

**Canadian Nuclear
Safety Commission**

**Commission canadienne de
sûreté nucléaire**

Public hearing

Audience publique

Cameco Corporation:

Application by Cameco
Corporation for the renewal of
Class IB Nuclear Fuel Facility
Operating Licence for Cameco Fuel
Manufacturing Inc. in Port Hope, Ontario

Cameco Corporation :

Demande de Cameco Corporation
Pour le renouvellement du permis
D'exploitation de son installation de
combustible nucléaire de catégorie IB
pour l'installation Cameco Fuel
Manufacturing Inc., située à Port
Hope en Ontario

January 19th, 2012

Le 19 janvier 2012

Town Park Recreation Centre
62 McCaul Street,
Port Hope, Ontario

Centre récréatif Town Park
62, rue McCaul
Port Hope (Ontario)

Commission Members present

Commissaires présents

Dr. Michael Binder
Dr. Moyra McDill
Mr. Dan Tolgyesi
Dr. Ronald Barriault
Mr. André Harvey

M. Michael Binder
Mme Moyra McDill
M. Dan Tolgyesi
M. Ronald Barriault
M. André Harvey

Secretary:

Secrétaire:

Mr. Marc Leblanc

M. Marc Leblanc

General Counsel :

Conseillère générale:

Ms. Lisa Thiele

Mme Lisa Thiele

Port Hope, Ontario

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--- Upon commencing at 8:32 a.m./

L'audience débute à 8h32

Opening Remarks

MR. LEBLANC: Bonjour, Mesdames et Messieurs. Good morning. Welcome to the continuance of the public hearings of the Canadian Nuclear Safety Commission.

We're about to resume the public hearing on the application by Cameco for the renewal of the operating licence for the Cameco Fuel Manufacturing facility here in Port Hope.

During today's business, we have simultaneous translation.

Des appareils de traduction sont disponibles à la réception. La version française est au poste 2 and the English version is on channel 1.

We'd ask you to keep the pace of your speech relatively slow so that the translators have a chance to keep up.

Transcripts of the proceedings will be available late next week or early the week after.

1 I'll also like to note that this proceeding
2 is being video webcast live and that the proceeding is
3 also archived on our website for a three-month period
4 after the closure of the hearing.

5 To make those transcripts as meaningful as
6 possible we would ask everyone to identify themselves
7 before speaking.

8 I would also ask you to please silence your
9 cell phones and other electronic devices.

10 Monsieur Binder, va présider l'audience
11 publique d'aujourd'hui.

12 But before he starts, I'd just like to
13 mention that regarding today's schedule we will be hearing
14 the three remaining oral presentations from intervenors,
15 not exactly as per the Agenda, as there was a little
16 switch in the order.

17 And the Members will have the opportunity
18 to ask questions on the written submissions normally. But
19 we did all the written submissions yesterday evening, so
20 we don't have to go. So we'll close this hearing with a
21 round of questions by the Members and we are planning to
22 start the Blind River Refinery Hearing at 11 this morning.

23 And we will break for lunch obviously
24 during the day and we'll close whenever we're done.

25 Thank you.

1 Mr. President?

2 **THE CHAIRMAN:** Thank you, Marc, and good
3 morning to everybody.

4 Mon nom est Michael Binder, je suis le
5 président de la Commission canadienne de sûreté nucléaire.

6 And for those who were not listening for
7 the last two days, let me introduce our Members, on my
8 right, Dr. Moyra McDill and Mr. Dan Tolgyesi; on my left,
9 Dr. Ronald Barriault and Mr. André Harvey.

10 We just heard from Marc Leblanc, the
11 Secretary of the Commission and we also have with us Ms.
12 Lisa Thiele, General Counsel to the Commission.

13 So I'd like to start with a submission by
14 the Property Owners for Equitable and Fair Compensation,
15 as outlined in CMD 11-H17.40, and Mr. Morand you'll make
16 the presentation. Please proceed.

17

18 **11-H17.40**

19 **Oral presentation by**
20 **the Property Owners for**
21 **Equitable and Fair**
22 **Compensation**

23

24 **MR. MORAND:** Yes, 9 minutes and 59 seconds.

25 **THE CHAIRMAN:** We're timing you.

1 **MR. MORAND:** We seem to be having a
2 technical difficulty.

3 It is a new group's intention to monitor
4 property values in Port Hope and report to council, their
5 membership, the community and federal government regularly
6 on any concerns and recommendations, using electronic
7 media, web pages, Facebook as well as town hall meetings.

8 It is their intention to educate the public
9 through social media, local and national media about the
10 great community that we live in, to tell the world why it
11 is a great place to live, work, and do business, and
12 finally to assist a local economic development effort.

13 We want to be part of bringing the
14 community together and protecting community property
15 values.

16 We support the relicensing of the Cameco
17 nuclear fuel facility.

18 Since the acquisition of the facility by
19 Cameco, sufficient funds and management have and are being
20 provided to bring the facility up to an acceptable, safe
21 level. That does not preclude management and the union
22 working together to make it the safest facility of its
23 kind anywhere to assuage the concerns of local residents
24 who care about their community and its perception as a
25 risky place to live.

1 In a previous hearing, it was revealed that
2 enriched uranium would be allowed at the facility. Is
3 there enriched uranium onsite? If so, how many kilograms?
4 Is that enough to create a criticality?

5 Are our emergency services equipped and
6 trained to deal with a nuclear accident? If not, what is
7 the response time?

8 Our two groups, as I mentioned, are in the
9 formation stage. Our purpose is to make and take a
10 positive approach and to the extent possible make certain
11 that our business community expands and grows.

12 We want to create a series of positive
13 messages that offset any negative repercussions from the
14 operation of the facility or resulting from the radiation
15 of our community.

16 Our first question is; has management met
17 all of the conditions set out in the previous licence; if
18 not, why not? When can we expect them to be met?

19 We know that no home insurance is available
20 to protect our property and goods from a nuclear accident.

21 What is the current level of insurance
22 protection from the company and what is the process for
23 the government's topping it up if there is not enough
24 coverage by the company's insurers should an accident
25 occur that causes damage beyond the fence? This is one of

1 the concerns that we have.

2 What decommissioning plan is in place and
3 does it clean up the site to bank financing levels? Will
4 the CNSC make these plans public to reduce stress
5 resulting from our lack of knowledge and the resulted
6 concern that the plans are not sufficient to create viable
7 developable sites for housing or offices in the future.

8 We are facing a very knowledgeable buyer's
9 and real estate broker's market who are aware of the
10 contamination issues in Port Hope and ready to take
11 advantage of the opportunity to buy low and sell high.

12 As we move towards 150,000 truckloads of
13 toxic waste plus the hundreds of trucks to our nuclear
14 facilities all bearing a nuclear warning marker, the
15 majority of potential buyers will become more risk
16 adverse. But others thinking longer term are already
17 moving into town to snap up bargains, bidding low knowing
18 that some people must sell.

19 Our concerns are increasing, speculators
20 buy the house now knowing in 10 years a clean town,
21 inflation and the announcement of the completion of the
22 cleanup stands to net them a great profit, to the
23 disadvantage of seniors who had to sell in a falling
24 market to cover their assisted living costs.

25 With all the construction rental housing

1 will be at a premium. Some knowledgeable developers and
2 speculators are already in the market.

3 Seniors are often left out of the equation.
4 We don't belong to that group of seniors here and intend
5 to make certain our community remains healthy for our
6 grandchildren.

7 I am personally aware of several local
8 developers and at least one real estate broker that has it
9 figured out. They buy properties at a bargain themselves
10 or suggest to their clients that they buy in Port Hope at
11 a reduced rate and then rent their property for the 10
12 years of the cleanup.

13 At the end of 10 years the property might
14 well be paid off if the rental market is high. The rented
15 units, you must remember, are just coming on the market
16 and not subject to rent review so they can seek a premium
17 price. The purchaser can move into town themselves or
18 rent it, and upgrade and renovate the house when the
19 clean-up is complete, and then sell the property into what
20 might well be a hot market 10 years from now in Canada's
21 cleanest community.

22 In the interim the seniors who had to sell
23 their home to pay for assisted living or to move closer to
24 grandchildren in another community are at the short end of
25 the stick; a bargain for the developers, a tragedy for us.

1 Having some experience at these hearings, I
2 note that there are some things that you can do to make us
3 feel that you truly represent everyone present. You can
4 make certain that staff and company answers to your
5 questions are full and factual, and pursue the issue if
6 you are not satisfied. That also applies to us
7 intervenors. We are not trying to teach granny to suck
8 eggs, just making an observation that you sometimes let
9 people off free when their answer is bafflegab. Dig in,
10 and don't let them off the hook. Demand straightforward
11 answers that make sense.

12 Please make certain that groundwater and
13 airborne emissions are cleaned up and eliminated by the
14 next licence review. We have the technology.

15 Make certain the decommissioning letters of
16 credit are indexed to the construction index annually so
17 there is no catch-up every five years. That's what the
18 CNSC can do for us.

19 You can also do some other things. If you
20 do not have a policy on how the letters of credit are
21 administered, get one quickly to make certain that a
22 default does not result in the taxpayers of Canada having
23 to pick up the cost. This has happened to municipalities
24 who did not have a good letter of credit automated bring-
25 forward system. Can we assume that there are clear

1 Treasury Board policies in place that are being adhered
2 to? What is your policy if a letter of credit must be
3 called? Is that a staff decision, a Commission decision,
4 the President's decision, or is it the PMO's office that
5 calls the shots? Does anyone know?

6 Finally, we are concerned about the current
7 falling property values. We are told a number of things
8 about the market for housing, you've heard them already in
9 detail, we will make this short. We know the following,
10 big houses were always more expensive in Port Hope, that
11 is no longer true. Smaller houses were always a better
12 bargain in Port Hope because the houses had less
13 amenities, no garage, one bath for instance.

14 Property values in Port Hope have been
15 falling over the past couple of years in comparison to
16 Coburg. That has accelerated in the past year. There is
17 now an across-the-board difference of approximately
18 \$50,000 with Port Hope on the lower side. At the time the
19 remediation agreement was signed in 2001 we know from the
20 studies done for LLRW that the average of all housing
21 prices in the two communities was only a few thousand
22 dollars different. We note and have concerns that many
23 commercial spaces are vacant. No one appears willing to
24 rent them at a reasonable price.

25 In summary, think of our property as if you

1 were a risk-averse buyer. Make certain that your
2 conditions on relicensing reduce rather than create risk
3 in our community. Encourage the company to take a lead in
4 rebranding our community as the uranium industry has taken
5 the lead in rebranding itself. Index the decommissioning
6 letters of credit and make certain your early warning
7 system is in place and can move quickly if there is a
8 problem. Please make certain that all licensing
9 conditions are met in a timely manner.

10 I'd like to thank the Commissioners and
11 staff very much for this opportunity to present our side
12 of the story.

13 Thank you.

14 **THE CHAIRMAN:** Thank you. Okay,
15 Let's start with the questions, monsieur
16 Harvey?

17 **MEMBER HARVEY:** First question, could you
18 elaborate on that -- you were talking of two groups, and
19 in your written submission you were speaking about a new
20 organization in Port Hope. So can you elaborate on how
21 many members and ---

22 **MR. MORAND:** They're nascent groups.
23 There's about 20 people involved in the formation groups.
24 We expect over the next three to six months that they'll
25 become substantially larger. There will be a group of

1 subcommittees that will take specific issues and deal with
2 them and deal with the council and others, just to keep on
3 top of the issues as they come.

4 **MEMBER HARVEY:** In your presentation you
5 mentioned that there is no insurance for nuclear
6 accidents. I just want to maybe to ask staff and Cameco,
7 is there any danger for -- because we touched that point
8 yesterday with the criticality. So is there any
9 possibility of a nuclear accident here caused by the
10 facility?

11 **MR. ELDER:** Peter Elder, for the record.

12 The facility is authorized to have enriched
13 uranium. Once you have enriched uranium you obviously
14 have the possibility, even if it's very small, of a
15 criticality accident. That means that Cameco's required
16 to have insurance coverage under the *Nuclear Liability*
17 *Act*.

18 The coverage under the Act is divided into
19 two parts. There is a basic amount that the licensee must
20 carry, there is then what's called a reinsurance amount,
21 which essentially is covered by the government in
22 association with an industry group, an insurance group.
23 That's up to 75 million under the current legislation, and
24 under the Act the federal government is liable for any
25 amounts above 75 million.

1 **MEMBER HARVEY:** This being said, is there
2 more probability to have a nuclear accident here than,
3 well, in Ottawa or -- because there is that facility
4 operating here?

5 **MR. ELDER:** To have nuclear accidents, in
6 terms of the *Nuclear Liability Act*, you need criticality.
7 So if you don't have anything to go critical, obviously
8 there is no possibility of this one. Cameco Fuel
9 Manufacturing can -- is allowed to have enriched uranium
10 under very strict controls, so otherwise controls to limit
11 or prevent a criticality risk, but theoretically there is
12 a possibility. So it would be a risk that doesn't exist
13 if they did not have the criticality, which is the reason
14 why they are required to have their insurance under the
15 *NLA*.

16 **MEMBER HARVEY:** Okay. So when Mr. Morand
17 said that there is no insurance, but the global insurance
18 would cover damages to any property?

19 **MR. ELDER:** The normal insurance industry
20 clauses include -- do not include -- there's an exemption
21 for nuclear-related because the *Nuclear Liability Act*
22 exists. So those ones, if there's something that is -- so
23 yes, normal property insurance would have this exclusion,
24 anyway where there is a risk is required to have insurance
25 under the *Nuclear Liability Act*.

1 **MEMBER HARVEY:** Cameco, can you comment?

2 **MR. KODARIN:** Alex Kodarin, for the record.

3 CFM is committed to a safe operation and
4 from a criticality perspective we currently do not have
5 enough material onsite to pose a threat from a criticality
6 event. I did mention in Day 1 hearings we had around .2,
7 .25 standard critical masses onsite at this point in time.

8 As well our criticality program is
9 compliant and also accepted by the CNSC, and should we
10 have a need to carry more enriched material on site,
11 before we go over the level of .8 standard critical masses
12 we need to come back to the CNSC and make modifications to
13 our program to their satisfaction before we proceed with
14 any program.

15 **MEMBER HARVEY:** Mr. Morand, do you have a
16 comment?

17 **MR. MORAND:** In the past, one of the
18 concerns that a number of us had after a tour of the
19 facility was that there were only warning gates on certain
20 areas, in terms of carrying radioactive material from one
21 area to another. And we were concerned that if an
22 employee went really awry and if there was enough material
23 onsite, that the material could be carried to a washroom
24 for instance, where there'd be a water moderator.

25 And I guess my question is, and I'm pretty

1 well assured the answer's yes, but have the warning
2 systems been put in place so nuclear materials can't be
3 carried from one area to another without setting off an
4 alarm?

5 **MR. KODARIN:** Alex Kodarin, for the record.

6 We have a very comprehensive radiation
7 protection program in place at CFM.

8 We're proud of the work that we've done
9 over the years to make that more robust and we're
10 confident that we can operate the facility safely on a
11 daily basis for any circumstances that are mentioned here.

12 **THE CHAIRMAN:** Question? Dr. Barriault?

13 **MEMBER BARRIAULT:** I guess I'm a bit
14 confused. What I'm hearing is that -- from Cameco is that
15 they do not have enough enriched uranium to reach
16 criticality.

17 Yet, I'm hearing from CNSC that they do.
18 Is that correct? Am I misunderstanding something?

19 **MR. ELDER:** They are permitted by their
20 licence to have it, okay?

21 **MEMBER BARRIAULT:** Okay.

22 **MR. ELDER:** So once you said you can have
23 it, you must have the insurance. Insurance doesn't -- you
24 know, you don't change insurance every day because your
25 inventory changes. It's based on the ability actually

1 that you have the possibility of having it.

2 What we have is a very -- they must have a
3 criticality control program and that -- that program,
4 which is based on a regulatory document that's publicly
5 available, has very strict rules depending on how much the
6 amount of material you have. So they may not have it
7 today.

8 But, you know, there was an environmental
9 assessment on their ability to have enriched uranium.
10 They have in the past made fuel for research reactors in
11 small quantities. So because they have -- are authorized
12 to have it, they must have insurance whether they have or
13 not.

14 **MEMBER BARRIAULT:** I understand the
15 insurance side of it. What I don't understand really is
16 that do they have enough material to go to criticality?

17 **MR. ELDER:** Today they have -- our
18 inventory numbers are the same and so your -- theirs is
19 somewhere around a quarter of what's called the critical
20 mass.

21 **MEMBER BARRIAULT:** Yes.

22 **MR. ELDER:** So you need to -- usually, you
23 know, as I said, we need one, but we conservatively said
24 more than .8 there's a real risk.

25 **MEMBER BARRIAULT:** Okay. Is it possible in

1 the licence to put the maximum that they can have on site?

2 **MR. ELDER:** It is possible to put anything
3 in the licence. The way we've done it before in the past
4 is saying if they've got a criticality program which we
5 have reviewed that covers everything, and appropriate
6 controls in that program, then we have not put in an
7 actual physical limit on the amount of rich uranium.

8 **MEMBER BARRIAULT:** Okay.

9 **MR. ELDER:** They have -- and again, as I
10 said, you have to ask Cameco about their business
11 prospects but they have requested to have the ability to
12 handle enriched uranium.

13 They have been assessed against their
14 ability to handle it. They have a proper criticality
15 program to be able to handle it.

16 **THE CHAIRMAN:** Okay. Let me try to
17 simplify all of this, okay.

18 Right now they have insurance to be able to
19 do criticality work. They don't have enough material to
20 actually undergo criticality. If they ever acquire
21 material to go above .8, which is the critical target,
22 they'll have to come to CNSC for approval.

23 **MR. ELDER:** That's ---

24 **THE CHAIRMAN:** Is that ---

25 **MR. ELDER:** CNSC staff, that's correct.

1 **THE CHAIRMAN:** Right. Is that -- once they
2 get this approval, does that become known?

3 **MR. ELDER:** This is -- this would be
4 considered a change in terms of the Licence Condition
5 Handbook. So that would be a change that we would let the
6 Commission know about, yes.

7 **THE CHAIRMAN:** Is it publicly known?

8 **MR. ELDER:** We would let the Commission
9 know about in public.

10 **THE CHAIRMAN:** Okay. So I think that's --
11 that's the picture as I see it.

12 Is that clear enough?

13 **MR. MORAND:** Yes, Mr. President. I recall
14 the reason I asked the question is that about seven or
15 eight years ago, you amended the rules when Barclay Howden
16 requested that staff rather than the Commission deal
17 directly with that.

18 So as long as the report comes back out to
19 the public, more than satisfied. Thank you.

20 **THE CHAIRMAN:** Okay. Dr. Barriault?

21 **MEMBER BARRIAULT:** Thank you. That's fine,
22 thanks.

23 **THE CHAIRMAN:** Questions? Anybody else?

24 Dr. McDill?

25 **MEMBER McDILL:** Two questions, please. The

1 first one is with respect to the letters of credit and I
2 think -- I think we did some of this yesterday, but
3 perhaps it's worth doing it again.

4 How was the limit set on the irrevocable
5 letter of credit? Can you hear? Sorry? Ah, try again.
6 Closer today? Today is closer.

7 We did it yesterday, but I think it's worth
8 repeating today. How is the value of the letter of credit
9 established? What are the conditions around the letter of
10 credit in terms of banking?

11 Right at the moment, we re-evaluate the
12 amount every licensing renewal. Should that be done more
13 frequently?

14 For example, the Intervenor suggested
15 tagging it to the construction industry on an annual
16 basis.

17 **MR. ELDER:** Peter Elder, for the record.

18 I'll explain what we -- repeat what we said
19 yesterday in terms of the value is based on the
20 preliminary decommissioning plan which must be updated
21 every five years.

22 And in that point, you take into account
23 the indexing and as well what we pointed out is that
24 because it's a preliminary one, there's a big contingency
25 on it around the 30 percent.

1 In the past, we felt that because there's a
2 big contingency on this one, there is not need to index
3 them on an annual basis.

4 And we've looked at this one in terms of
5 Zircatec of how much it's gone up over that five years is
6 -- is not a significant amount. It's a few -- you know,
7 it's in the 5 percent range.

8 As I said, these are irrevocable lines of
9 credit payable to the CNSC. And when saying CNSC, that
10 means the Commission, just to be clear on that one. So to
11 access these ones, it is a Commission level approval.

12 **MEMBER McDILL:** Does Cameco have anything
13 to add to that?

14 **MR. KODARIN:** Alex Kodarin, for the record.
15 We're confident that the PDP that we've put together is
16 accurate and reflects the cost of a preliminary
17 decommissioning plan and it's been accepted by the CNSC
18 and it meets all the guidelines of the CNSC.

19 **MEMBER McDILL:** Mr. Morand?

20 **MR. MORAND:** One question I would ask is
21 who actually would call the letter of credit if staff felt
22 that there was an issue?

23 **MEMBER McDILL:** My understanding is it's
24 the Commission, but I'll send it back to Mr. Elder.

25 **MR. ELDER:** That is correct. So if staff

1 made the request, then we would go to the Commission and
2 the Commission, they are payable to the CNSC. So I think
3 -- you can check with the lawyers, but I think that means
4 that -- "we" usually means that that means the Commission.

5 So we would have to go to the Commission
6 and ask the Commission to call the -- the financial
7 guarantee. But ---

8 **THE CHAIRMAN:** Okay. But to be -- to be
9 very practical, so something -- some event happens, Cameco
10 goes bankrupt or, I don't know, some major event happens,
11 the staff will present a scenario of what happened and how
12 to remediate. They will look at the plan.

13 And by the way, I'm not sure about the
14 value of annual indexation because once you look at the
15 plan, if it's short, they are -- you know, they are -- the
16 company and everything else we would be, if you like,
17 first creditors on that.

18 **MR. ELDER:** Yeah.

19 **THE CHAIRMAN:** And then -- then the CNSC
20 will invoke its powers here and go to the bank. And the
21 banks assured us it's a irrevocable letter of credit that
22 it's money in the bank. So that's the way we see this --
23 this working.

24 **MR. MORAND:** Don't ask two lawyers. Just
25 ask one.

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(LAUGHTER/RIRES)

THE CHAIRMAN: We got our own lawyer.

Dr. McDill?

MEMBER McDILL: Yes, thank you.

My second question is to Port Hope Area Initiative, if it's still here? Ah, there we are. Thank you.

While they come up, this is relating to the intervenor's question on page 23 concerning the third party retained by AECL to do the independent study. Perhaps I could have some feedback on that. I'll wait until you're sitting down.

On page 23 of the written submission, the intervenor makes reference to the third-party expert or third party who were retained to do a property value assessment.

I wonder if you could address the concerns of the intervenor with respect to the independence of the third party.

MS. HEROD: It's Judy Herod for the record, Stakeholder Relations Officer with the Port Hope Area Initiative Management office.

If you would let me read this paragraph please I'd appreciate it. Yes, thank you. I can respond re the independence of the consultant who conducted the

1 independent indepth market analysis.

2 The Port Hope Area Initiative Management
3 Office in late spring/early summer of 2011 prepared a
4 scope of work for this analysis. We then identified
5 approximately 10 consultants in this region who had access
6 to the local data necessary for the analysis of this
7 report.

8 The purpose of the report was to study over
9 a 10-year period, 2001 to 2010, the market in both Port
10 Hope and neighbouring Cobourg which the Property Value
11 Protection Program of the Port Hope area initiative
12 considers a baseline community to assess property values
13 as compared to Port Hope's. This is because they are
14 similarly sized communities. They are within 10
15 kilometres of one another and it represents an ideal
16 baseline. This is what the study did.

17 We then -- we prepared the scope of work.
18 We invited approximately 10 independent consultants to
19 respond to that RFP. In the end two independent
20 consultants felt that they could bid on that. And out of
21 those we chose one, the successful consultant.

22 The successful consultant has indeed done
23 some work for the Property Value Protection Program as
24 that program has a requirement to contract on an as-
25 required basis, independent appraisals for the day-to-day

1 work of the Property Value Protection Program.

2 However, the two contracts were completely
3 -- are and were completely distinctive, had very little
4 bearing on one another. And there is, in our view,
5 absolutely no conflict and the independence is assured.

6 **MEMBER MCDILL:** Without asking for too much
7 personal information, these consultants are -- I guess the
8 last two in particular, have specialized training in real
9 estate, in economics, in marketing -- in what?

10 **MS. HEROD:** Sorry, to work for the Property
11 Value Protection Program, to conduct appraisals for us,
12 you have to be a certified accreditor -- accredited
13 appraiser, and they are in each cases.

14 Within a firm there's various
15 accreditations the members have but in the end the
16 principal has to have the appropriate accreditation.

17 **MEMBER MCDILL:** I'll go back to Mr. Morand.
18 It was your question.

19 **MR. MORAND:** Most of the studies, the peer-
20 reviewed studies have been done in United States on this.
21 And the norm -- there are three or four approaches, a
22 hedistic (sic) approach but the one that really works is a
23 double regression analysis.

24 And as former Chair of the International
25 Economic Development Council and having taught at the

1 university level in terms of analyzing communities and
2 balancing them, I'm really looking forward to seeing this
3 study.

4 And particularly since the consultant that
5 won the RFP has been the consultant that won the original
6 RFP back in 2001. So I don't see a degree of
7 independence, but that'll be discussed in another forum
8 and another way.

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

10 **THE CHAIRMAN:** Thank you.

11 Questions? Mr. Tolgyesi?

12 **MEMBER TOLGYESI:** Yes. What is the
13 involvement and responsibility of Port Hope Initiative in
14 property valuation?

15 **MR. MORAND:** Which one of us would you like
16 us to answer -- okay.

17 **MEMBER TOLGYESI:** I'm sorry.

18 **MS. HEROD:** Judy Herod, for the record.

19 The Port Hope Area Initiative includes as
20 part of the legal agreement that was finalized on March
21 31st, 2001 between the Government of Canada, the
22 Municipality of Port Hope and the Municipality of
23 Clarington, a Property Value Protection Program.

24 It is a socioeconomic effects management
25 program to protect property owners from real estate based

1 losses that could arise during the project, the Port Hope
2 Project and the Port Granby Project.

3 **MEMBER TOLGYESI:** That means that Port Hope
4 initiative has some -- offers some financial support or
5 compensation?

6 **MS. HEROD:** Judy Herod, for the record.

7 Yes, the Property Value Protection Program
8 as per the legal agreement has been in effect since
9 October 1st, 2001. It was actually even retroactive to
10 December 2000.

11 However, since October 1st, 2000 -- October
12 31st -- 1st, , sorry, 2001 to present and these have been
13 pre-construction years for the Port Hope Area Initiative
14 we have received and verified claims to the program. In
15 total we have received and approved and paid out on 50
16 claims for a total of approximately \$2 million. And
17 approximately 75 percent of the claims we have received
18 have been approved. So you can see that even in a pre-
19 construction period there has been acknowledgement that
20 the plans and activities on disclosure to buyers could
21 cause a devaluation for the seller of some property values
22 in Port Hope and in Port Granby area.

23 **MEMBER TOLGYESI:** Did you notice any kind
24 of speculation in this field because the Intervenor was
25 talking about some speculators and developers who are

1 trying to benefit from -- eventually from this cleanup?

2 **MS. HEROD:** Judy Herod, for the record.

3 I would agree that that potential exists.

4 We have staff that very carefully evaluate all claims,
5 continue to monitor the market on an ongoing basis.

6 We have procedures in place to make sure
7 that we not only live up to our legal agreement
8 commitments through the Property Value Protection Program
9 and protect property owners from project-related real
10 estate loss, but that we also response -- we are
11 responsible stewards of federal taxpayers' money; PVP is a
12 grant program through Natural Resources Canada. And so we
13 believe that our scrutiny and our diligence and our
14 processes will continue to make sure that we administer
15 the program appropriately.

16 **THE CHAIRMAN:** I would like to remind
17 everybody we are here for the Cameco fuel manufacturing.
18 And we're way off scope now in terms of our discussion
19 here. And many of those issues will be, as you said be,
20 discussed elsewhere on a different regime with different
21 players.

22 Mr. Tolgyesi?

23 **MEMBER TOLGYESI:** I have just last one.
24 This situation occurs in the mono-industrial communities
25 and where industry is cyclical. Did you benefit from

1 expertise or experience of these communities? Like when
2 you are talking about northern communities where it's a
3 lumber industry, it's cyclical so I think they are facing
4 similar -- could face or may face similar situations.

5 **MR. MORAND:** In 1979 I first started into
6 the economic development business as the Commissioner of
7 Economic Development for the Hamilton-Wentworth region.
8 And I joined the -- at that point -- American
9 International Development Council.

10 I rose over 10 years through the Chairs to
11 be the first Canadian Chairman of the International
12 Economic Development Council based in Washington. I was
13 heavily involved in instances where military bases were
14 being closed and there were issues relating to property
15 values around military bases, issues like Love Canal.

16 We had some 4,000 members, and more today.
17 So I had the ability to call on and discuss and meet with
18 people dealing with these types of problems. I still have
19 that ability and have been doing that. There are
20 approximately 1,000 articles on these types of issues and
21 how to deal with them.

22 So I actually sent in to the CNSC about 20
23 full articles on PDFs that should anyone want to read them
24 they're there. I don't recommend spending a lot of time
25 at them. But they clearly set out distances, impacts,

1 public perception.

2 And a new thing developed in about the last
3 eight or nine years is on the psychological side and
4 that's called amplification, and amplification has
5 increased with social media and it's getting more and more
6 pervasive.

7 So a lot of people are educating themselves
8 which is even more dangerous.

9 **THE CHAIRMAN:** Any other questions?

10 I've got two quick questions on your page 4
11 of your submission. You ask the question that I think
12 requires an answer from staff; has management met -- and
13 Cameco -- has management met all the conditions set out in
14 previous licensing conditions?

15 Who wants to go first?

16 **MR. ELDER:** I'll go first because we talked
17 -- we did this in our presentation yesterday and actually
18 went through the outstanding -- there is one outstanding
19 item from an audit from a few years ago that Cameco has
20 said they will complete by the end of next month about
21 their design change process.

22 And we discussed this quite a bit at Day
23 One saying this is if they do a major change so, you know,
24 we would put a -- so there's no particular risk of them
25 not having it today but they have committed to get that

1 information to us by the end of next month.

2 That's the only outstanding item we have
3 right now.

4 **THE CHAIRMAN:** Cameco?

5 **MR. KODARIN:** Alex Kodarin, for the record.

6 We are committed to operating a safe
7 operation at all times and we believe we are doing that.
8 We do have the one outstanding item and we're putting the
9 effort towards completing that by the end of February.

10 **THE CHAIRMAN:** Okay, thank you.

11 On Slide 7, Mr. Morand, you maybe admonish
12 us to make sure that staff and company answer your
13 questions full and factual and pursue the issue if you're
14 not satisfied.

15 Let me suggest to you if we ever don't,
16 please write us, and I think you know where we are, and we
17 actually do reply to observation and questions, et cetera.

18 We try in these particular hearings to
19 answer to the best of our ability some questions put to
20 us.

21 **MR. MORAND:** Thank you, Mr. Chair. You
22 know I in fact do do that and I've gotten very -- obtained
23 very good answers from you. So thank you very much.

24 **THE CHAIRMAN:** Okay, thank you.

25 Anybody else has any other questions?

1 Well thank you very much.

2 I'd like to move now to the next submission
3 by the Port Hope Community Health Concern Committee, as
4 outlined in CMD H17.47 and H17.47A.

5 Ms. Faye More, the floor is yours.

6

7 **11-H17.47 / 11-H17.47A**

8 **Oral presentation by the**
9 **Port Hope Community Health**
10 **Concerns Committee**

11

12 **MS. MORE:** Good morning, Mr. Binder,
13 Members of the Commission.

14 I am Faye More, Chair of the Port Hope
15 Community Health Concerns Committee.

16 We are presenting today regarding the
17 Cameco Fuel Manufacturing Incorporated in Port Hope.

18 I'd like to begin by reading a quote that I
19 read yesterday but it forms an important context. This is
20 from the Ontario Ministry of the Environment rationale
21 document draft, "Uranium and Air Standard":

22 "For a given uranium intake, the
23 inhalation pathway gives doses 200
24 times greater than ingestion."

25 Our recommendations regarding this facility

1 are as follows.

2 That Cameco and the CNSC staff
3 recommendation for a 10-year licence term for this
4 facility situated in a Port Hope neighbourhood be
5 rejected.

6 A two-year licence be issued to Cameco with
7 the condition that within this two-year time period Cameco
8 will prepare and submit a plan to the CNSC, the
9 municipality and the public to fully decommission all of
10 its sites within the boundaries of the community of Port
11 Hope.

12 That decommissioning, including removal of
13 all wastes and full restoration of all lands, to be
14 completed by 2017.

15 That Cameco's Vision 2010 Project and the
16 proposed investment of millions of dollars into the
17 current sites be halted and a new environmental assessment
18 be ordered for the decommissioning and restoration process
19 when the plan is received.

20 It's important to note here that Vision
21 2010 does not impact the existing operations or emissions
22 which are problematic to the community. Ultimately, it
23 improves appearances and it improves storage of material.

24 We have come to this recommendation after a
25 number of years of work on health issues in Port Hope and

1 a number of interventions to the Canadian Nuclear Safety
2 Commission and have realized that resolution of a number
3 of these issues really can only be resolved through
4 relocation of the facilities.

5 Some of the considerations.

6 Significant changes to licences by the CNSC
7 can and do occur with CNSC staff authorization during a
8 licence term without public input or disclosure.

9 An example then from the current licence
10 for this facility is at Section 4.1:

11 "The licensee shall not process or
12 store enriched uranium and the
13 containing 5 percent or more uranium
14 235 biomass without the prior written
15 approval of the Commission or a person
16 authorized by the Commission."

17 In 2003 at a meeting in Ottawa -- and I
18 must correct the record here in our intervention that we
19 stated that it was former Zircatec President Lloyd Jones
20 who made the statement and in fact it was Cameco's Andy
21 Oliver -- informed the CNSC and the public audience that
22 Zircatec had experienced onsite in Port Hope in the past
23 working with 93 percent enriched uranium, which is weapons
24 grade.

25 We asked how this could happen and were

1 told that it was CNSC staff approved, although supporting
2 documentation was not provided as to when this happened or
3 that explained the basis for such approval at a facility
4 that had no capacity to deal with the criticality.

5 Licence amendments of this magnitude made
6 in this non-transparent manner to the public are
7 apparently historical practice and they are unacceptable.

8 This facility, again I say, is in a
9 neighbourhood.

10 The actual enrichment levels and quantities
11 of enriched uranium onsite are not specified in the
12 current documents and they should be.

13 Such approvals also raise real questions
14 about what the true content of the wastes are. What is in
15 these wastes? What level of enrichment? How will they be
16 disposed of? What will be approved in the future without
17 our knowledge?

18 There is no proper security zone around
19 this facility. The location of these designated nuclear
20 facilities in the middle of a town beside homes precludes
21 a property security zone for the operations and safety to
22 help protect residents.

23 To do so would interfere with the use of
24 property by the residents. There is no information on
25 what zone exists or what measures are in place to alert

1 residents if they happen to contravene security while
2 utilizing the area in a normal and permitted manner.

3 On the matter of the facilities not being
4 included in the Ontario Provincial Nuclear Emergency
5 Response Plan, which has been a real concern for us, I
6 believe we received confirmation yesterday that Cameco's
7 facilities are in fact included in the provincial plan and
8 we look forward to seeing them listed in writing in that
9 plan.

10 On the matter of inadequate liability
11 insurance, at the hearing -- again I have the transcript
12 excerpt here -- we were told that Cameco for the
13 waterfront site had \$4 million of liability insurance and
14 the Zircatec location had \$2 million.

15 And we're still concerned, obviously, about
16 the level of responsibility that a private corporation is
17 required to take on matters pertaining not only to its own
18 property but beyond the fence line.

19 We were advised that the situation would be
20 investigated and looked into and are looking for a current
21 status report.

22 I know that has been discussed previously
23 but clarification relative to our intervention would be
24 appreciated.

25 Home Owner Policies do not cover radiation

1 contamination, whether from routine operations, improper
2 disposal practices or accidents. The residents of Port
3 Hope and beyond are unprotected from financial losses that
4 are incurred as a result of the industry in this town.

5 As you have been told before, the Property
6 Value Protection Program has emphasized repeatedly
7 publicly that it does not cover property that is
8 contaminated; that is not is not its job. What is does is
9 compensate people primarily who are in transportation
10 routes so far, and maybe they can add to the list of the
11 kinds of approvals they've made but they are not here to
12 compensate people who suffer property loss because they
13 are waiting for a clean-up or they have contamination.

14 We believe that the levels of exposure
15 allowed for employees are far too high. We have not seen
16 recent annual health physics reports but we want to focus
17 particularly, today, on the compaction room at this
18 facility, which has had problems in the past exceeding
19 action levels; what areas of the facility do the employees
20 work who have had the highest effective doses; what has
21 been done to investigate causes and remedy; and what
22 health monitoring is in place for outcomes for these
23 people?

24 As our intervention yesterday, we again
25 note the unacceptable transportation of materials, through

1 our community, emitting radiation.

2 There is a lack of health monitoring of
3 current and former employees. You heard from Dan Rudka
4 last evening, this is a former employee who needs help and
5 he is not getting it.

6 He is not alone; we have talked to other
7 former employees of this facility who have concerns about
8 health issues and also post-retirement early onset of
9 illness. We understand there is no monitoring of
10 employees. I don't know about benefits for the employees
11 but surely there should be health monitoring and there
12 should be assistance to employees in obtaining
13 compensation.

14 Yesterday, in the previous intervention we
15 discussed the problem in Canada of a lack of recognition
16 of radiation-related diseases for nuclear energy workers
17 and that Canada needs such a plan that would be comparable
18 to the Ontario government's plan for firefighters, for
19 example.

20 In the United-States, under the *Radiation*
21 *Exposure Compensation Act* and the *Energy Employees Illness*
22 *Occupational Compensation Act*, more than \$4 billion has
23 been paid out; that includes current existing employees of
24 energy facilities. We are working to obtain details of
25 the facilities where these employees work.

1 There is no such program in Canada and
2 there is little recognition of the harm that is caused to
3 workers by being exposed to these materials.

4 There is a lack of health monitoring in the
5 community, obviously there are air emissions, the
6 International Joint Commission On The Great Lakes did
7 studies. We reviewed some of those findings yesterday and
8 the elevated rates of disease that have been shown in Port
9 Hope by Port Hope Specific Statistical Studies by the
10 Federal Government. What is lacking is follow-up cohort
11 and case controlled studies.

12 You heard mention yesterday about a
13 complete study waiting to be done such as St. Mary's
14 Elementary School, Dr. Power School, people who live on
15 contaminated properties in Port Hope. There has been
16 absolutely no follow-up done. We asked that that be part
17 of the scope for the clean-up about five years ago and
18 were refused, that they do not do baseline health
19 monitoring.

20 There is no isotopic testing uranium for
21 transuranics; at least that is publicly disclosed.

22 Cameco acknowledged the accuracy of our
23 human test results that showed the uranium 236 in the
24 bodies of three former workers and it shows that -- what
25 they stated was that depleted uranium coming to the

1 facility was in fact contaminated with transuranics having
2 been through the fission process.

3 This is to be expected since most depleted
4 uranium coming in from the United States is contaminated.

5 We are asking why there is not isotopic
6 testing done in the bioassays of the employees and why
7 material located at these facilities is not being properly
8 identified by its isotope.

9 Again, the foundation of this industry is
10 isotopes and it's very difficult to believe that people do
11 not, at these facilities, know and understand the material
12 that they are dealing with.

13 **THE CHAIRMAN:** Will you please summarize?

14 **MS. MOORE:** Yes, what I'd like to do please
15 with an extra few minutes is respond -- Patsy Thompson
16 discussed the urine test results ---

17 **THE CHAIRMAN:** No, we will get into the
18 question and answers.

19 **MS. MOORE:** Okay. Thank you.

20 Then I am fine to conclude.

21 **THE CHAIRMAN:** Okay, so why we start the
22 questions. Who wants to go first?

23 Mr. Tolgyesi.

24 **MEMBER TOLGYESI:** The Intervenor is talking
25 about lack of health monitoring of post-employees.

1 Is there something which is done to do
2 this?

3 **MR. KODARIN:** Alex Kodarin, for the record.

4 We do not have a program for post-
5 employees. We have a program in place to monitor the dose
6 levels for all existing employees. We currently meet all
7 regulatory requirements; in fact, we operate at a fraction
8 of the regulatory levels and we are confident that we are
9 very good, very robust medical surveillance program for
10 our employees in place.

11 **MEMBER TOLGYESI:** Staff has any comments on
12 this?

13 **DR. THOMPSON:** Patsy Thompson, for the
14 record.

15 Our understanding is that Cameco's Fuel
16 Manufacturing Radiation Protection Program does include
17 extensive monitoring. The monitoring is done as part of
18 the radiation protection program that is reviewed and
19 approved by CNSN staff.

20 The monitoring includes dosimetry for
21 workers as well as urine analysis for workers that are
22 potentially exposed to uranium dust. The workers wear
23 whole body dosimeters and depending on the work they do
24 they also wear extremity and finger dosimeters.

25 The urine analysis is done when workers

1 have potential for uptake of uranium and because of the
2 detection limits in uranium. The workers who have the
3 potential to be only slightly exposed don't have to submit
4 urine samples.

5 All of this information is collected and
6 monitored by the CNSC. The CNSC licenses the dosimetry
7 program so that we have some assurance that the data is
8 robust and appropriate. The data submitted to Health
9 Canada, the dose -- the National Dose Registry.

10 There is also elements of medical
11 surveillance program for workers during employment and
12 that has been part of the Radiation Protection Program.

13 **MEMBER TOLGYESI:** And do you aware if
14 provincial authorities, they have something which is post-
15 employment follow-up or surveillance?

16 **DR. THOMPSON:** Patsy Thompson, for the
17 record.

18 The CNSC is the regulator responsible for
19 regulating nuclear facilities in Canada. I don't believe
20 that the provincial government has such a program.

21 **MEMBER TOLGYESI:** The Intervenor was
22 talking also about lack of, or no follow-up of cohort and
23 case controlled studies.

24 Could you comment on that?

25 **DR. THOMPSON:** Patsy Thompson, for the

1 record.

2 This has been discussed extensively in the
3 past and the Port Hope Synthesis Report does include the
4 cohort and case controlled studies that could be done in
5 Port Hope. To be able to do studies like this we need to
6 have good information on the individual exposures. And so
7 the cohort study that was done was done using exposure
8 information from workers. The workers that were
9 monitored, there are 3,000 workers from the Eldorado --
10 the Cameco facility during the Eldorado period. And the
11 workers were exposed to -- occupationally as well as they
12 were members of the community. That work has shown that
13 there is no relationship between radiation exposure and
14 the risk of developing cancer or other diseases.

15 This work has been peer reviewed and it has
16 been published in peer reviewed literature.

17 There has also been a case control study of
18 residential radon in Port Hope and the case control study
19 looked at houses with elevated radon in relation to houses
20 with lower radon values. That work is also presented in
21 the synthesis report.

22 Doing a cohort or case control study in a
23 residential setting where the radiation exposures that we
24 have measured over the years being very low, we have no
25 individual exposure information, essentially because the

1 exposure to the general public has been extremely low.

2 Everybody recognizes that the practices --
3 waste management practices and operational practices
4 during the early decades of operation weren't to the
5 standards of today.

6 I guess the good thing is that many of the
7 radionuclides like uranium that were released to the
8 environment aren't very bio-available.

9 There's been a lot of studies in Port Hope,
10 in soils, in vegetation, in gardens, and air, and all of
11 that information together does indicate that the levels of
12 exposures to members of the public have been low.

13 And on that basis, we've concluded that
14 it's really not feasible to do the type of studies that
15 have been requested.

16 We have compared the findings of all of the
17 work that's been done in Port Hope for members of the
18 community and workers with work that has been done,
19 internationally in other countries, for similar
20 communities or with similar contaminants, and we're
21 finding the same thing.

22 So that gives us confidence that the work
23 has been done appropriately to the appropriate scientific
24 standard and the work that we have done has recently been
25 published in a peer reviewed journal.

1 **MS. MORE:** May I respond, please?

2 First of all, just to reference the Queens
3 study which Ms. Thompson just referenced, was a study
4 looking at incidents of lung cancer and comparing that to
5 people who lived in homes with elevated radon and those
6 who did not.

7 The outcome of that study -- and they ended
8 up with, I believe, 22 subjects, there were many more lung
9 cancer cases but there were a number of eligibility
10 criteria hoops.

11 The outcome of that study was in fact that
12 an association was shown between the people who had lung
13 cancer and who lived in homes in Port Hope with elevated
14 radon. So the one and only study of that kind did show an
15 association. That was documented by Dr. Eric Mintz in his
16 review. It was also confirmed by the peer review team for
17 the Town of Port Hope, Hardy Stevenson.

18 So why didn't we go further? That was a
19 very preliminary study done in the early 1980s.

20 And I would remind you that what this town
21 was promised in press releases in 1979 was that people who
22 lived in contaminated properties or who had been most at
23 risk would be followed over a long period of time and
24 there would be in-depth health studies.

25 No one said it would be easy. Nothing

1 about this situation has been easy. But the fact that
2 those studies were not properly done at the time does not
3 mean that we should not go back and right those wrongs.

4 And as I said, Dr. Powers School, St.
5 Mary's School, there are very specific locations where the
6 radon levels -- and we should not only talk about radon
7 here, but indoor radon was documented and is known and the
8 exposures can be dealt with.

9 I think the problem here is that we
10 absolutely have not been studied to depth as is claimed.
11 That's why this keeps coming up because our requests keep
12 getting dismissed and what we need is a proper scientific
13 discussion with external experts here at the table working
14 with CNSC staff around the fact that this is doable.

15 **THE CHAIRMAN:** Can I ask you a question?
16 Cancer Care Ontario would have data on every resident in
17 Port Hope for I don't know how long? Maybe CNSC staff
18 also can help me on this.

19 Did you ever approach them and ask, you
20 know, do some long internal studies and show us any
21 incident of any cancer?

22 Did anybody approach Cancer Care Ontario
23 with this request?

24 **MS. MORE:** It's my understanding that
25 facilities like this require a proposal from someone who

1 is prepared to do the work. That has been -- the
2 stumbling block, again, is funding someone to be able to
3 take the time to do this work.

4 **THE CHAIRMAN:** No, but Cancer Care Ontario
5 does their own study, epidemiological study all the time.

6 And again, staff, do you know what do they
7 have and what are they capable of doing?

8 **DR. THOMPSON:** Patsy Thompson, for the
9 record.

10 The studies that were done for the CNSC by
11 Health Canada in 2000 and 2002 use provincial data. The
12 source of the provincial data is Cancer Care Ontario.

13 There's no other way of accessing that
14 information but to have an agreement and a relation with
15 Cancer Care Ontario.

16 So the information on Port Hope and
17 Northumberland County that was used for the studies are
18 from the registries and the database of Cancer Care
19 Ontario.

20 **MS. MORE:** And this information was
21 obtained based on postal code. We will certainly look
22 into whether we can obtain this information as an
23 organization.

24 But in the past when we have sought to get
25 information, it required a designed proposal and someone

1 who was qualified to conduct the study. So there is the
2 stumbling block. We'd be happy to overcome that and we
3 can discuss this with your staff.

4 Thank you.

5 **THE CHAIRMAN:** Mr. Tolgyesi?

6 Dr. McDill?

7 **MEMBER MCDILL:** I think we have to go
8 through a few of the questions the intervenor raised with
9 staff and with Cameco for clarification for the record,
10 the intervenor's first supplementary issue with respect to
11 written approval of the Commission or person authorized by
12 the Commission and the DU question.

13 **MR. ELDER:** Peter Elder, for the record.

14 So I think we talked about the DU or the
15 SEU question before but I want to talk -- enter a higher
16 level in terms of what we have, and as the Commission
17 knows, changed the look of the licence and introduced the
18 Licence Condition Handbook.

19 The purpose -- one of the purposes of that
20 handbook was actually to take a lot of information that
21 was buried in lower-third (ph) documents and make them
22 more visible.

23 We plan to do an annual report. Part of
24 that annual report will go through and give information to
25 the Commission and the public to any changes to that

1 Licence Condition Handbook.

2 If we see issues where there is a lot of
3 interest, like the level of enrichment that's onsite, the
4 amounts and whether they've gone up to or more than .8 of
5 a critical mass, we will actually not wait for an annual
6 report. We will actually write it into the document.
7 This will be reported to the Commission in a public
8 meeting as soon as -- around the time if there's approval
9 given or whether we receive the approval.

10 So we are trying to make sure that there is
11 more transparency around such approvals.

12 **THE CHAIRMAN:** Can you answer specifically
13 the 93 percent enriched uranium and the lack of
14 specificity claimed on -- I thought the 5 percent is
15 explicitly mentioned in the licence.

16 **MR. ELDER:** The 5 percent is specifically
17 mentioned right now in the handbook. That's where it is.

18 In the past -- and I don't have precise
19 dates, in the eighties, Zircatec or before it,
20 Westinghouse did manufacture HEU fuel for research
21 reactors.

22 And this was done under the licence at the
23 time.

24 **THE CHAIRMAN:** Whose licence?

25 **MR. ELDER:** The CNSC licence. So ---

1 **THE CHAIRMAN:** Mr. Jammal is waving at us
2 here.

3 **MR. JAMMAL:** Thank you, Mr. President.
4 Thank you. For the record, it's Ramzi Jammal.

5 The clarification that Dr. McDill is
6 requesting is you ask what -- under what regime. As Mr.
7 Elder mentioned previously and in the old legacy under the
8 AECB, staff had the authority to give that approval.

9 So under the legacy of the AECB, as Mr.
10 Elder correctly mentioned, they were authorized to do for
11 the purpose of research or fuel manufacturing.

12 I'm not going to go into technical details
13 but the staff did give the approval under the legacy of
14 the AECB.

15 So once the Commission came into effect as
16 of 2000, all those have changed and, as Mr. Elder said, we
17 will provide you the information accordingly.

18 **THE CHAIRMAN:** But those approvals were
19 given without public hearing or without process kind of a
20 notion?

21 **MR. JAMMAL:** Correct. It was at a
22 "designated officer level". I mean -- again, let's not
23 mix two eras here. Staff had the authority to make those
24 approvals back then.

25 **THE CHAIRMAN:** Okay. Dr. McDill.

1 **MEMBER McDILL:** So all licence amendments
2 since the CNSC came into being have been transparent in
3 your opinion, or in fact?

4 **MR. ELDER:** I wouldn't say absolutely going
5 back in and saying, for last five years I'd say
6 absolutely. In the past there was transition period as we
7 moved licences into the CNSC, you know, from AECB to CNSC.
8 So certainly for the last five years every licence
9 amendment has gone to some sort of -- gone to the
10 Commission leve, yes.

11 **MEMBER McDILL:** Ms. More?

12 **MS. MORE:** I would just ask you to bear in
13 mind the concerns raised yesterday about weapons
14 production in Port Hope and the fact that the confirmation
15 that we were dealing with 93 percent enriched uranium
16 would confirm that concern.

17 **THE CHAIRMAN:** Well, there's a lot things
18 that we can point fingers at that happened a long time
19 ago. We are just trying to make sure that we don't repeat
20 the same mistakes. We've acknowledged that this will not
21 happen on our watch anymore and that's the only thing we
22 can do. We cannot undo what was done. And we are trying
23 to be as transparent as we can and we'll continue to make
24 sure that we improve our transparency whenever we can.

25 Dr. McDill?

1 **MEMBER MCDILL:** Thank you.

2 I wonder if I could ask Cameco to address
3 the health compaction room as pointed out on Item 6 by the
4 Intervenor; and follow-up by staff, please.

5 **MR. KODARIN:** Alex Kodarin, for the record.

6 CFM does have a robust radiation protection
7 program in place, we do perform all the necessary tests on
8 our employees to measure dose and we are operating right
9 now at fraction of the regulatory limit. We're confident
10 that we're doing the right things for our employees to
11 lower doses as lower as reasonably achievable and have
12 that mandate day in and day out, so I think we are in a
13 very safe facility and are very conscious of the safety of
14 our employees.

15 **MS. MORE:** May I ask a question about that?

16 If we take, say, 2011, if Cameco could say
17 how many testing exceedences they were in the compaction
18 room, I believe they do a lot of testing like 10,000 air
19 samples, what percentage were over their action level?

20 **THE CHAIRMAN:** And while they're looking
21 into replying; staff, are you aware of those action
22 exceedences whenever it happens and you know what you do?

23 **MR. ELDER:** Yes, we are aware of and they
24 must report to us two things on action levels; you must
25 report to us and you must take action to prevent

1 reoccurrence. So, yes, we are fully aware of all the
2 action level exceedences. The number we've got over the
3 last licence period is eight, a few of them were -- about
4 half were dealing with the issues around the dosimeters
5 and, yes, so we are fully aware and we require that there
6 is corrective action and we certainly look for any trends
7 around those actions as well.

8 **THE CHAIRMAN:** So how do those incidents
9 become known publicly again, following up our last
10 intervention?

11 **MR. ELDER:** Again, we've been reporting in
12 our CMDs and our midterms about action levels exceedences
13 and obviously if we are going to report on an annual basis
14 about radiation protection results that would include
15 noting if there were any exceedences of action levels as
16 well.

17 **THE CHAIRMAN:** Every such exceedence will
18 be reported in the annual report?

19 **MR. ELDER:** Yes.

20 **MS. MORE:** I'm not sure we're talking about
21 exactly the same thing. That's very important. What I'm
22 referencing around the exceedences is the dust exceedences
23 in the compaction room. We are concerned about inhalation
24 of the dust and I think you're talking about exceedences
25 of exposure results on the dosimeters.

1 **MR. ELDER:** But if there is -- that's
2 right. Any action level within the plant must be reported
3 to us. So maybe in terms of dust when I may not have the
4 data right there but any action level exceedences
5 associated with any program must be reported to us.

6 **THE CHAIRMAN:** Cameco?

7 **MR. LONGINOV:** For the record, Mike
8 Longinov.

9 We do have compaction room air monitoring
10 sampling done on a daily basis. We can't really go much
11 more than a day before we have identified if there is a
12 concern. We do have a number, during the 2011 year, of
13 reported internal administrative level exceedences. These
14 internal administrative level exceedences are forwarded to
15 production and investigated quite quickly, most of which
16 we -- when it's talking about the compaction room the
17 biggest hazard that we are concerned with is the
18 inhalation of uranium dioxide from airborne contamination.

19 We do monitor the individual through
20 urinalysis. The urinalysis also suggesting, from an
21 annual standpoint, that no worker is coming close to the 1
22 millisievert per year. So we're quite confident that the
23 risk to the employee is quite minimal.

24 **MS. MORE:** Could we have a number, please,
25 of how many exceedences there were.

1 **MR. LONGINOV:** Mike Longinov, for the
2 record.

3 We do not have any action levels for indoor
4 air quality, we do have an internal administrative level
5 and out of 7,558 samples taken in 2011, we had 46 samples
6 that exceeded our internal administrative level.

7 **THE CHAIRMAN:** And those administrative
8 levels are known? I mean, I'm just trying to figure out,
9 I have no idea whether 46 is good, bad, or indifferent and
10 what's the trend of 46, those are the kind of things that
11 I guess somebody would be interested in.

12 Staff?

13 **DR. THOMPSON:** Patsy Thompson, for the
14 record.

15 This monitoring is part of the radiation
16 protection program and the structure of administrative
17 levels is part of the program and is reviewed by staff for
18 appropriateness. We have staff in Ottawa who could
19 provide more information but certainly there's an
20 expectation, and this has been done by Cameco, that
21 essentially the dust management is an important part of
22 their program because of the potential for uranium
23 inhalation.

24 **THE CHAIRMAN:** But I'm asking really a
25 simple question. Is there an action level on base and

1 will the action level way, way below the licence limit and
2 et cetera, will that be reported or viewed or monitored?

3 **DR. THOMPSON:** Could we ask staff in Ottawa
4 to respond to the question? I believe Bernard Ellaschuk
5 is in the hearing room.

6 **THE CHAIRMAN:** Ottawa?

7 **MR. ELLASCHUK:** Thank you, this is Bernard
8 Ellaschuk, for the record; radiation protection specialist
9 with CNSC.

10 So just to confirm, the administrative
11 levels are reported to CNSC staff on an annual basis.
12 They are recorded in CFM's annual report, that report is
13 available to the public on the Cameco's website, section
14 3.10 if anyone is interested. We do review those values
15 every time we do an inspection of the facility and as well
16 when the annual report is received. So, yes, the values
17 are reported to us, yes, we do review them and, yes, they
18 are a fraction of the regulatory limits. And I believe
19 that answers the question.

20 **MR. CHAIRMAN:** So just to clarify, so the
21 2011 data is now on Cameco's posted website?

22 **MR. ELLASCHUK:** For the record, the 2011
23 data is not yet on their website, it has not been
24 presented to CNSC staff but the 2010 report is available.

25 **MR. THORNE:** Maybe I could -- Andy Thorne,

1 for the record.

2 We have a policy across the division on
3 posting both quarterly and annual compliance reports. In
4 relation to radiation protection, there is typically a
5 delay in receiving the results for the last quarter, which
6 is why you wouldn't see the 2011 annual report posted yet.
7 But we will -- in line of our policy we will be posting
8 that report on our website in due course.

9 **THE CHAIRMAN:** Thank you.

10 Dr. McDill.

11 **MEMBER McDILL:** Last question and, Mr.
12 Chair, you may have to guide me here.

13 There is question with respect to the
14 security zone and this is in point 2 on page 2.

15 The intervenor has said there are -- there
16 is no information on what zone exists or measures that are
17 in place to alert residents if they are contravening
18 security while utilizing the area.

19 I don't think there's an issue here but
20 there are no areas outside the fence that are of concern;
21 is that correct?

22 **MR. ELDER:** Peter Elder, for the record.

23 The fence is the start of the security for
24 these facilities.

25 **MEMBER McDILL:** The fence inwards?

1 **MR. ELDER:** The fence inwards and this is
2 in full compliance with CNSC security regulations that
3 were updated in 2006.

4 **THE CHAIRMAN:** Just to be precise, so if I
5 take my dog and it leans on the fence, will bells and
6 whistles go?

7 **MR. KODARIN:** Alex Kodarin, for the record.
8 You might get a visit from one of the
9 security folks. That's probably about it but you'll know
10 that you're leaning on the fence for sure.

11 **MS. MORE:** May I comment?

12 About 10 days ago, I and my children and
13 some other youth were standing on the grass in front of
14 the house just up from the facility and three police cars
15 came and talked to -- there was a Director doing a filming
16 of a documentary and doing interviews.

17 And there was a real concern about
18 terrorism, that there was a demonstration, that -- so I
19 mean obviously the Port Hope police were responding and
20 felt they needed to do their job.

21 They were called by security at the
22 facility because we were out there on the grass. So it
23 certainly gives rise for me to a degree of confusion about
24 civil liberties and the ability to walk on this grassy
25 area.

1 And if someone could put up a picture, the
2 one that you had of the Zircatec property, I can show you;
3 we weren't near the fence at all.

4 **THE CHAIRMAN:** Cameco, you want to respond
5 to this?

6 **MR. THORNE:** Andy Thorne, for the record.

7 I think it's important to know that we are
8 managing a nuclear facility. We have to take security
9 very seriously. It would be inappropriate of me to
10 provide details of that security protocol.

11 But, you know, we -- I can't -- also really
12 can't comment on the Port Hope Police Service but I think
13 it's important that it's a nuclear facility and we take
14 our obligations in relation to security very seriously.

15 **MS. MORE:** And we absolutely support that.
16 We understand the police are doing their job. It is
17 another reason why the facility needs to be outside of the
18 community.

19 It cannot do that properly in an occupied
20 community in a neighbourhood.

21 **THE CHAIRMAN:** Anybody -- any other
22 questions?

23 Monsieur Harvey?

24 **MEMBER HARVEY:** Just a precision. Mr.
25 Elder mentioned that the -- any modification would be

1 brought to the Commission.

2 Is this to say -- you're talking any
3 modification to the licence and the handbook is part of
4 the licence?

5 **MR. ELDER:** I'll just clarify this one.
6 Any amendment to the licence must be done by the
7 Commission. What we've said in terms of the handbook is,
8 the way the structure is, these are staff can approve
9 changes to it but we will report to you on all changes.

10 **MEMBER HARVEY:** How will the public be
11 informed of that because that was ---

12 **MR. ELDER:** We will report at a public --
13 to you at a public meeting of the Commission. So the
14 reporting will be done at a public meeting. So the ---

15 **THE CHAIRMAN:** Just so everybody
16 understands but that's not the only reporting, public
17 reporting. There's also any incident like an event that
18 require them to come. There's many proactive disclosure
19 that Cameco is obligated to publicly disclose.

20 **MR. ELDER:** That's correct. So this is
21 about changes that would allow changes to the operation
22 without being considered a fundamental change that would
23 require a licence amendment.

24 There is also -- as I'm going in, there's a
25 licence condition in this licence that Cameco must have a

1 public disclosure program in place. They have something
2 in place now. This makes it a legal requirement to
3 continue to do that one.

4 So any events at the facility should be --
5 must be disclosed to the public.

6 **MEMBER HARVEY:** Do we have the same
7 obligation? I mean I'm not concerned about the
8 Commission. I'm concerned about the public.

9 **MR. ELDER:** In terms of if the licensee
10 discloses, it will be linked on our website as well. We
11 also have early event notification reports to the
12 Commission if there is significant events as well, which
13 again are available to the public.

14 **MEMBER HARVEY:** It's available to the
15 public?

16 **MR. ELDER:** Yes.

17 **MEMBER HARVEY:** All the significant events.

18 **MR. ELDER:** Yes.

19 **MEMBER HARVEY:** Okay. Thank you.

20 **THE CHAIRMAN:** Anything else?

21 We need to break. I'd like two quick
22 questions that were raised.

23 First of all, somebody explain to me very
24 quickly this insurance, waterfront insurance, the \$2
25 million. What's the issue here?

1 Go ahead, staff.

2 **MR. ELDER:** Sorry, we discussed this on the
3 last one. This is nuclear liability insurance. It only
4 covers criticality accidents.

5 For anything that's not a criticality
6 accident, Cameco would have conventional liability
7 insurance like any other industry.

8 So just ---

9 **THE CHAIRMAN:** So in our view it's properly
10 covered?

11 **MR. ELDER:** Yes, these are for very
12 specific types under Federal legislation where they're
13 required to have this one for a very specific purpose.

14 It does not cover or mean that they do not
15 have to have liability insurance for any other type of
16 accident.

17 **THE CHAIRMAN:** Okay. Ms. More, what's your
18 concern here?

19 **MS. MORE:** I'm sorry, I don't understand
20 his answer. Is he saying that there's \$2 million for
21 criticality? I'm sorry; I'm not understanding what he's
22 saying.

23 **MR. ELDER:** So you asked are the values
24 right. Yes, your values are right.

25 **MS. MORE:** It's \$2 million?

1 this new legislation I think in the future to deal with
2 this. That's been -- that's in the works.

3 My last point -- and you keep mentioning
4 this about the U.S. Department of Justice listing
5 compensation for member -- for nuclear workers.

6 Again, our information is it's strictly for
7 people who are involved in the atomic weapon program,
8 testing, mining for it, all of the above. It's always had
9 to be tied to -- it's not to do with the current, for
10 example, 104 operators right now in the nuclear facilities
11 in the U.S. It does not cover them.

12 So that's our understanding and if you can
13 give us more evidence, please send it to us and we'll take
14 a look.

15 **MS. MORE:** Yes, because that is not correct
16 at all. It does apply to energy employees in the United
17 States currently working at facilities. It does ---

18 **THE CHAIRMAN:** On weapons.

19 **MS. MORE:** Pardon?

20 **THE CHAIRMAN:** Not -- on weapons. Only on
21 weapons, not on nuclear facility. That's our
22 understanding.

23 **MS. MORE:** I have never seen that
24 limitation anywhere. No, that is not in the legislation
25 that I've read through. So I'm happy to provide the

1 details to you because ---

2 **THE CHAIR:** Please do and highlight to us
3 where there's limitation. It's our understanding. If
4 somebody has a different interpretation, let's hear it.
5 Okay. We'll take it off line.

6 **MS. MORE:** Now, I still need some time. If
7 you want to take a break, may I return after the break or
8 can I deal with it now?

9 **THE CHAIRMAN:** You got one minute because
10 we're going to -- we need to move on.

11 **MS. MORE:** But I also asked you for time to
12 respond on the urine testing results. Ms. Thompson
13 discussed those last evening.

14 **THE CHAIRMAN:** We are now in the hearing
15 for the facility. We have had a lot of extensive
16 discussion about this. If you want to rebut it for a few
17 minutes, go ahead. Now is the time.

18 **MS. MORE:** Well there were a couple of
19 other points. One was the lung cancer elevation that was
20 discussed yesterday and Ms. Thompson stated that -- well,
21 that was a county-wide problem.

22 The fact is that lung cancer and lung
23 disease, respiratory disease elevation has appeared in
24 every study focused on Port Hope.

25 And obviously Port Hope is part of the

1 county statistics and so they would be elevated. So we're
2 getting into a bit of a circular chase the tail thing
3 here.

4 The fact is Port Hope's statistics show
5 elevated lung cancer and respiratory diseases.

6 Reliance on dosimeters to talk about
7 internal contamination is wrong. Inhalation of particles,
8 the particles continue to irradiate the cells around them
9 and dosimeters do not capture that level of exposure.

10 Dispersion of uranium by fertilizer, I can
11 give an example of one study, Ewald Schnug and Silvia
12 Haneklaus in Germany, where their recommendation -- this
13 was a published study -- that the most efficient and
14 sustainable solution to the problem is the extraction of
15 uranium from fertilizers.

16 So I'm just brief lining that, but the
17 conclusion is that there should not be uranium contained
18 in fertilizers.

19 The uranium study was done at a reputable
20 lab in Frankfurt, Germany by Dr. Axel Gerdes, the
21 Institute of Mineralogy; lots of published work in
22 journals out of that lab doing exactly this same
23 methodology. The methodology was detailed in the abstract
24 that was peer reviewed.

25 The ultimate poster presentation and

1 document was peer reviewed for, I believe, three days at
2 the European Association of Nuclear Medicine.

3 There is nothing wrong with our test
4 results. We stand by them 100 percent.

5 Cameco subsequently confirmed the finding
6 of Uranium-236 in three out of four former workers. That
7 is what has led to the disclosure that they were dealing
8 with contaminated material at their site.

9 That is what has led further to our concern
10 about what is actually contained in the waste and how the
11 clean-up will progress since they think they're dealing
12 with natural uranium only.

13 Clearly they're not. They're also dealing
14 with enriched uranium, some wastes of which may have 93
15 percent in them from the past. So we don't really know.

16 I think the ultimate question is why was
17 this not taken as a learning opportunity?

18 This biological testing was a key component
19 of our health study design done by our committee, with Bob
20 Pollock from AECL, with the epidemiologists from AECEB, MOE
21 people; all helped do a health design document which we
22 did with a \$10,000 grant from Health Canada.

23 Biological testing was a key part of that.
24 This was the beginning and we had to fundraise the money.

25 Instead of denigrating and attacking valid

1 test results, the first biological test results of Port
2 Hope people that anybody had done here in 70 years of
3 exposure to this material, why didn't anybody come and
4 replicate it and prove us wrong? No, didn't happen; we're
5 not wrong.

6 It shows that Port Hope people inhaled this
7 material which is to be expected, right? And the workers
8 are exposed; 23 years after they set foot in the plant a,
9 worker was excreting Uranium-236. It is in his bones and
10 it will be there until the day he dies.

11 **THE CHAIRMAN:** Okay. Look, we've ---

12 **MS. MORE:** I'm done. Thank you.

13 **THE CHAIRMAN:** This is not the first time
14 we spoke about that. We spoke about this many, many times
15 and practically every time we appear here it was
16 discussed.

17 I don't know. I wanted to give Ms. More
18 the final words but Ms. Thompson, if you want to say one
19 minute, again to actually rebut some of those or reply to
20 them.

21 **DR. THOMPSON:** Patsy Thompson, for the
22 record.

23 We have said on a number of occasions that
24 the levels of uranium that were measured in urine
25 represent background values. So we did not discount them.

1 We compared them to U.S., Italian and other values that
2 are in the literature.

3 But I would like to reemphasize that we do
4 consider inhalation of uranium by workers. This is a
5 monitored exposure. We get urine analysis results. The
6 radiation protection staff and my directorate review and
7 analyze this information and the programs are there to
8 minimize inhalation of uranium.

9 This is also a fact we have exposure to
10 members of the public that we review, and we measure and
11 it's reported on an annual basis.

12 **MS. MORE:** And it is not the levels of
13 uranium; it's the kind of uranium. It's insoluble. It's
14 the difference between having a marble in your lung and a
15 sugar cube.

16 **THE CHAIRMAN:** Okay. Thank you.

17 We shall take now a break for 10 minutes
18 and reconvene at 10:15.

19

20 --- Upon recessing at 10:06 a.m./

21 L'audience est suspendue à 10h06

22 --- Upon resuming at 10:17 a.m./

23 L'audience est reprise à 10h17

24

25 **THE CHAIRMAN:** I guess nobody believed our

1 10 minute warning.

2 It's a good time while everybody gets
3 settled. Mr. Jammal, I understand you wanted to do some
4 clarifications.

5 **MR. JAMMAL:** Thank you, Mr. President. For
6 the record, it is Ramzi Jammal.

7 Yes, sir, I would like to make some
8 clarification with respect to the statement I made
9 yesterday for TI based on the question of Dr. McDill.

10 I would just like to clarify that the TI is
11 based on -- it is based on a distance of one metre, and as
12 you move away from that one metre, the neutrons are not
13 measurable and you will reach a point that they are not
14 detectible.

15 So I want to reconfirm the fact it was at
16 one metre.

17 **THE CHAIRMAN:** Thank you.

18 **MEMBER MCDILL:** So the answer remains a
19 child on a bicycle beside the truck has no exposure from
20 that?

21 **MR. JAMMAL:** That is correct. If you'll
22 allow me three seconds, sir, as a matter of fact the
23 measurement of the dose of the truck driver who does the
24 job on a full-time basis is less than one millisievert.

25 But the answer is correct, yes, there will

1 be no measureable dose to anybody around the truck.

2 **THE CHAIRMAN:** Thank you.

3 I'd like to move to the next presentation,
4 which is from Ms. Lawson, as outlined in CMD H17.26.

5 Ms. Lawson, the floor is yours.

6

7 **11-H17.26**

8 **Oral presentation by**

9 **Patricia Lawson**

10

11 **MS. LAWSON:** Thank you, and thank you to
12 the Commissioners for doing this whole hearing here in
13 this place.

14 It's important at the very outset that you
15 realize that I live a few metres across the road from
16 Zircatec.

17 In the right kind of world, the
18 precautionary principle would never have allowed Andy
19 Thorne to process fuel, to buy the place and process fuel
20 right there.

21 I wish I could bring you to the house we
22 live in and the property we live in, and this talk about
23 security and a dog, Mr. Binder, all of that is right there
24 in front of me.

25 I've spoken about this for years and

1 largely because I've lived there for years.

2 At the outset, I want to tell you that I
3 believe the nuclear industry hides behind specialized
4 jargon and obscure economic theories. This has been
5 brought up already when I referred to those charts with
6 F's and arrows and all that.

7 And just a few a days ago, or a week or
8 something, we heard at this hearing that Zircatec had
9 received canisters that were unsafe and in a truck and
10 therefore going near to the road I live on; I can't tell
11 you exactly where.

12 But these I guess they hadn't unloaded
13 them, but the fact of the matter is they were right there
14 at my door step, unsafe canisters that arrived at their
15 plant.

16 They talk about relevant safety and control
17 areas. Well I reject your measurements. This ALARA
18 principle allows the industry to be the main concern and
19 all this other stuff about safety is measured in such ways
20 as to put it at arms-length from a bad accident, such as,
21 Pathways Analysis, the Derived Release Limit.

22 Well I stick behind the precautionary
23 principle, and we are no longer in a space here in Port
24 Hope, in my home, across the road from me of having
25 industry take precedence under obscure names and

1 measurements over human life and the natural world.

2 There has been a growing inequality in our
3 society and it pertains right here in Port Hope. It's
4 relevant to us here. And on the one side is the nuclear
5 industry, exemplified in the wider sphere by the Occupy
6 Movement that caught fire across the country and further
7 beyond. This Occupy Movement is rebelling against the
8 haves and the have not's.

9 And I'm quoting now from Dr. Palani
10 (phonetic). He says -- he wrote a book about transfer --
11 I think it was entitled "Transformation" and it was
12 written -- he's dead now. It's written, anyway, a
13 lifetime ago.

14 "When nature and human beings are
15 objects whose worth is determined by
16 the market, then human beings and
17 nature are destroyed."

18 So I come at this whole thing from that set
19 of feet, and I wish to -- I wish really to perhaps tell
20 you how wrong the nuclear industry is in their whole
21 decommissioning effort.

22 You heard yesterday -- I think it was said
23 there were four facilities around the world like ours.
24 So, one of the facilities is a place called Paducah
25 Enrichment. It's an enrichment plant and it is located in

1 Kentucky on the Ohio River and it is in the process of
2 being decommissioned.

3 It began in 1952. It produced enriched --
4 highly enriched uranium, first of all to power military
5 reactors, then to produce nuclear weapons for the
6 government, and in the '60s Paducah changed to produce low
7 enriched uranium for nuclear fuel in commercial reactors.

8 By 2002, they decided they would have to
9 decommission the plant. By that time -- they started with
10 \$823 million. It's now -- the Department of Energy has
11 now projected \$1.5 billion -- this is the Department of
12 Energy in the United States. That's \$1.6 billion to
13 complete the clean-up. And then they are saying that
14 there will have to be a formal oversight for the future
15 and they're projecting five billion for that, and it won't
16 all be completed until 2030.

17 Now, your staff will tell you how much the
18 Zircatec plant has put aside for decommissioning because
19 they're required to by the federal government to have a
20 note of promise or something of that nature, but it's in
21 the order of, I don't know, I've forgotten what it is,
22 something like two million or something.

23 And I believe my point with you, Mr.
24 Binder, is that the amount of money set aside to
25 decommission the facility opposite where I live is way out

1 of whack and I use this Paducah information to prove my
2 point.

3 **THE CHAIRMAN:** Thank you. Thank you for
4 the intervention.

5 I would like to start questioning.
6 Anybody? Dr. Barriault?

7 **MEMBER BARRIAULT:** Just one brief -- in
8 your written submission, in the last paragraph, you
9 mention that your concern, I guess, about possibility of
10 an explosion blowing up your home ---

11 **MS. LAWSON:** I forgot to say yesterday,
12 this is -- excuse me for interrupting, but yesterday here
13 I was able to meet some more informed people who had
14 something to do with the plant and who explained to me
15 that it would not explode. So I withdraw that statement
16 formally.

17 **MEMBER BARRIAULT:** I just wanted to clarify
18 that. Thank you.

19 **MS. LAWSON:** Yes.

20 **MEMBER BARRIAULT:** Thank you.

21 **MS. LAWSON:** I didn't know it at the time.
22 We were worried about it because of the label of
23 criticality. And I no longer stand behind that.

24 **MEMBER BARRIAULT:** Thank you.

25 Thank you, Mr. Chairman.

1 **THE CHAIRMAN:** Question? Monsieur Harvey?

2 **MEMBER HARVEY:** Maybe just to give Ms.

3 Lawson the exact numbers for the decommissioning
4 provisions.

5 **MS. LAWSON:** I'm sorry; I'm not hearing
6 very well.

7 **MR. ELDER:** Okay, just the question was --
8 the exact number for decommissioning is 19.5 million, and
9 again, this is based on ---

10 **MS. LAWSON:** That's what they've written
11 the letter for, is it?

12 **MR. ELDER:** That's correct.

13 It's an irrevocable line of credit, which
14 essentially means the CNSC can take it to a bank and the
15 bank gives us money, no questions asked.

16 **MS. LAWSON:** I get it. But ---

17 **MR. ELDER:** And I understand the point
18 about comparisons. As well, we do do comparisons when we
19 review them, and -- but -- so we do take in fact actual
20 data from actual clean-ups of a similar size when we are
21 reviewing these financial guarantees.

22 **MS. LAWSON:** Well, may I ask, Mr. Elder,
23 please, how does this compare to the United States that
24 I've just told you about, the Paducah?

25 **MR. ELDER:** Peter Elder, for the record.

1 My -- and I've got to admit, I don't have
2 all the details on that but that is a very, very large
3 enrichment plant. The plant would be -- probably take up
4 a square kilometre or more. It's a very large -- it was
5 very early technology, very large, very energy intensive
6 process. So it's a very large facility.

7 **THE CHAIRMAN:** But more importantly, can
8 you describe a situation -- okay, this is the insinuation
9 here, that there's not enough money to do the job.

10 So here's a scenario; Cameco is no longer
11 around, and there's not enough money to do the job, what
12 happens then?

13 **MR. ELDER:** So if there's not -- if Cameco
14 disappears the financial guarantee is not big enough, the
15 federal government would be probably on the hook for the
16 rest of the amount.

17 So we have a very large interest to make
18 sure that the federal government's not on the hook.

19 And I would say in terms of the modern ones
20 that we've done, in terms of modern mine at Cluff Lake and
21 some of the research reactors, they've been coming in
22 within the estimates or roughly around the estimates.
23 They haven't been 10 times as much, five times as much.

24 **THE CHAIRMAN:** Mr. Jammal, you want to add?

25 **MR. JAMMAL:** For the record, Ramzi Jammal.

1 Mr. President, it's -- in between what Mr.
2 Elder is talking about from insurance and so on and so
3 forth there is a very powerful tool that the Commission
4 has its hand that it can order anybody in order to carry
5 out the cleanup.

6 As a matter of fact, the Commission did
7 order a non-licensee to clean up a site that was
8 previously uncontrolled.

9 **THE CHAIRMAN:** So the takeaway here is
10 regardless of the amount of money that's right now is
11 sitting about a future decommissioning plan, when the time
12 to decommission the site it will be done. I think that's
13 what the kind of information we just now get.

14 And it's really -- there's no point in
15 comparing one facility to another, they are different
16 types of facility size and activities and history, so
17 very, very difficult to sit down and know whether this
18 particular facility is relating to an American facility.

19 **MS. LAWSON:** I'd like to respond, Mr.
20 Binder.

21 **THE CHAIRMAN:** Go ahead.

22 **MS. LAWSON:** So it will be done by -- it
23 will be decommissioned by the federal government and who
24 is the federal government?

25 **THE CHAIRMAN:** He said ---

1 **MS. LAWSON:** First off, let me just explain
2 from my point of view, please.

3 The federal government, first off, today,
4 here and now, is in big financial trouble. We've all
5 heard that on the CBC.

6 Secondly, the federal government is the
7 taxpayers of Canada and it's of Canada not just Port Hope.
8 I mean this is right across Canada people are paying for
9 what has gone on here for this very unwise decision of Mr.
10 Andy Thorne to buy the property opposite me.

11 **THE CHAIRMAN:** Okay, I guess -- let me
12 repeat it. The decommissioning will be done by Cameco.
13 Okay, can we get that straight, by Cameco.

14 **MS. LAWSON:** Yes, I think I got it straight
15 in my head.

16 **THE CHAIRMAN:** Good. And we're trying to
17 put as much money as we believe will be required to do the
18 job.

19 If by whatever situation that money needs
20 to be augmented, the federal government will pick up the
21 tab. That's really the way the process works right now.

22 **MS. LAWSON:** Yeah.

23 **THE CHAIRMAN:** Anybody else with any other
24 question?

25 Dr. McDill, no.

1 Mr. Tolgyesi?

2 Okay, well thank you very much.

3 **MS. LAWSON:** I would like to invite you to
4 my home, all of you, so you could see for yourselves.

5 And the other problem, of course for me, is
6 that I am inhaling this fluorides all my life and this UF₆
7 that attacks the bones in my body. I wasn't like this
8 before. I was not having to go around with canes like
9 this to hold me up.

10 And I reject this way of measuring, I told
11 you that, and -- and I completely because it isn't borne
12 out with me and it's not borne out with all the other
13 people that we have, as Health Committee, on our lists.

14 **THE CHAIRMAN:** Okay, thank you very much.

15 We now need to move on for a round of
16 questions. Why don't we start -- I'm going to go in order
17 here, Dr. Barriault?

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

19 To Cameco, on the issue of the soil
20 contamination in and around the plant, with the Port Hope
21 Initiative, do you plan on cleaning that up?

22 I noticed you have some wells there and you
23 have some soil contamination.

24 **MR. KODARIN:** Alex Kodarin, for the record.

25 We are not part of the plan for Port Hope

1 Area Initiative to clean that soil up or to remediate the
2 soil, we have other plans in place to take a look at that
3 soil itself and find the proper outlets for that soil.

4 **MEMBER BARRIAULT:** Thank you.

5 Thank you, Mr. Chairman.

6 **MEMBER MCDILL:** Thank you.

7 All the way back to groundwater. I've got
8 your slides, the overburden slide and the bedrock slide
9 and put one over the other basically. The .02 microgram
10 per litre contour is quite a bit broader -- they're from
11 two different things here, this is the one in the
12 bedrocks, this must be -- at the overburden than it is at
13 depth.

14 So what is the approximate depth of the
15 bedrock in that area, first question?

16 Second is; what's blocking the flow right
17 at the edge of -- there's a -- it's a little hard to see
18 what's there, there are a couple of X's just to the right
19 of the contour line, the .02 contour in both -- it seems
20 to back up -- actually I guess it's the .02.

21 I wrote this picture last night. The
22 contours back up against a building or something over
23 there; what is it that's blocking the flow? If you might
24 give me a stab on that.

25 And can you explain why the .02 contour is

1 quite a bit wider at the overburden than it is down?

2 This looks like sort of an icing bag that's
3 tilted on its side and pulled over, for the sake of a
4 description.

5 **MR. LONGINOV:** For the record, Mike
6 Longinov.

7 Yeah, you're correct; this is the two
8 charts, one shows the overburden which is close to the
9 surface, the other shows the -- closer to the bedrock,
10 deeper down.

11 As you can see there's more contamination
12 higher up in the surface. This is -- kind of corresponds
13 to our hypothesis that we had taken, you know, several
14 years ago to suggest that there was activities in this
15 area of the facility many, many years ago at that location
16 on the surface.

17 It is suggested that there is some ground
18 contamination had occurred. This contamination has -- you
19 know, was entered into the soil and is slowly migrating
20 kind of downward.

21 But right now it is not mobile it is
22 covered over with an asphalt. So now that we have it, you
23 know, adequately characterized we're now going to look
24 into avenues as to what we want to do with this in the
25 future.

1 You made mention also about a line with X's
2 on the chart I believe. Those X's and lines just
3 represent fence lines.

4 **MEMBER McDILL:** So subsurface below the
5 fence there's something there that appears to be stopping
6 the contour development. It doesn't flow beyond that,
7 there's nothing going out so there's a -- that's what I'm
8 was saying the icing bag tilted on the side appears to ---

9 **MR. LONGINOV:** Mike Longinov, for the
10 record.

11 That's just what the data that we get from
12 the groundwater monitoring wells suggests. Our expert has
13 drawn those contour lines based upon the data.

14 **MEMBER McDILL:** It looks like on the
15 overburden line, the .02 contour slams up against
16 something right there and it looks like at the bedrock the
17 outermost contour slams up against; something appears to
18 be preventing flow.

19 I mean this is not -- it doesn't look
20 normal. So I'm asking if there's something down there
21 like a big rock.

22 **MR. KODARIN:** Alex Kodarin, for the record.

23 We have nothing to suggest there's
24 something down. The data is what the contours are based
25 on. We'd have to do some further investigations to

1 determine whether there was something in fact blocking
2 flow.

3 **THE CHAIRMAN:** So when you simulate like
4 this, you don't measure the density of the soil, rock
5 formation, structures or anything like that? You don't
6 characterize the depth of the site?

7 **MR. LONGINOV:** Mike Longinov, for the
8 record.

9 The consultant that we do hire to do this
10 work, when they do the drilling, all of the drilling is --
11 the cross sections are detailed. Unfortunately I can't
12 understand it. Geotechnologists would be able to
13 understand that.

14 **MEMBER McDILL:** Maybe I can ask staff if
15 they have any interpretation of why the .02 contours are
16 in the same place at the overburden and the depth?

17 **MR. LEI:** Shizong Lei, for the record.

18 Those contour lines are not -- they are
19 interpreted through the data points available at the site.

20 For the moment, there are 76 monitoring
21 wells there but to answer your question, those lines, the
22 contours near the fence, are kind of artificial.

23 They do not indicate that there's something
24 blocking the flow under the fence right there. Just
25 because of the distribution of the monitoring wells, that

1 gives us that false impression.

2 But the key point at this site is that CSNC
3 staff requested Cameco to conduct a detailed
4 hydrogeological investigation and during this process, we
5 review and give them feedback and they added additional
6 wells.

7 And based on our understanding of the
8 situation, we didn't for the moment ask them to drill
9 additional wells and that's because the groundwater flow
10 at the site is very, very slow and we had a rough
11 estimate.

12 The flow rate is about -- in the bedrock
13 it's about just 1 metre per year, the horizontal velocity.
14 In the overburden, it's around 2.5 to 7.5 metres per year.

15 And throughout monitoring over years, we
16 found that the plume more or less is sitting at the same
17 spot. They are not moving out. From the observation, for
18 example, there is no groundwater -- uranium concentration
19 in the groundwater that has exceeded the drinking water
20 even though the water is not for drink there.

21 **MEMBER McDILL:** I appreciate that the
22 curves are fitted; I have no problem with that. It was
23 just both of them are fitting to exactly the same place
24 which is perhaps unusual since one is at bedrock which is
25 at what depth and the other one is at the overburden.

1 **MR. LONGINOV:** Mike Longinov. for the
2 record.

3 I am not sure. I can't recall what the
4 depth is. I believe it's somewhere around 4 metres to
5 bedrock, but I can't be certain.

6 **MEMBER MCDILL:** Does staff remember?

7 **MR. LEI:** Yes, the bedrock is around 4-5
8 metres deep but the deep groundwater monitoring well was
9 drilled into almost 14 metres deep.

10 **MEMBER MCDILL:** One four or four zero?

11 **MR. LEI:** One 14.

12 **MEMBER MCDILL:** Thank you, 14.

13 And staff is in agreement that the -- this
14 is a legacy issue that we don't have something here that's
15 diffusing up as opposed to something that's percolating
16 down?

17 **MR. LEI:** Shizong Lei, for the record.

18 Staff confirms that's a legacy issue.

19 **MEMBER MCDILL:** Thank you, Mr. Binder.

20 **THE CHAIRMAN:** Okay. Mr. Tolgyesi? Short,
21 we are running out of time, please.

22 **MEMBER TOLGYESI:** So maybe I should not
23 ask?

24 **THE CHAIRMAN:** No, no, no, better ask the
25 questions.

1 **MEMBER TOLGYESI:** J I find interesting
2 about the plumes that the plumes seems to follow the water
3 flow in overburden but in opposite sense. Normally it's
4 going with the flow and in this case it's going opposite
5 the plume extent.

6 So that's what I was questioning again and
7 I was questioning also the overburden thickness you said
8 it's 4 to 5 metres the overburden?

9 **MR. LEI:** Shizong Lei, for the record.

10 The 14-metre deep is the deepest well that
11 has tracking to the bedrock.

12 To answer your question, that's a very good
13 question. The reason the water -- the plume appears to be
14 moving against our perception is because there are some
15 pumping wells in place that are changing the flow
16 direction.

17 But if we look at the groundwater outside
18 the fence near the creek, it's actually moving towards the
19 river.

20 **MEMBER TOLGYESI:** And do you have any
21 correlation between the data collected from pre 2007 and
22 post 2007 monitoring was regarding concentration of
23 uranium in overburden in the bedrock?

24 **MR. LEI:** Shizong Lei, for the record.

25 The additional wells actually confirmed the

1 observation from the earlier wells monitoring data. The
2 trends are still similar.

3 **MEMBER TOLGYESI:** I have a last question to
4 Cameco.

5 In your submission, there were two lost-
6 time injuries up to September. Have they changed? Did it
7 change or it's still two?

8 **MR. KODARIN:** Alex Kodarin, for the record.
9 The number is still two.

10 **MR. CHAIRMAN:** Okay. Monsieur Harvey?

11 **MEMBER HARVEY:** Merci, monsieur le
12 président.

13 In your presentation about flood studies, I
14 just want to know when were completed those studies and
15 have they been adjusted recently taking into account
16 climate change and extreme conditions? It's in page 4 of
17 your presentation.

18 **MR. LEBLANC:** Slide for the slide deck.

19 **MR. KODARIN:** Alex Kodarin, for the record.
20 Two studies were done; one in 2005, one in
21 2008.

22 There have been no updates since that time
23 for the events that you mentioned but they are modelled on
24 100-year flooding and probable maximum flood. So we
25 believe they are consistent with the requirements.

1 We believe they are consistent with the
2 requirements for the studies that need to be done.

3 **MEMBER HARVEY:** Okay. So is the staff
4 satisfied with the studies and there is no need to ---

5 **MR. LEI:** Shizong Lei, for the record.

6 The data study was conducted in 2008 at the
7 CNSC staff's request. Originally, the Ganaraska River
8 Conservation Authority commissioned the study and CNSC
9 staff reviewed their reports. That was around 2005 and
10 found this not sufficient to address the specific issues
11 at this facility.

12 Therefore, since this, staff requested
13 Cameco to conduct another study and they hired a
14 consultant and did a detailed study of the flood risk and
15 CNSC staff also requested to -- they at first assessed it
16 at 100-year flood, but to be conservative we also asked
17 him to give us a scenario and analyze under the extreme
18 condition of probable maximum flood.

19 Probable maximum flood is the physical
20 extreme at a specific location and, in our knowledge, we
21 consider that also would cover the potential climate
22 change effect because that's a physical extreme.

23 And their study concluded that even under
24 the probable maximum flood condition, the highest water
25 level would still be about one metre below the lowest

1 building floor at the facility.

2 **MEMBER HARVEY:** Okay, thank you.

3 Okay; that's fine.

4 **THE CHAIRMAN:** Okay, last...

5 **MEMBER TOLGYESI:** Very quick about these
6 wells. You were saying that the plume is going in that
7 sense because it's pumping. It's -- there is pumping
8 wells.

9 Are these monitoring wells also pumping
10 wells or, if not, where are these pumping wells? They are
11 not on the map.

12 **MR. LEI:** Shizong Lei, for the record.

13 The pumping wells are under the Ontario
14 Ministry of Environment regulation who are dealing with
15 some legacy issues.

16 Not all the monitoring wells are pumping
17 wells; just a few of them which we're dealing with this --
18 it's called a TCE. Yeah, it's kind of a solvent they used
19 in the older times they're no longer using, but there's
20 still some issue there.

21 So the Minister of Environment is dealing
22 with the issue.

23 **MEMBER TOLGYESI:** I was just talking about
24 location because it's not specified where these pumping
25 wells are. Which are pumping wells?

1 **MR. LEI:** Yeah, they are not identified
2 there, but in the reports they submitted earlier they are
3 all identified. And in their annual report they also
4 reported the results.

5 The pumping wells are also sampled
6 regularly along with the rest of the monitoring wells.

7 **THE CHAIRMAN:** Okay, thank you.

8 Anybody else has any -- okay, I'd like to
9 close this hearing.

10 Thank you all, and we will take 10 minutes.

11 Marc?

12 **MR. LEBLANC:** Yes. So this brings to a
13 close the public portion of this hearing with respect to
14 this matter.

15 The Commission will confer with regards to
16 information that it has considered today and yesterday and
17 then determine if further information is needed or if the
18 Commission is ready to proceed with a decision.

19 Obviously, that also includes information
20 provided on Day One. We'll advise accordingly.

21 So yes, Mr. President, we'll take a short
22 10-minute break and we'll resume at five past 11:00 with
23 the Blind River file.

24 Thank you.

25

1 --- Upon recessing at 10:56 a.m./
2 L'audience est suspendue à 10h56
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