same as  
15 the terminology used in the other guidelines as  
16 NORM, naturally occurring radioactive material,  
17 the transportation regulations apply to the  
18 movement of that material. It doesn't exclude  
19 that.

20 Although the CNSC jurisdiction  
21 isn't in there, transportation regulations do  
22 apply and I should have made that point very  
23 clear.

24 MEMBER GRAHAM: So the guidelines  
25 do apply at that time?

1 MR. McCABE: Yes, the regulations.  
2 Your transport regulations apply for the movement  
3 of material off of those sites, yes.

4 MEMBER GRAHAM: Okay.

5 One other question I have, if I  
6 may, Madam Chair, in the definition or in the  
7 wording it said -- I know it is not very big, it  
8 is only a \$60,000 financial guarantee, but the  
9 comment always strikes me when I see those in  
10 writing "are in good standing".

11 When are they not in good  
12 standing? If you have a guarantee it should  
13 always be in good standing. How do you monitor  
14 that, that some may not get in good standing? I  
15 don't understand that part as a safety check.

16 MR. McCABE: The question is with  
17 regard to the \$60,000 --

18 MEMBER GRAHAM: Yes.

19 MR. McCABE: Those letters of  
20 credit are self-renewing, so that are always in  
21 good standing unless we are notified that they are  
22 not going to be renewed by the institution 90 days  
23 prior to the expiry date. So we would know that  
24 they are not about to be renewed by the  
25 institution, so it wouldn't be in good standing.

1                   MEMBER GRAHAM: So your letters of  
2                   guarantee are not indefinite? I know this is only  
3                   a very small amount of money and it is not maybe  
4                   significant, but I am also thinking of letters of  
5                   guarantee we see on larger projects.

6                   It is not money deposited by the  
7                   company in an institution that can't be touched.  
8                   These are just letters from the institution.  
9                   There is quite a big difference between the two  
10                  types of guarantees.

11                  When does CNSC require that that  
12                  money be deposited separately, and when does it  
13                  require that it is just a letter of guarantee from  
14                  the bank and as long as everything is going well  
15                  with the company the bank will continue to honour  
16                  it?

17                  MR. McCABE: The letter of credit,  
18                  I guess, can be looked as insurance, sort of  
19                  backed by a financial institution, and they say  
20                  that they will pay that out should the regulatory  
21                  agencies, both the CNSC and Saskatchewan Resource  
22                  Management call that letter.

23                  So if there were any conditions  
24                  under which there was any need for that,  
25                  Saskatchewan and the CNSC could call that credit.

1           Then it would be converted to some sort of  
2 security for the province.

3                         In the interim I look at it as  
4 insurance, an insurance policy.

5                         MEMBER GRAHAM: I'm not getting  
6 the answer. Maybe I'm not explaining myself  
7 correctly.

8                         The thing that I am saying is that  
9 it is like an insurance policy. You have  
10 insurance on your automobile as long as you pay  
11 the premiums, but the day you don't pay your  
12 premium and you keep on driving you are not  
13 covered.

14                        What I'm saying is, this is a  
15 letter of guarantee from a bank -- I don't want to  
16 belabour the point on this one because it is only  
17 small and it is not maybe significant, but in  
18 larger ones where letter of guarantees can be  
19 stopped at any time or the banks can give them up,  
20 there is quite a difference between that and a  
21 deposit where the money is set aside.

22                        That is something that we should  
23 always watch, that if somebody sets aside  
24 \$5 million in a bank account or a bond, or  
25 something, that is quite a lot different than just

1 getting a letter of guarantee. That is the point  
2 I was trying to make.

3 MR. McCABE: Right. If I might  
4 explain that, the letter of credit has a defined  
5 termination date.

6 MEMBER GRAHAM: I realize that.

7 MR. McCABE: So 90 days back from  
8 then we would get notification up -- during that  
9 period the financial guarantee is in place.  
10 Ninety days prior to that we would get  
11 notification if that letter of credit was not to  
12 be renewed and we would have to then take action  
13 based upon that notification.

14 MEMBER GRAHAM: But then if you  
15 couldn't find anyone to give you a letter of  
16 guarantee --

17 MR. McCABE: Then you could call  
18 the letter of credit during that period of time.

19 MEMBER GRAHAM: Thank you.

20 THE CHAIRPERSON: Would the  
21 applicant wish to clarify? Is there anything in  
22 that discussion that concerns you or that is on  
23 record?

24 MEMBER GRAHAM: Sorry about that.

25 MR. WITTRUP: No, I think

1 Mr. McCabe has essentially captured it. This is a  
2 bank letter of credit from a large financial  
3 institution. Obviously from our perspective we  
4 don't want to tie capital up in such things as  
5 bonds, so I think it basically rests under the  
6 credit of things like the Royal Bank. That is all  
7 I would have to add.

8 THE CHAIRPERSON: Dr. Barnes.

9 MEMBER BARNES: Just two  
10 questions.

11 I think you mentioned it, but just  
12 for my clarification again.

13 Which is the Saskatchewan agency,  
14 then, that monitors the health of workers and  
15 geologists in the hot core shack?

16 MR. JARRELL: That would be  
17 Saskatchewan Labour.

18 MEMBER BARNES: You indicated that  
19 those provincial agencies were not very visible up  
20 in these camps. Do we have any particular problem  
21 with this?

22 MR. JARRELL: Access usually. The  
23 sites are quite isolated and generally --

24 MEMBER BARNES: I am referring to  
25 their ability to monitor this effectively and

1           ensure that those regulations and the protection  
2           of workers is --

3                         MR. JARRELL:  I'm not sure how to  
4           answer that.  They do monitor it, but their  
5           presence, their physical presence at the site is  
6           not very common.

7                         I know they have inspections  
8           scheduled for next month, so they will be showing  
9           up.

10                        MEMBER BARNES:  Does staff have  
11           any concerns on this sort of issue?  I guess it is  
12           outside of your jurisdiction technically.

13                        MR. McCABE:  I guess if we were to  
14           look at it from the point of view of the risk with  
15           regard to this, the intermittent nature of the  
16           operations, either sometimes in the summer,  
17           sometimes in the winter.

18                        The frequency of inspections by  
19           our own staff has been minimal also and it doesn't  
20           really create us a lot of concern in that regard  
21           because of -- the potential for being inspected is  
22           there, but it is very infrequent.

23                        MEMBER BARNES:  A second question  
24           to Cameco, if I could.

25                        You indicated that the transport



1 of the drill core, the hot drill core, was perhaps  
2 a long, slow process in a pick-up truck, and so  
3 on. Again, is there any potential health,  
4 depending on the duration there, of the drivers  
5 concerned?

6 MR. JARRELL: Based on the grade  
7 of the material, the fact that it would be  
8 packaged according to the regulations and sitting  
9 in the back of a truck well removed from the  
10 operator, I don't think so.

11 MEMBER BARNES: The packaging is  
12 not repackaging. These are going to stay in the  
13 drill boxes, right?

14 MR. JARRELL: It is going to stay  
15 in the drill boxes, but we wrap them, we screw  
16 lids on them and they are secured in the back of  
17 the truck so that there is no potential for  
18 release of material from the core boxes.

19 MEMBER BARNES: I'm thinking about  
20 the radiation hazard.

21 MR. JARRELL: I couldn't do the  
22 calculation, but it would be very minimal. They  
23 are badged as well and generally for the whole  
24 winter our geologists come up with minimal  
25 exposure. .03 I think was the highest geologist

1 for last year for instance -- millisieverts.

2 MEMBER BARNES: Okay. Thanks.

3 THE CHAIRPERSON: Dr. Giroux.

4 MEMBER GIROUX: Yes. Just  
5 following up on that one. .03 what?

6 MR. JARRELL: I'm sorry,  
7 millisieverts.

8 MEMBER GIROUX: Millisieverts.  
9 Thank you. That was one of my questions.

10 Could I raise just two questions,  
11 or three.

12 The 10 kilograms as a limit which  
13 used to exist, how does that translate in terms of  
14 mass or volume of material of rock? How large is  
15 that? It says "10 kilograms of uranium".

16 MR. JARRELL: I can't do the math  
17 in my head, but you are looking at a density,  
18 depending on the grade, from somewhere of around  
19 2.5 to 4 grams per cubic centimetre. So I'm not  
20 sure what the mass would be. It is not very big,  
21 in terms of it is spread out in a lot of core  
22 boxes and just -- it is a tough one to answer. It  
23 is grade dependent really.

24 MEMBER GIROUX: It depends on the  
25 grade, that is the point, yes.

1 MR. JARRELL: Yes.

2 MEMBER GIROUX: But you are  
3 talking about hundreds of kilograms of material?

4 MR. JARRELL: Oh, no. No. I have  
5 the numbers right here.

6 For all of the exploration work  
7 done basically from about 1985 to 1998 we had  
8 generally about 0.1 kilograms per year.

9 In 1999 for all of the sites at  
10 Dawn Lake we had a total of 16.13 kilograms.

11 The year 2000 we had  
12 19.93 kilograms, which was really only twice the  
13 de minimis limit.

14 For 2001, I worked all week trying  
15 to get the numbers, but all the geologists were  
16 out in the field and I couldn't get hold of them,  
17 but it has been indicated it will be substantially  
18 less than last year.

19 So that is the order of magnitude  
20 we are looking at.

21 MEMBER GIROUX: Those numbers are  
22 for the total material removed by drilling?

23 MR. JARRELL: That is right.

24 MEMBER GIROUX: Okay.

25 MR. JARRELL: We added up all of

1 the intersections in terms of the uranium content  
2 for everything that was drilled in that year on  
3 the whole Dawn Lake project. So that is actually  
4 drilling at a number of grid locations, La Rocque  
5 Lake -- for instance, the 19.93 included drilling  
6 at the Dawn Lake ore zone, at the La Rocque  
7 showing and at the Collins Creek showing.

8 MEMBER GIROUX: Thank you. That  
9 answers the question.

10 The other one I had is just a  
11 clarification, I think it should be fairly  
12 obvious.

13 But is it very clear that drilling  
14 is understood as being surface exploration?

15 MR. McCABE: Drilling can be part  
16 of surface exploration. Drilling is a continual  
17 operation that can happen after the mine is  
18 completely developed. They are always tending to  
19 try to define new ore bodies, better information  
20 on the thing. So it doesn't exclusively mean that  
21 exploration is happening.

22 What we are looking at here is a  
23 continuum from exploration to evaluation. What we  
24 are trying to do is define a point at which the  
25 licensing will start in evaluation.

1                   So some of the activities that  
2                   take place during exploration could also be taking  
3                   place during evaluation. So I don't like to focus  
4                   on just the activities that are taking place to  
5                   define that point.

6                   I think what we are talking about  
7                   here, the point at which licensing begins, is an  
8                   understanding of the intent of what is going to  
9                   happen, the confidence level that the company has  
10                  that they have a mineral resource that could be  
11                  further developed.

12                  We have begun to look at defining  
13                  that point and I think the only difference we have  
14                  with the companies and others we have discussed  
15                  this with is terminology. There has been some new  
16                  terminology introduced by the Ontario Securities  
17                  Commission, people have terminology that they talk  
18                  about with reserves, gaining confidence in  
19                  reserves, and all I think we have to do is define  
20                  that point at which we gain -- they have the  
21                  confidence to go ahead to call this a "uranium  
22                  mine" -- what has a potential for becoming a  
23                  uranium mine, and at that point we would then  
24                  begin licensing.

25                  So I don't want to just tie that

1 point to an activity.

2 MEMBER GIROUX: But in your  
3 analysis it is very clear that in this specific  
4 application here we are talking about exploration.  
5 That is very clear for you?

6 MR. McCABE: Very much so, yes.

7 MEMBER GIROUX: Thank you.

8 THE CHAIRPERSON: Ms MacLachlan.

9 MEMBER MacLACHLAN: My questions  
10 are for staff on the larger issue of one of the  
11 first objectives that Cameco set out for itself,  
12 and that is to determine when formal CNSC  
13 licensing is required.

14 I am struggling with this. This  
15 is the larger issue that in some way has nothing  
16 to do with this application, but it is very  
17 important.

18 Through this application, I  
19 understand what you are saying is that drilling  
20 from surface is at the early stages encompassed in  
21 the definition of exploration, and that is really  
22 regulated by SERM, and you are making the case  
23 here that no CNSC licence is required by  
24 regulation or the Act.

25 So if I can just follow that

1 through then. The core samples that are preserved  
2 and analyzed on site then, assuming they have  
3 naturally occurring radioactive material in those  
4 core samples, the safe handling of those core  
5 samples and storage of those core samples then is  
6 regulated or must be handled under the Health  
7 Canada guidelines. Is that correct?

8 MR. McCABE: Transportation?

9 MEMBER MacLACHLAN: No, no.

10 MR. McCABE: Storage is covered  
11 then by the province, yes.

12 MEMBER MacLACHLAN: No.

13 MR. McCABE: The storage of the  
14 core is covered by Saskatchewan Environment. The  
15 aspects of labour, exposure to workers is covered  
16 by Saskatchewan Labour.

17 MEMBER MacLACHLAN: Right.

18 MR. McCABE: Under the NORM  
19 guidelines.

20 MEMBER MacLACHLAN: But you also  
21 said that there are Canadian guidelines for the  
22 management of naturally occurring radioactive  
23 materials and in your oral presentation you said  
24 that those guidelines were from Health Canada.

25 MR. McCABE: Yes. My apologies.

1                   MEMBER MacLACHLAN: I am just  
2                   trying to get the life cycle because it seems to  
3                   me that the purpose of the Commission is to ensure  
4                   that these materials are safely managed and  
5                   stored, and then at some point if those cores, the  
6                   core samples or other materials that are stored on  
7                   site that might be regulated either by guidelines  
8                   from another department or by the province, if  
9                   they are transported off site then the CNSC  
10                  regulations would kick in with respect to  
11                  transportation. Okay.

12                 And the clean up of that site and  
13                 decommissioning of that site, as I understand it,  
14                 would be regulated by SERM.

15                 MR. McCABE: That is correct.

16                 MEMBER MacLACHLAN: As long as it  
17                 is at the exploration stage. Okay.

18                 Now, a number of mining companies  
19                 have advanced exploration programs where they  
20                 actually underground and they remove materials  
21                 from underground and that is still called an  
22                 advanced exploration stage. They may even have  
23                 open pit mining.

24                 THE CHAIRPERSON: I just would  
25                 like to caution that the discussion not get



1 outside the purview of this licence application,  
2 just with some care that we do not go beyond the  
3 application that is before us, please.

4 MEMBER MacLACHLAN: My question  
5 is: Would those kinds of activities fall within  
6 evaluation or exploration, according to the  
7 definition that you have used, and perhaps that's  
8 an academic distinction, but I don't know the  
9 forum in which I should ask those questions for  
10 the purpose of Commission members clarification.

11 THE CHAIRPERSON: Well, I would  
12 again caution that this is a licence hearing on an  
13 application by this licensee for this project, and  
14 if there is clarification required with regards to  
15 the definitions of exploration, et cetera, with  
16 regards to this application, that is suitable.  
17 Broader discussions could be held and could be  
18 done by a technical briefing, or whatever.

19 But I will wish to restrict this  
20 discussion to the specifics of this application.  
21 So Mr. McCabe, you can respond to Commissioner  
22 MacLachlan with the regards to the specificity of  
23 the definition of this application.

24 MR. McCABE: I did include in my  
25 presentation assurance to the Commission that any

1 underground activities would be CNSC licensing.  
2 The definition of an excavation site and a removal  
3 site are still in the Uranium Mine and Mills  
4 Regulations and any activity of an open pit nature  
5 would also trigger licensing by this Commission.  
6 Those definitions are within the body of the UMMR.

7 THE CHAIRPERSON: Is there further  
8 clarification on exactly what this applicant is  
9 requesting or is needed at this time, or you feel  
10 that that has been discussed in fulsome?

11 MR. HOWDEN: I think we are  
12 satisfied. The point we were trying to make is  
13 that we feel that on the continuum Mr. McCabe said  
14 that we were definitely at the surface exploration  
15 stage on that end, and we haven't approached  
16 whatever the trigger would be for evaluation which  
17 we are committed to do stakeholder consultations,  
18 that type of thing to define that.

19 May I make one other point of  
20 clarification?

21 THE CHAIRPERSON: Yes.

22 MR. HOWDEN: It has to do with the  
23 workers safety. We received correspondence from  
24 Saskatchewan Labour that basically outlined their  
25 legislative regime. They said that even though

1 the guidelines are produced by Health Canada, they  
2 indicated that as part of implementing their  
3 regime they use those Health Canada guidelines  
4 which were produced under a  
5 federal-provincial-territorial working group.

6 THE CHAIRPERSON: Does the  
7 applicant wish to clarify, please?

8 MR. WITTRUP: Yes. Just to  
9 measure that. To go underground, or to do an open  
10 pit or an add it, or something like that, would  
11 require some form of measured reserve, and at the  
12 exploration stage we don't have that. Clearly  
13 under the definitions we have been using today we  
14 would require a licence to go to that work on a  
15 measured reserve.

16 As an example, we have the Dawn  
17 Lake zones on the Dawn Lake Project and it is a  
18 measured reserve and I would expect we would have  
19 to have a licence to go and drill it because your  
20 chances of intercepting mineralization would be  
21 basically 100 per cent.

22 So we have an example right on the  
23 property where that next level would be achieved  
24 if we went back to reevaluate the deposit or some  
25 other activity on it.

1 Thank you.

2 THE CHAIRPERSON: I just have a  
3 question for clarification with regards to the  
4 responsibility for a notification of changes of  
5 actions and moving to the next stage. Perhaps  
6 first to CNSC staff and then to the applicant.

7 When the applicant, when the  
8 company makes a decision to go the next stage,  
9 understanding that there is further work to be  
10 done and definitions of that, who is  
11 responsibility is it to notify the CNSC of changes  
12 of status?

13 MR. McCABE: It is my contention  
14 that is the applicant's responsibility to make  
15 that notification, and I think that if we  
16 developed those guidelines we had a common  
17 understanding that would certainly go much towards  
18 helping them decide when that trigger point has  
19 been reached.

20 THE CHAIRPERSON: And when is the  
21 time period for the development?

22 MR. McCABE: I would suggest that  
23 within the next four to six months we would have  
24 that complete.

25 THE CHAIRPERSON: And would the

1 Commission be aware of those guidelines?

2 MR. McCABE: It certainly could  
3 be. I would be glad to present them at a meeting  
4 of the Commission for discussion so that we could  
5 all gain a common understanding of that point.

6 THE CHAIRPERSON: Does the  
7 applicant have a comment on that?

8 MR. WITTRUP: Yes. We have been  
9 involved with this communication with CNSC  
10 regarding that particular level, and we have  
11 submitted letters indicating how that definition  
12 might come.

13 I would also just like to  
14 reiterate that as a publicly traded company we do  
15 have a fairly transparent method of sort of a  
16 secondary notification if we are at all tardy, and  
17 the fact that we have to release material  
18 information and the fact that we are moving to a  
19 higher level of activity would definitely be  
20 material.

21 THE CHAIRPERSON: I appreciate  
22 that, but that is sort of in the economic realm  
23 which is not necessarily the concerns of the  
24 Commission. So I do appreciate that, but --

25 MR. WITTRUP: Well, they are

1 linked.

2 THE CHAIRPERSON: Yes. Thank you.

3 With that, I would call the end of  
4 the questioning with regards to the first part.

5

6 **02-H3.2**

7 **Written submission from Saskatchewan Environmental**  
8 **Society**

9 We will now move to CMD 02-H3.2  
10 which is a written submission from Saskatchewan  
11 Environmental Society.

12 Are there any questions from the  
13 Commission Members, any comments or questions from  
14 the Commission Members with regards to this  
15 submission?

16 Ms MacLachlan.

17 MEMBER MacLACHLAN: Thank you.

18 One of the concerns in this  
19 submission is that there might be a "downloading"  
20 of responsibility of CNSC to SERM and SERM is not  
21 here to answer that issue for itself, but in  
22 taking a look at the materials in support of this  
23 application, it would seem that SERM is not  
24 expected to take on any additional  
25 responsibilities and, therefore, would not incur

1 any additional expenses.

2 Could I have comment on that from  
3 both the applicant and from CNSC staff, please?

4 MR. JARRELL: It's John Jarrell.  
5 I would say that given the limited scope and risk  
6 of the activity, I think the requirement on SERM  
7 is fairly modest relative to their  
8 responsibilities with the uranium, the mining  
9 sector anyway. So I think it's a fairly modest  
10 amount of work. That's what I would say.

11 MR. HOWDEN: I will ask Rick  
12 McCabe to comment, please.

13 MR. McCABE: We have a letter from  
14 SERM also indicating that they have that  
15 responsibility now and it's done. In the  
16 guidelines it indicates that the conservation  
17 officers that do some of the work with regard to  
18 that and we have a letter from Sask. Labour  
19 indicating that they are responsible for the  
20 workers.

21 Again, I can't comment as to the  
22 resources that they have available for that, but  
23 they certainly do have that responsibility and  
24 they acknowledge that in writing.

25 MEMBER MacLACHLAN: Thank you.

1                   Just as a follow up to that. Have  
2                   they acknowledged -- have those letters of  
3                   acknowledgement been in just general  
4                   correspondence or are they related to these  
5                   applications?

6                   MR. McCABE: Related to these  
7                   applications. We have asked these questions  
8                   specifically with regard to these applications.

9                   MEMBER MacLACHLAN: Why are they  
10                  not part of the public --

11                  THE CHAIRPERSON: I would submit  
12                  that those are the responsibility of the staff  
13                  that are monitoring the project. Is that correct?

14                  MR. McCABE: Yes. We wanted to be  
15                  able to provide that assurance to the Commission  
16                  that there was a regulatory regime in place, and  
17                  to be able to do that confidently we asked for  
18                  letters from both Saskatchewan Environment and  
19                  Resource Management and Saskatchewan Labour, as  
20                  to their activities with regard to exploration.

21                  We tried to present that  
22                  information also within our presentation so that  
23                  the Commission would be assured of that.

24                  MEMBER MacLACHLAN: Thank you.

25                  THE CHAIRPERSON: Thank you very



1 much.

2 I will turn it over to the  
3 Secretary now.

4 MR. LEBLANC: This completes the  
5 record for the public hearing in the matter of  
6 application by Cameco Corporation for the  
7 revocation of its Mining Facility Removal Licence  
8 for the Dawn Lake Projet.

9 The Commission will deliberate and  
10 will publish its decision in due course. It will  
11 be posted on the CNSC website as well as  
12 distributed to participants.

13 Merci. Thank you.

14 THE CHAIRPERSON: Thank you very  
15 much.

16 I would like to just take a  
17 five-minute break for change over and we will move  
18 over to the next hearing.

19 Thank you.

20 --- Upon recessing at 11:06 a.m.