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 18th, 2012

Le 18 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:

Mr. Marc Leblanc

Secrétaire:

M. Marc Leblanc

General Counsel :

Ms. Lisa Thiele

Conseillère générale:

Mme Lisa Thiele

--- Upon resuming at 8:09 p.m. /L'audience est reprise à 20h09

THE CHAIRMAN: We're back. The next item on the agenda today is Hearing Day One on the matter of ---

MR. LEBLANC: Day Two, a mistake. Day Two.

THE CHAIRMAN: I just read what's in front of me here.

(LAUGHTER/RIRES)

THE CHAIRMAN: It says Day One. So, first thing, let me start again.

The next item on the agenda today is Hearing Day Two on the matter of the application by Cameco Corporation for the Renewal of Class IB Nuclear Fuel Facility Operating Licence for the Cameco Fuel Manufacturing Facility in Port Hope.

Marc.

MR. LEBLANC: Yes, this is Day Two of the public hearing. The first day of the public hearing, or Day One, was held on November 3rd, 2011 in Ottawa. The Notice of Public Hearing 2011-H-09 was published on August 24th, 2011.

Presentations were made on Day One by the applicant, Cameco, under CMDs 11-H17.1 and .1A and by Commission staff under 11-H17.

The public was invited to participate either by oral presentation or written submission. December 19th was the deadline set for filing by intervenors. The Commission received 48 requests for intervention. January 11th was the deadline for filing of supplementary information. I note that supplementary information has been filed by CNSC staff, Cameco, as well as intervenors.

Participant funding was available to intervenors to prepare for and participate in this hearing. The Commissioner received no requests for funding regarding the chemical fuel manufacturing facility.

Mr. President.

THE CHAIRMAN: Thank you, Marc.

I'd like to start the hearing by calling on the presentation by Cameco, as outlined in CMD H17.1B and H17.1C.

And, Mr. Thorne, you're still with us? Go ahead.

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

11-H16.1B/and 11-H16.1C
Oral presentation from
Cameco Corporation

MR. THORNE: Thank you, President Binder. For the record, my name is Andy Thorne and I'm the Vice-President of Cameco's Fuel Manufacturing -- sorry -- Fuel Services Division. It's late.

It's my pleasure to introduce Alex Kodarin and Mike Longinov.

Alex joined Cameco's Fuel Manufacturing Business as General Manager in June 2009. He's responsible for the production of CANDU fuel assemblies in CFM's licence facility in Port Hope, as well as activities in Cobourg that include the forming, welding, brazing and machining of the zirconium alloys for the nuclear industry in Canada and abroad.

Alex previously served as Vice-President for George Weston Bakeries Ltd. where he oversaw bakery operations for the Ontario and Atlantic regions.

Prior to that, he worked for a consulting

firm in Boston that focused exclusively on engagements in the areas of operations, supply chain and new product introduction.

Mike serves as Manager of Environment and Occupational Health and Safety and joined the company in 1997. In this position, he oversees areas that include occupational and industrial safety, radiation safety, environmental monitoring, security and licensing.

Prior to that, Mike worked for two nuclear consulting firms over an eight-year period that specialized in waste management, decommissioning, health physics, transportation and licensing.

I now turn the presentation over to Alex.

MR. KODARIN: Thank you. Good evening. For the record, my name is Alex Kodarin. I am the General Manager of Chemical Fuel Manufacturing.

I'm pleased to provide some supplementary information that addresses several questions that were asked during our Day One Hearing in November.

Specifically, I will speak to flood studies and groundwater management.

CFM currently operates with a licence that became effective March 1st, 2007. Our primary business is to manufacture fuel bundles for CANDU reactors in Canada using natural and depleted EO_2.

We are uniquely equipped within the Canadian nuclear fuel manufacturing industry to provide significant support to the nuclear power generation community.

We are requesting a single change to our existing licence. The change we are requesting is a 10-year licence term. We are confident that an extended licence term is justified given our consistent demonstration of managing a safe, clean, and reliable operation.

In addition, the risks associated with the operation of CFM are low. These risks have been adequately managed historically and will continue to be managed with the same emphasis placed on keeping safety and environmental risk as low as reasonably achievable.

In short, we have demonstrated past performance that qualifies us to carry out future activities competently.

During Day One discussions, we received some questions from the Commission on results of flood studies conducted in the areas surrounding the facility. The flood study concluded three key conclusions.

First, a probable maximum flood event would not impact CFM.

Secondly, the finish floor elevations of

our buildings are well above the maximum flood elevation. And the maximum rainfall event in West Gages Creek would not create a flood event that would impact CFM's operations.

The slide shown here predicts the extent of flooding at West Gages Creek, and north is roughly at the top of the page. The modelled 100-year flooding area is shown in red. The CFM licence facility is shown near the bottom middle of the slide, outlined in yellow.

And as you can see, the flooding in the watershed falls well short of the licence facility and it falls short of our employee parking lot on the east side of our property as well.

At Day One Hearing, CFM was also asked to provide further detail on our groundwater management program. Our program has been in place for several years now, and CFM is committed to continuing with it.

We now include some 76 wells in our groundwater monitoring program. With the assistance of third-party experts, CFM has continued to enhance its understanding of the extent of historical uranium in groundwater.

During the licensing period, 23 additional wells were added to our inventory to help with delineation. With this further delineation, experts have

concluded that uranium concentration in groundwater is not increasing and that there is no evidence indicating off-site migration.

We have also reconfirmed that the on-site concentration patterns are consistent with historic use of uranium. There are no uranium sources from current operations.

This figure depicts the concentration of uranium in groundwater for the overburden. A similar diagram exists for the bedrock, which we have included in the CMD update document. The red dots are the new wells drilled for further delineation and the blue dots were wells in place prior to this latest licensing period.

Both the overburden and bedrock diagrams indicate that the uranium in groundwater is isolated to the northeast corner of our main facility. As I mentioned earlier, our studies confirm that the source of uranium in groundwater is from historic activities and that uranium is not migrating off site. We will continue to monitor the situation.

And as part of our continual improvement program, we will further assess the nature of this historic source of contamination and take appropriate action in 2012.

The material we outlined during Day One in

November, along with the information provided today, both demonstrate that CFM has operated the facility in a safe, clean and reliable manner and is qualified to receive a new 10-year licence.

The facility continue to comply with the *Nuclear Safety and Control Act*, all relevant regulations and our current licence.

We are proud of our past performance and remain committed to operating in a compliant manner in the future.

Thank you for your time.

THE CHAIRMAN: Thank you.

I'd now like to move to the presentation from CNSC as outlined CMD H17.B.

Mr. Elder, please proceed.

11-H17.B
Oral presentation by
CNSC staff

MR. ELDER: Good evening, Mr. President, Members of the Commission. My name is Peter Elder, Director General at the Directorate of Nuclear Cycle and Facilities Regulation.

At the front table with me today are Mr.

B.R. Ravishankar, Director of the Nuclear Processing Facilities Division and Mr. Julian Amalraj, the Senior Project Officer in the same division. We also still have our members of the CNSC staff here as well as those available in Ottawa by teleconference.

We are here to present CMD -- Commissioner Member Document -- 11-H17 and 11-H17B in regard to the licence application for Cameco Fuel Manufacturing in Port Hope.

Similar to our presentation on the conversion facility we will go over very briefly the Cameco Fuel Manufacturing, our overall licensing performance, the Day Two supplemental information and then our conclusions and recommendations.

Cameco Fuel Manufacturing, we refer to as CFM, is owned and operated by Cameco Corporation. It is a Class 1B facility, which you can see is located in Port Hope, a few kilometres away from the conversion facility.

CFM employs approximately 190 people in various capacities and has been in operation since 1965 under various management. It manufactures uranium dioxide pellets and assembles nuclear fuel bundles for use in CANDU -- in Canadian nuclear reactors. It has and is capable of handling depleted natural and enriched uranium.

The current licence expires this February

and as Cameco’s noted they’ve applied for a licence with a term of 10 years.

So now Mr. Julian Amalraj will quickly go over our assessment.

MR. AMALRAJ: Thank you, Mr. Elder.

Good evening, Mr. President, and Members of the Commission.

For the record, my name is Julian Amalraj, Senior Project Officer at the Nuclear Processing Facilities Division.

During Day One Public Hearing staff presented details on CNSC compliance verification plan and associated activities which included 15 on-site inspections for this facility.

From their review of CFM’s compliance performance in the current licence period CNSC staff find that CFM continues to maintain comprehensive and mature core programs in all safety and control areas.

CNSC staff’s assessment of CFM’s overall performance in all 14 safety and control areas is satisfactory.

As part of Day Two supplemental information we now present key statistics in safety and control areas of radiation protection, environmental protection and conventional health and safety.

Presented here in this graph is the maximum effective dose to a member of the public for CFM.

From the review of the data presented CNSC staff conclude that the maximum effective dose to a member of the public from CFM's radiological emissions remains a very small fraction of the regulatory limit of one millisievert per year with the maximum value of 0.037 millisievert recorded for the year 2011.

The increase in 2011 values were attributed to temporary storage of manufactured fuel bundles at the facility. CFM is working to reduce this increase by constructing a shielded storage facility that is expected to be operational in 2012.

This slide presents the annual effective dose for a nuclear energy worker at CFM. The data is taken from CFM's annual compliance reports for 2006 through 2010.

As evident from the graph, the average effective dose to workers at CFM during the current licensing period is low and the maximum effective dose is well below regulatory limits.

Of relevance to CFM due to production workers handling of uranium pellets manually is the annual extremity and skin doses, hence we have presented the same here.

Again CFM has monthly and quarterly action levels for these parameters. The annual average extremity and skin radiation doses, as well as the maximum extremity and skin doses received by nuclear energy workers at CFM are well below regulatory limits.

We now present key statistics for the safety and control area of environmental protection.

Statistics presented here show releases by the facility to the environment and in subsequent slides we present the receiving environment monitoring results to show impact.

In this slide we show CFM’s total annual uranium releases for the current licence period. There are 12 stacks monitored at this facility.

The current licence limit is based on derived release limits with the regulatory limit of one millisievert dose to public as the basis. For the proposed new licence CNSC staff have proposed a more stringent value using 50 microsievert dose to public based on ALARA principles.

The facility is also governed by action levels that ensure the overall emissions are monitored and controlled effectively.

CFM’s annual uranium in air emissions are well below licence limits with the maximum values recorded

in 2008.

CFM's total annual uranium and liquid effluent releases for the current licence period is show here. CFM's annual uranium and liquid effluents are well below regulatory limits with the maximum values recorded in 2010.

We now present monitoring data on the receiving environment starting with uranium concentrations in ambient air around CFM.

The graph shows CFM's results from four high volume air samplers located at the facility when compared with the Ontario Ministry of Environment's proposed air quality standard for uranium which is 0.03 micrograms per meter cubed.

Uranium concentrations in ambient air around CFM facility are well below Ontario's air quality standard.

This slide presents the average uranium concentrations in soil at the CFM facility. The values as reported here are from the licensee and based on a soil monitoring program which includes 23 locations around the facility with results reported on an annual basis.

The average uranium concentrations in soil at CFM are below Ontario MOE's guideline for uranium in soil for residential land of 23 micrograms per meter

cubed.

Another key component of monitoring receiving environment is groundwater. During Day One Public Hearing the Commission requested data on groundwater flow direction as well as historical contamination data. This information is submitted to CNSC by the licensee on an annual basis with the last report submitted by April 2011.

CNSC staff are satisfied with the information submitted in the last annual groundwater report as well as information provided by CFM for Day Two.

Another safety and control area of interest to the Commission and public presented here is conventional health and safety. For CFM there were no safety significant events during the review period.

CNSC staff is satisfied with CFM's event detection reporting, investigation processes and timely implementation of corrective and preventative actions. Overall performance of the licensee in this safety and control area was satisfactory.

During Day One Public Hearing on November 3rd, 2011 Commission requested additional information on outstanding action items from compliance inspections related to management systems and radiation protection. They also requested information on maximum probable flood

line for CFM facility and groundwater well locations and historical contamination data at this facility.

CMD 11-H17.B presents status updates on outstanding action items from inspections. All but one action item have been closed by CNSC staff. CFM has committed to completion of the open action item associated with design control by February 2012.

CFM has submitted information on groundwater well locations as well as historical contamination as part of CMD 11-H17.1B as well as in today's presentation here.

CNSC staff are satisfied with the information presented.

Mr. Elder will now present CNSC staff conclusions and recommendations for this facility.

MR. ELDER: CNSC staff conclude and based on the licensee's application and past performance and the licensee's -- and also our review of the programs and resources in place, that CNSC's application -- CMF's application for licence renewal meets the requirement of the *Nuclear Safety and Control Act*. Cameco has operated CMF facility in compliance with the (inaudible) regulatory requirements during the current licence period and is qualified to carry out the activities as per the proposed licence for a 10-year term.

Additional information presented here today does not affect CNCS’s staff's conclusion and recommendations that were presented at Day One.

Our recommendations to conclusion are, to the Commission are that they approve the issuance of a 10-year nuclear fuel facility operating licence to Cameco Fuel Manufacturing Incorporated and they also accept CMF’s revised financial guarantee of $19.5 million. This is an increase from the current one of $17.9 million. This concludes staff's presentation, we are now available to answer any questions.

MR. CHAIRMAN: What we're going to do is a little bit different. We’ll reserve all our questions for the last round and we’ll go right into the intervention and starting with the Municipality of Port Hope as outlined in CMD 17.14 and 17.14A, Mayor Thompson the floor is yours.

11-H17.14 / 11-H17.14A
Oral presentation by
Linda Thompson

MAYOR THOMPSON: Thank you, for the record Mayor Linda Thompson and with me is our CAO Carl Cannon of the Municipality of Port Hope. And again on behalf of all

the municipality's residents, Members thank you for being in Port Hope.

I believe you have a good understanding of our community profile and we are very pleased that you do.

I would just comment on, in regards to our community, in some questions that were asked in the earlier hearing in regards to the conversion facility and that is in regards to a Centre of Excellence. Port Hope has been very actively involved in economic development and part of our economic development strategy includes a Centre of Excellence.

And in fact since back since 2007 we have worked extremely cooperatively with Cameco, with our local MP, MPP and a number of post-secondary education facilities to build on that Centre and that is something that we are, we support as a community through our economic development strategy and through other areas.

I just wanted to make one other note outside of my regular presentation. Listening to the hearings over a period of time, I was first elected back in 2000 and I've been very privileged to be re-elected four times in Port Hope. I get relicensed every four years now as opposed to three.

Back during that time, Cameco and attending hearings and that, there was often not lot information in

the community. If there was an incident at Cameco we didn't always know about it. I know I have every faith that the CNSC did.

That is very different, back in the last hearing, to the standards and communication that happened today are like night and day. And I think there has been a continuous improvement that from my perspective, as an elected official in this community, it is like night and day.

The information that is provided to Cameco to the community, the information that is provided by the CNSC staff, the open houses that are held, the forums. There is a huge amount of information out there and I will say I think we've gone from one end of the spectrum to the other. And the more information you provide the more questions that get asked and that's good but sometimes you can also go a little too far, in my personal opinion.

On having said that, you know we do, as a municipality, do our due diligence and we have hired Stantec Consulting to do a review of Cameco's Port Hope conversion facility. And through that peer review -- here we go, sorry -- just some general comments as we made before, we appreciate that the licence renewal is clear and concise; Cameco has made substantial improvement to operations and community relations. They have responded

to several key challenges that emerged during the previous licence period and have maintained and improved its public information program during the current licence period. Cameco's staff participates in those regular meetings with the Mayor, CAO and provide regular updates to Council, staff and the community.

And the key changes noted in Cameco's safety culture including the improvements to management system with the implementation of a corrective action process and incident reporting system, including reporting to the municipality, a positive development promoting higher standard of safety and environmental performance going forward.

The Stantec review did identify key challenges. There is a, as is identified in our written submission, Cameco has identified large quantities of combustible, non-combustible and low-level radioactive and recyclable waste, currently stored on-site. And they've acknowledged that this, the inventory and lack of available low-level radioactive management facility as a key operational challenge.

Storage of large quantities of combustible waste in a populated area is inappropriate and no plan is provided for disposition of this waste. Cameco should be encouraged to construct an appropriate, secure low-level

radioactive waste storage facility and determine a long-term approach to waste management.

In regards to the decommissioning plan, we raised the same concerns that we raised previously with the conversion facility and to ensure that a facility is available and those costs are appropriate for the assumption of low-level radioactive waste arising from decommissioning.

In regards to the proposed new licence, we are very supportive of the shorter, more transparent licence and the new licence condition handbook. And where changes have been implemented they generally enshrine processes, procedures already developed by Cameco and represent an incremental tightening of radiation protection or emission standards.

The municipality advocated during the previous licence renewal process for a reduction in release limits and is very pleased to see the reduction reflected in the proposed new licence. We also support the additional requirements introduced for recording acquisition inventory and disposition of nuclear substances and the reduction action levels of uranium in air quality and liquid affluent monitoring.

A 10-year licence represents a long period of time during when, which many changes could occur.

During the past 5-year licence period the CFM facility changed ownership, underwent an environmental assessment and cancelled their new production line. Enhancement to management and safety culture are relatively recent and processes bring CFM into alignment with other Cameco facilities is ongoing and we believe very successful.

The municipality does believe a 5-year licence or a 10-year licence with the commitment to a mid-term review would be more appropriate.

Again, we thank you for the opportunity and reaffirm that the municipality has a very positive relationship with Cameco. They're an important member of our community, both economically and socially, and we strongly support the renewal of Cameco's Nuclear Fuel Facility operating licence for the Port Hope fuel manufacturing facility.

Thank you.

THE CHAIRMAN: Thank you. Questions? Monsieur Harvey.

MEMBER HARVEY: We start with a challenge which is the storage on the site of different waste or products. So we start by the staff asking, is there a limitation to store on site Cameco decide how all the different wastes are managed on site?

What's in the licence?

MR. PETER ELDER: In the licence, they are allowed to store the waste produced from their facility in accordance with a waste management plan and that plan has to -- has to describe how they will deal with the waste streams.

So there is now -- and this is a fairly new requirement to make sure that there is a waste management plan for each facility.

So some of the -- in some ways, some of the challenges Cameco has identified are the fact that we forced them to write down their plans.

So this is something we are aware of but there's nothing that says there's a certain volume you can store. You must be able to store it safely on site.

MEMBER HARVEY: But do you have on hand such a plan now?

MR. PETER ELDER: Yes, there is a plan and it's -- it describes what they -- they intend to do was to send it somewhere else in Canada and there they're saying: Well, there isn't a facility right now to send it to.

So in that regard, you may have heard this is not an issue that is unique to Canada -- to Cameco and we have been encouraged and encouraging NRCan discussions with all the owners of low-level waste about some sort of central approach or centralized approach to low-level

waste.

So NRCan does have a working group that includes the -- well, I'll say the "small owners of waste" other than OPG that has a proposal for their repository for low-level waste.

So there is a group. I believe Cameco has been participating in that one. If they're not, we'll get them in touch with the people in NRCan.

MEMBER HARVEY: I turn to Cameco and have their comment.

What are your intentions about that storage?

MR. ALEX KODARIN: Alex Kodarin, for the record.

MEMBER HARVEY: And give us some indication what's in your plan. What is in the plan?

MR. ALEX KODARIN: Alex Kodarin, for the record.

We, obviously, are -- are sensitive to the sensitive to the fact that there is storage on site of low-level waste.

We have, over the last year, put a significant effort into developing plans to deal with that waste. We have very specific plans for all the types of waste and we intend, over the next several years, to

execute those plans.

So it is our intention to dispose of this low-level contaminated waste.

MEMBER HARVEY: That just ---

THE CHAIRMAN: Can I jump in?

Can we stop dancing around this? Why don't you give us the short-term? Is it in the short-term, the next two/five years, keep the waste on site? And the next five years, find some area or the long-term view is for a facility yet to be built?

I'd really like to know a little bit more details about what is the plan.

MR. ALEX KODARIN: Alex Kodarin, for the record.

We have several types of waste there. We have -- we have contaminated combustible waste which we have several options available to us.

One is that we did mention in Day 1 hearing was to have that incinerated in Blind River. We're just in the beginning of the discussions around that possibility. That is a viable option for -- for CFM.

We have other ways such as metal contaminated wastes which we are actually already in the process and started last year, about mid-last year, to start to process that waste. We have two -- two options

available to us there which we've already started to use.

One is to clean the waste on site which is we started to do and, for waste that we cannot clean on site and recycle, we have an outlet with our Port Hope conversion facility to do some grip blasting and processing on their site.

So that process is already under way.

So when I say we've got a plan in place, in fact, we are already starting to execute again some of that plan. We also have, over the last year, dealt with some contaminated oil and found an outlet for that.

So I can provide more details, I suppose, and we have the plan in place -- it's rather lengthy -- but the reality is we do have a short-term, a near-term plan and also a long-term plan not to store the waste but, in fact, to dispose of the waste.

THE CHAIRMAN: Thank you.

Monsieur Havery?

MEMBER HARVEY: Yes. The total volume on your side, waste volume, it's the result of how many years of operation?

MR. ALEX KODARIN: Alex Kodarin, for the record.

Some of the -- the waste that's stored on site is up to 20 years old. That's not all the waste.

It’s anywhere from 20 years to as recently as last year.

MEMBER HARVEY: Each year, you add to that, I suppose, and what would be the percentage of new volume coming each year?

I think of the actual volume.

MR. ALEX KODARIN: Alex Kodarin, for the record.

The estimate that we’ve -- we’ve -- we have right now is that the -- we’re adding about a 100 drums of waste per year to the inventory. That amounts to roughly 30,000 tons -- sorry, 30 tons.

MEMBER HARVEY: In the Port Hope written submission, on page 3 of 5, they mention the -- Cameco identify using 41 intermodal freight containers for the storage.

This is the -- this is part of the volume on site?

MR. ALEX KODARIN: Alex Kodarin, for the record.

Drums and metal waste, other contaminated waste are stored in trailers. That’s the storage mechanism right now. So it’s drummed and then stored in trailers, on site.

MEMBER HARVEY: Just turning to the staff, so you don’t see any problem with the current plan to

manage waste on site?

MR. RAVISHANKAR: Ravishankar, for the record.

The waste management program was -- a document was submitted to us in March of 2011 and this information had been provided and that was found acceptable by CNSC.

MEMBER HARVEY: Have you been on the site since and have you been -- did you do some kind of inspection of the -- of that storage?

MR. RAVISHANKAR: Yes.

MEMBER HARVEY: Yes?

THE CHAIRMAN: Question?

Dr. Barriault?

MEMBER BARRIAULT: Thank you, Mr. Chairman.

I'm looking at the CNSC slide, page 3. The trailers that you're describing, are those behind the plant that we see? Those white trailers?

MR. ALEX KODARIN: Alex Kodarin, for the record.

Yes, those are the trailers.

MEMBER BARRIAULT: Are they in a fireproof-secure state?

In other words, if one of them caught fire, what would happen to the rest of them?

Are they on rubber wheels or flat beds or?

MR. ALEX KODARIN: Alex Kodarin, for the record.

There is access there for proper firefighting. We have been in consultation with the Port Hope Fire Department. They are aware of that -- that storage area and they're -- they're also okay with the -- the means or the access they have to those -- those trailers.

For the most part, the trailers don't -- are not combustible as well so there is that piece of the -- the puzzle there as well there.

The contents inside are drums or metal so the contents themselves are not highly combustible.

MEMBER BARRIAULT: Do you have a sprinkler system in these or are they just -- just regular trailers?

MR. ALEX KODARIN: The trailers do not have sprinkler systems.

MEMBER BARRIAULT: So theoretically, there's potential for -- for a fire?

THE CHAIRMAN: I think the Fire Marshall is still here and he may want to comment from his perspective on this.

MR. OLAF LAMERZ: Olaf Lamerz, for the record.

When it comes to the facility and the way that the Municipality has an agreement with them operating and as long as they're following all the appropriate rules and regulations that apply to that type of storage and the way that they're set up, you know, that's an issue for the Municipality and their By-law Division as well as the Fire Service to decide whether or not it meets all the appropriate regulations in place for that type of storage.

MEMBER BARRIAULT: If I understand correctly, the Municipality would prefer to have a secure fireproof environment for these?

MS. THOMPSON: To clarify, yes, the Municipality and the Municipal Fire Department does have a memorandum of understanding and works extremely closely with Cameco in regards to their site.

We would support any assistance that could be provided to deal with these materials.

MEMBER BARRIAULT: How does Cameco feel about that?

MR. KODARIN: Alex Kodarin, for the record.

I should add that the picture you're all looking at is an old picture, older picture, and since that picture was taken, a fair number of those trailers have been removed from site. In fact, probably more than half of them are now no longer there.

So I think we are, in the last six months, we've made quite an extensive progress on dealing with this stored waste -- both metal waste which we've processed more than 20,000 Kg, kilograms of waste.

So we're moving some of those trailers that contain metal waste and also our drummed combustible waste has also been, for an interim basis, moved off site, out of trailers and into a secure storage at our Dorset Street location.

So, again, we are obviously taking this very seriously and trying to make positive steps to deal with this long-term storage issue of waste and also make the facility safer; obviously, store the waste in the safest manner as possible.

MEMBER BARRIAULT: So all of that is low-level waste?

MR. KODARIN: Alex Kodarin, for the record.

Yes, it's all low-level waste.

MEMBER BARRIAULT: With regards to complying with the wishes of the community, are there any steps towards construction of an appropriate, secure area for this?

MR. THORNE: Andy Thorne, for the record.

Just to give a little bit of a divisional perspective to this discussion.

So we have set up the Fuel Services Division and that creates some opportunities for us in the fact that we can create synergies from the fact that we're operating three licensed facilities together.

Alex and Dale, who you've met earlier, is a part of the same management team and as a result of that, we're able to have dialog in relation to areas that we can help each other.

Alex has given you some examples of some of the historic waste we see at CFM. It’s material that's been there for many, many years and I think it's fair to say, in the past, the facility has struggled to find viable outlets for that waste material.

As a result of the purchase of Zircatec, Cameco's purchase of Zircatec, we've been able to leverage some of those synergies. We're in the infancy stage of that synergy, leveraging those synergies. But this last year has been quite successful for us.

We have a great blaster that Alex mentioned at the Port Hope conversion facility, which is underutilized, has some spare capacity. And we've been utilizing that capacity to deal with contaminated scrap steel and we've been quite successful at doing that.

We also have, at Dorset Street location, a warehouse that was also mentioned in the Port Hope

hearing. It's a licensed facility, it's a secure licensed facility, clean and well-maintained.

And as a result of, again, a conversion facility working with Cameco Fuel Manufacturing, CFM are now able to utilize that storage space and that secure and clean and safe storage place for the waste material while we look at options to deal with that on a permanent basis and moving forward.

So, you know, we've talked about some of the discussions, very early discussions we've had with staff in relation to options related to contaminated combustible waste material going to Blind River. We also have other options outside of Canada for dealing with that material.

So I think it's fair to say that we're addressing some of the legacy issues that we've got in a proactive manner and we're committed to making sure we do that safely and protecting the environment.

MEMBER BARRIAULT: If I understand correctly, you've also got combustible oils.

Do you have a great deal of those? Are they radioactive?

MR. THORNE: Andy Thorne, for the record.

So, again, the Port Hope conversion facility has a lot of history with dealing with

contaminated oils. We have a specialist on staff who reports to the Director of Compliance and Licensing who's a specialist in waste and waste management, has a lot of experience with dealing with oils and liquids.

Those oils that we see at CFM do contain small amounts of uranium and they have to be dealt with appropriately and the appropriate waste streams found to deal with those.

MEMBER BARRIAULT: If you were going to put a timeframe on the management of this in a permanent manner, what would you be looking at?

MR. THORNE: Andy Thorne, for the record.

So we have had some discussions internally in relation to this.

We have -- we've set ourselves a strategic goal of trying to eliminate all historic waste that we see on site over the next five-year period and, in addition to that, creating plans to make sure that waste in the future has a viable outlet.

So those are really -- we're still formulating those plans, but that's -- we're trying to set ourselves some goals in the long term here.

THE CHAIRMAN: Okay, we've got to get moving. Staff, last word on this, please.

MR. ELDER: Just I'm going to go briefly to

our fire protection specialist, Grant Cherkas in Ottawa because these containers are one of the things that we do look at during our fire inspections.

MR. CHERKAS: For the record, my name is Grant Cherkas, Fire Protection Specialist with CNSC staff.

We wanted to confirm that the hazards represented by the storage of combustible and non-combustible materials external to the facility were evaluated by a detailed fire hazard analysis.

The analysis concluded that there was adequate segregation and separation of the material from, between the different piles and between the buildings and other external equipment such as transformers and liquid hydrogen storage tanks; that there was not an unreasonable fire risk and not a risk of propagation to the main facility; that gave staff the assurance that there's adequate fire prevention protection measures being maintained.

We concur with the recommendation that reduction of combustibles is always desirable. Thank you.

THE CHAIRMAN: Okay, any other subject? No, no, just the intervenor.

Okay, thank you. Thank you very much.

The next presentation is a presentation by Mr. Dan Rudka, as outlined in CMD H17.24.

Mr. Rudka, the floor is yours.

11-H17.24

Oral presentation from

Dan Rudka

MR. RUDKA: Thank you very much, Mr. Binder, and good evening to all.

As you know, I'm a former nuclear energy worker and I want to give you some perspective on some of the things that I've run into in my past because we've been hearing a lot of positive reports on lost-time injuries at Cameco's two facilities, but I'm wondering if you're getting the full picture.

It's concerning the various exposures of uranium that cause illness, cancer disease as well, and well after the initial exposure. This is due to a latency period before symptoms and, therefore, it's usually not regarded, if ever, related to the nuclear exposure or contamination.

As a former employee of Zircatec, now Cameco, I was twice tested for lung burden counts in a questionably short period of time. It was with less than a year's time. I was told that the test indicated my lungs were fine.

In 2001, after some years of suffering with

serious lung problems, I was diagnosed with a rare, near-fatal lung disease. Testing in 2007 verified my lungs were contaminated with Zircatec, now Cameco's uranium, resulting in severely damaged disease and failing lungs. I was tested for lung count at Cameco and their plant, I don't know why, they didn't catch the contamination at that point.

I also wore the ring fingers to monitor my skin dose. My arms, hands, face are covered in scars that are quite visible to you. It's a recognized secondary condition of exposure to radiation.

Yet, no one at the company or the CNSC has ever acknowledged this obvious condition as related to nuclear exposure and it's most disappointing because I would think that it's the CSNC's job to know. It also would be the company's job to know.

So detection methods, I would say, obviously in my case, have not been reliable.

Now, a few recollections that will always be in question. The day that I was not issued a dosimeter, I was told basically they didn't have one for me and they sent me off to work. Or the Friday evening, when I was leaving the plant and set off the radiation detection system at the security office, I set that off three times and I was told that it would be taken care of

first of the week. Monday I went in and there was no report, no nothing issued. Nobody knew anything about it, apparently, other than the security guard. And years ago, it was discovered that contaminated water was piped into the drinking water and shower water of the plant.

Now, I, along with many others, was exposed to this, but it was discovered while we were on temporary layoff. We were never officially told afterwards or warned of that incident.

Now, I guess, you know -- before I get to that, as reported, this plant's highest dose, the CFM plant, was like 9.5 millisieverts in 2008. But the company, Zircatec, reported that I may have received well over 30 millisieverts in 1993-94. I expect the dose was higher due to inhalation and, sadly, the CNSC itself has not done, as Linda Keen, former Chairperson of the Board had directed some time ago for the company, that’s Cameco, Health Canada, and the union, I expect under the CNSC’s guidance, to find a resolution to my situation. That has never been done.

Surely the CNSC has no interest in the medical end of exposure to workers. This is left as a union responsibility, and no one forces any obligation for the union to respond. This is a union that you’ve already heard from today, a union that will not respond and is not

accountable to a member, that is me, contaminated under their watch. Excuse me.

So a person in my position seeks outside assistance by way of occupational health clinics. After a lot of scurrying around trying to find where to go, I was advised of a certain individual that could help me with the Workers' Safety Insurance Board claims. And the expert that I was directed to for the nature of my uranium exposure turned out to be a former Cameco doctor, and he has never mentioned this conflict of interest. Needless to say, I don’t see him any more.

When I attempted to speak to our former local MPP, Lou Rinaldi, who has written a written submission about my exposure, he asked of my doctors. When I attempted to explain the difficult issues around diagnosing this type of exposure, he stated, “Your doctors are no good.” And I was quite perturbed by that because I have some of the best respirology(ph) doctors in the country and along with a few others.

And when I explained that to him, he reiterated that they were no good.

So after 17 years of no effort, or with lots of effort with no resolution, I can attest that the present system within around the nuclear system or nuclear industry is perfect in regards to failing the exposed

worker and that is why lost time is never shown by way of exposure injury.

This must change. There is a need for a separate compensation system for nuclear energy workers.

In my experience, the CNSC either ignores or does not understand the face of exposure when it's been dropped on their doorstep and, either way, the CNSC is doing a disservice to the people that they are to protect and this lends reason to the need of independent medical testing, studies and treatment.

I would ask that you consider the following suggestions for both licence applications.

First, the industry needs an independent medical watch for workers and public support, professional medical people that have the ability to test people for radiation, uranium exposure and treat them, and there is treatment. This town, because the nature of the main industry, needs medical observation that has never been allowed and should have been in place long ago.

And long overdue with no excuse not to be here is a CNSC office on site in this town. You have CNSC offices at all of the nuclear plants, but it's surprisingly absent from Port Hope, and I would wonder if they'd like to respond to this afterwards. With all that is happening around this town in regards to nuclear for

the next 10, 15, 20 years, the CNSC should be camped out in this town's backyard and they should have been here long ago.

Now, it would also be important to keep the townspeople informed. Yes, there's been a far better effort at that over the years, but I think it would be productive for the CNSC to hold regular public meetings, regardless of licensing, with Cameco and the Port Hope Area Initiative reporting on plans, progress, problems, concerns and solutions with public input.

And lastly, I would hope that the CNSC Board Members could understand that a two-year licence period would better serve this community. It's the community that will most be affected by the future of the nuclear industry, the clean-up, storage and all else around these projects. However, I know the CNSC will relicense Cameco regardless of many issues.

But with the state of the soil, the water, the wells all around these plants, the air and the environment in general as ongoing issues and considering health issues, too, I really think that their licence, in reality, should not be renewed.

This is the time, if there ever was one, to consider removing these facilities from the lakefront and the town to a much safer location. If you must renew this

licence, use the next two years to come up with a viable plan for relocation.

Two comments I will end with. One was from CEO Tim Gitzel from Cameco that stated, “We look for people who fit our culture and line up to our values.” And these people are some of the same people that overlooked the exposure, resulting illness and disability that so seriously affects me, burdens my family and has changed the future of all that we, as a family, had ever hoped for.

Is this the fit, the culture and values that this company is striving for, you know, the absence of exposure incidents by way of refusal to acknowledge and assist in the face of evidence?

And finally, retiring CEO Jerry Grandey stated to the CNSC and Globe and Mail that he learned it’s most important to be transparent about mistakes. If these words held true, I would probably not be here tonight.

Thank you very much.

THE CHAIRMAN: Thank you. Questions?

Dr. Barriault.

MEMBER BARRIAULT: Thank you, Mr. Chairman.

It begs the question, really. I would assume that you worked through Workers’ Compensation of Ontario?

MR. RUDKA: I just explained the reasons that I have tried to go through the compensation system. Workers' Compensation does not understand anything about radiation nuclear. As you people yourself said, it's complicated. They need an outside source to go to. They return to people like the CNSC for answers or to the industry, and that doesn't work, so...

MEMBER BARRIAULT: The second issue with regards to the physician that does not disclose that he was, quote unquote, "a company physician", you had the option of reporting that to the College of Physicians and Surgeons of Ontario.

Did you go that route at all, or...?

MR. RUDKA: Reporting to the College of Physicians and Surgeons. No, I haven't.

MEMBER BARRIAULT: They're the licensing body for these physicians, is the reason why I'm asking that.

MR. RUDKA: No, I realize that.

MEMBER BARRIAULT: Okay.

MR. RUDKA: I understand that with that conflict, but I have enough on my plate without having to pursue another problem, sir, thank you.

MEMBER BARRIAULT: Okay, thank you.

Thank you, Mr. Chairman.

THE CHAIRMAN: Can I just jump on that? There is a Durham medical officer, isn't there, in the region? There's a public -- I don't know what the exact title is, but there is a medical authority in the region.

I'd expect that that particular individual or the institution would be very well conversed with medical issues associated with radiation. Did you go there?

MR. RUDKA: No, I have not.

THE CHAIRMAN: Why not?

MR. RUDKA: I'm having trouble, obviously, getting direction. I have no union support, no company support. The CNSC is distant. So I'm left to my own means. And like I said, the system is set to fail. There's so many things going against you from the politicians right through to doctors that fully don't always understand the nature of radiation poisoning and especially in regards to latency periods.

Of course, they're starting to understand better, but they don't seem to have all the information that they should have.

THE CHAIRMAN: Okay. Anybody else, questions? No?

Mr. Tolgyesi.

MEMBER TOLGYESI: When you're saying, Mr.

Rudka, that CNSC has no interest in medical end of exposure to the workers, you mean medical or you mean compensation?

MR. RUDKA: No, sir, I mean medical, not compensation. I refer to medical.

We have to first recognize the medical before you can go compensation, obviously, and I can't get people to recognize the medical even though it's -- I wear it, physically.

MEMBER TOLGYESI: The staff has any comments on this?

DR. THOMPSON: Patsy Thompson, for the record.

I would say that that's obviously the case. The mandate of the CNSC is to protect workers' health and safety as well as members of the public through the Radiation Protection Regulations.

There is very stringent requirements in terms of radiation protection programs, including monitoring of doses to workers, and, as Mr. Rudka said, you know, the workers have to submit urine samples. There's body dosimeters that are being worn as well as extremity dosimetry.

The CNSC process when, for example, action levels are exceeded is that the licensees have to take

action to restore the effectiveness of the radiation protection program and if there is a suspicion of an exceedance of a dose limit, there’s a procedure where the worker is -- this is reported to the CNSC, the worker is removed from radioactive work until an investigation is done and the doses are confirmed through independent verification.

All the -- this information is reviewed by CNSC technical specialists in dosimetry and assessed to determine whether these are personal doses or if it’s a dosimeter, for example, that’s been left exposed without been worn.

As far as I know, all the information was -- that we have reviewed over the years for Mr. Rudka, we have not had any indication of exposures above the worker dose limits for whole body dose, as well as for a skin dose and that -- that’s the information we have right now.

But certainly we do take very strong actions on monitoring and controlling worker doses and we’ve taken certainly actions on potential overexposures.

One of my duties as a designated officer of the Commission is to review potential overexposures and not return workers to work until we are assured that there are adequate mechanisms in place to correct the situation and make sure it doesn’t happen again.

MEMBER TOLGYESI: Are your comments and results available to provincial authorities like Compensation Board if requested?

DR. THOMPSON: Patsy Thompson, for the record.

As we've explained in the past, the -- all worker doses are -- the dosimetry is reviewed and approved by the CNSC. We licence Dosimetry Services and the Dosimetry Services have to submit every single radiation dose for workers to Health Canada's National Dose Registry.

In the case of a compensation case with a provincial authority, I'm not sure what the process would be, but Health Canada are the keepers of the dosimetry information. If we were asked to provide assistance we certainly would.

I don't know if -- I'll just check with my colleague.

Mr. Bundy will speak of the CNSC's experience in terms of assisting with provincial authorities.

MR. BUNDY: For the record, Kevin Bundy.

Yes, I have been -- we have been, in the past, approached by the different Workers' Compensation Boards across Canada -- very infrequently, not that often

-- and been asked to make a judgment on certain cases on radiation -- on an instance of a disease and possibly due to radiation. We have not been asked, as far as I know, with respect to Mr. Rudka's case.

MR. RUDKA: Okay to comment?

THE CHAIRMAN: By all means, go ahead.

MR. RUDKA: As far as Patsy Thompson has to say, then I look to you and say, what happened; how did you miss me.

I know I'm under the regulatory limits, but obviously we are learning that less than 2 millisieverts can cause problems.

And again, I told you how the WSIB returns to the CNSC for answers and you're not going to get them there. I mean, what I heard from Ms. Thompson here is I should be fine and I'm not. And that's what is most bothersome and I think what's really bothersome to me is a bit of a phrase I left out of here about some of the incidents that happened to me and they may have contributed to my exposure, but I am going to tell you the truth.

It is something more sinister that that can happen and it is not an unfamiliar knowledge amongst a number of people within the plant. So maybe that's why Ms. Thompson is not getting her information properly, but

whatever you're doing is not working because here I am with an obvious case of radiation exposure. It's recognized by doctors, by Medic Alert; I have the first and only bracelet printed in Canada for radiation poisoning and yet we sit here and say that well, we are under the limit so I guess I might as well go home and pretend I am okay. It doesn't work that way.

THE CHAIRMAN: But I -- but if you do have a medical professional doctor who actually deem you to be radiation, I don't understand -- somewhere along the line another institution which is the Workmen's Compensation Board, some other medical authority has to accept that.

And I do not -- forget about CNSC, if a couple of doctors are say that is what happened, I don't understand why that's not in evidence that will be considered by the Board.

So there's something we can, cannot do no matter what we would say -- I'm talking about the CNSC -- it has to be such an institution would deem, you know, that you have gone through some sort of radiation poisoning. It can't be us.

MR. RUDKA: But sir, as I said, you go to those institutions, then come back to the CNSC for answers and you say it can't be you.

THE CHAIRMAN: No, whatever CNSC has, it is

just giving the raw data of dose -- dosimeters and I think that's what really happening here.

Cameco, do you have a medical -- somewhere in the organization, medical doctors that actually have the ability to determine whether somebody is, you know, medically got overdosed; let me put it that way?

MR. KODARIN: Alex Kodarin, for the record.

While we do have a comprehensive medical surveillance program at our facility, I don't believe we have physicians who make -- would make that type of diagnosis.

I can get back to you, but it's our belief right now.

THE CHAIRMAN: So the medical person that Mr. Rudka identified as a company doctor who actually told him that; on what basis did he say that?

MR. KODARIN: Alex Kodarin, for the record. I'm not familiar with the specifics of that comment or the details.

THE CHAIRMAN: Dr. Barriault?

Just so that you know, we -- Mr. Rudka, we -- you operate in front of us now for many, many years; I mean, we know your file pretty well. I know staff have been trying to help as much as it can and I'm just trying to figure out if there's anything new that you can bring

to this story, so to speak.

Dr. Barriault?

MEMBER BARRIAULT: Just bear with me. I'm just trying to understand this. This happened when? How long ago since this incident happened?

MR. RUDKA: I worked from 1993 to 1995, but I only worked 53 weeks in that period due to some layoffs.

MEMBER BARRIAULT: So this was in '95 this happened. Have you been to any occupational health clinic or occupational physician since then and what was the outcome of that? And I do not want to get into your personal ---

MR. RUDKA: No, no, I've been to, again, occupational health clinics and doctors and they recommended me to a health clinic and, again, I go to this clinic, as I said, and I find that the clinic was run by a Cameco -- former Cameco company doctor.

MEMBER BARRIAULT: This particular clinic that you went to, but if I understand correctly, there are some occupational health clinic in Toronto or in Hamilton that you could go to to get professional opinion if you want to if you have a -- and if you do, then, obviously, Worker's Comp is too as well, and if you are not satisfied with them then there's an appeal process at Worker's Compensation Board that you can get into.

So there's a variety of avenues. I don't know how much of this you pursued and I'm sure you probably pursued all of the avenues, but ---

MR. RUDKA: Sir, I have pursued more avenues. I'm surprised that -- in 2001, my doctors told me that I would not make 2003 probably. I'm lucky to be here.

But you have to understand; fighting with Compensation Board against this corporate giant is extremely difficult and I don't know if it'll ever succeed and I think it is going to be up to the company to step up to the plate, at some point.

That's why I suggested we need a different compensation system; something like the fire people -- the firemen have because it's not working as it is.

Okay, I have exhausted so many avenues and I said my biggest concern now is longevity, mortality and some of the news isn't good about my lungs and into my -- apparently, my diaphragm is collapsing; they can't do anything with it.

So I'm going to abandon a wife who's not going to be able to retire and she's been a nurse for over 30 years because the 17 years of disability; she still works and when I am gone she's going to continue and she's going to be listed -- she's going to be left with a debt

that we have accumulated over all this.

And again, you know, to go through compensation -- again, through all the expense and everything it's lost, it would take me a year to sort it all out as it is. It's been so extensive.

But that's again why I've mentioned in here that we need a different system that can work with workers because obviously 50 millisieverts a year is just -- you know, don't even talk to me about that.

All's you have to do is inhale a little bit of this stuff. One particulate is 4.5 million electron volts to the tissue around it so you can imagine what that's doing. It gets very difficult when you get into a Compensation Board, you try to explain this. You people here probably far better understand it. The company does. I understand it far better than I ever did because of all the years I've put into it, but -- it's not beyond our understanding -- but when you get medical people, a lot of things that I have look like other things, it gets confusing. And when the Compensation Board sees anything that's of any doubt, you're out and you're on the appeal process.

So, I don't know, I'm lost for what to do because I have exasperated just about all of my avenues, I would think.

THE CHAIRMAN: Okay, thank you. Anybody else? Thank you very much.

MR. RUDKA: Thank you very much, sir.

THE CHAIRMAN: I'd like to move now to the next submission from Mr. Victor Allan Glover, as outlined in CMD H17.30. Mr. Glover, the floor is yours.

11-H17.30
Oral presentation by
Victor Allan Glover

MR. GLOVER: For the record, my name is Victor Allan Glover. Good evening.

I've been employed as a quality assurance specialist at Cameco Field Manufacturing since August 2008. I work out of the Cobourg facility.

I would like to thank everyone that has submitted a letter to the CNSC regarding the relicensing of Cameco. It shows that you care about this relicensing and, like me, you want your opinion to be heard.

I won't go through my letter as I know that you have already reviewed it. I would like to touch on one point and that's with regards to safety. Safety at Cameco is a culture, not just a slogan or a bumper sticker. It's a belief.

One small thing that we do at Cameco, starting meetings, is have a safety moment. These safety moments can be work related, they can be home related, but it gets a mind set within the company that you start everything you do, your job, getting out of bed with safety at mind.

I know there's a few points that have been already discussed, the ISO 1401 successful registration last fall, one year without lost-time incident, implementation of our SAT, Systematic Approach to Training, helping to enhance that process, preventative maintenance integrated into SAP.

But the one thing I know by now you've read and heard a great deal of submissions for this hearing and my goal by coming here tonight was to let you see in my eyes and on my face, the passion and conviction with which I wrote my letter. It may not have come through in my letter, but I would just like to say it again, I offer my full support for the 10-year renewal of Cameco's operating licenses.

Thank you very much for allowing me to express my thoughts and if I can answer any questions, I will try to do so.

THE CHAIRMAN: Thank you. Questions?

Let me, I don't know maybe it was -- you

also submitted the written submission for the conversion. And I think, I don't know if it was a new submission and I remember somebody mentioning that Cameco actually failed three years ago the 14001 ISO test. In fact, somebody said it failed miserably. Can anybody, are we talking about that facility or the conversion facility.

MR. KODARIN: Alex Kodarin for the record.

It was the CFM facility but I will clarify that our certification is a certification that happens for both facilities; both Cobourg non-licensed facility and for the facility in Port Hope, the licensed facility.

We have had an effective environmental protection program in the Port Hope facility for the entire licence duration so the failure was really a more holistic implementation of ISO 14,000 that was troublesome.

A lot of the work that has been performed over the last year to become certified in fact has been to instil many of the existing programs from Port Hope into our Cobourg facility in such that both facilities are operating at a higher level than they were prior to the certification. Hope that clarifies things.

MR. CHAIRMAN: Mr. Tolgyesi.

MEMBER TOLGYESI: Are you saying that you were conducting monthly audits? You do that in

conjunction with workers participation or union participation or it’s only the supervision and employers staff who are doing these audits (inaudible).

MR. GLOVER: Allan Glover, for the record.

We use internal auditors from the shop floor right through to SMT, so it’s a full cross section of people.

MEMBER TOLGYESI: Who orders the follow-up after the audit? Is there a report and its answer from the employer from the company?

MR. GLOVER: Allan Glover, for the record.

These audits would have an audit report issued and any findings or corrective actions would be entered into SERS and be addressed in that manner.

THE CHAIRMAN: Anybody else? Okay, thank you. I think that this is all we can do tonight for all presentation. But we’re not over yet. So what we're going to try to do is some written material and written submissions. So Marc would you take us, guide us through this?

MR. LEBLANC: This is correct, we had already scheduled a number of oral interventions for this evening and we’ve gone through them. The fourth one that we were supposed to do was from the Canadian Nuclear Worker’s Council and they’ve asked us to consider their

oral presentation as a written submission.

THE CHAIRMAN: So why don't we start with that.

MR. LEBLANC: That's right. I will deal with it in the order it was received if I may.

So the first written submission is from Mr. Gerald Crawford as outlined in CMD 11-H17.2. Any questions from the Members?

11-H17.2
Written submission by
Gerald Crawford

THE CHAIRMAN: Wait a second, we've got to find it.

MR. LEBLANC: If it assists the Members, I could also say whether it's already been dealt with as part of the conversion facility file because many of them are repeat, people have filed with respect to the two or three Cameco facilities. And this is one that we've dealt with.

THE CHAIRMAN: Okay.

MR. LEBLANC: The second or the next written submission is from Mr. Donald Ketcheson as outlined in CMD 11-H17.3. Any questions?

11-H17.3

Written submission by

Donald Ketcheson

THE CHAIRMAN: Dr. McDill.

MEMBER McDILL: I wonder if I could ask staff to comment on the (inaudible), I'm not sure I can ask staff to comment on the Secretariat, however, I guess that's the only way to do it. Is the Secretariat heavily weighted with people from the nuclear world? It appears there's nobody from the non-nuclear side in areas such as law or medicine. I'm not sure whether to ask my President or staff to comment on that but ---

MR. ELDER: I'll, going back in saying, I don't know if she's talking about the Secretariat in terms of Mr. Leblanc, who is a lawyer, or staff in general. We actually, and for the last number of years, I'll start with the legal one as we do actually have a number of lawyers, a good compliment of lawyers who helped us on this one and I'll ask Dr. Thompson to talk about her medical background.

DR. THOMPSON: Patsy Thompson, for the record.

Actually when I read the intervention, I

thought Secretariat meant the Commission, but I will provide an overview of the staff expertise in terms of health- and environmental-related programs.

Essentially, the directorate that I'm responsible for, we have approximately 72 staff members in areas related to radiation protection, dosimetry, radiation biology, epidemiology, toxicology. There's a wide number of expertise represented within our directorate with many people having PhDs and a number of people with Masters degrees. All of the staff are hired based on their qualifications, their expertise, their experience with the subject matter of the CNSC's responsibly. And we have a number of staff who have been active participants in international committees such as UNSCEAR or ICRP and others where they're known and recognized for their expertise.

MEMBER McDILL: Thank you.

Without the intervenor here to clarify the questions it's a little difficult.

Since the intervenor has raised the question, and I realize it doesn't relate to CFM, but on the second page there's some discussion about water coming from the Fukushima plant across the Pacific, and since you're here maybe you could take a stab at addressing that.

For example, the intervenor said we should avoid eating mussels and fish from the Pacific.

DR. THOMPSON: Patsy Thompson, for the record.

Essentially this relates to the -- my understanding, to the Fukushima events. Following the Fukushima events with the -- there's obviously a large amount of contaminated water that has been discharged to the Pacific Ocean. The Japanese government put in place an extensive monitoring program of fish and shellfish that are used for human consumption.

The information that we have and the dispersion is that this certainly doesn't represent a risk to Canadians and the -- on the Canadian side of the Pacific there's no likelihood of having increased levels of caesium and some of the other radionuclides that are associated with that accident.

The controls that have been put in place for human consumption of shellfish in Japan and those that are for export comply with, for example, the World Health Organization standards and don't represent a risk for human health.

THE CHAIRMAN: Again, I'd like everybody to remember what is the CNSC mandate and what other agency mandate. We have another agency called the Canadian Food

Inspection Agency in Canada whose responsibility is to make sure that they will issue any warning about any risk associated with any fish or anything – or any food that may contain higher level of radiation that is not fit for human consumption. It is not CNSC's responsibility to do that.

What we would like to be able to do is just put on our website whatever happened internationally and also on what CFIA, for example, would rule so there's one place you can go and find some objective information.

Did I get it right?

DR. THOMPSON: Patsy Thompson, for the record.

Yes, that's correct. The Canadian Food Agency is responsible for health advisories or food advisories.

THE CHAIRMAN: Dr. McGill?

Anybody else?

Thank you.

MR. LEBLANC: The next submission is from Ms. Marilyn Routly as outlined in CMD 11-H17.4.

11-H17.4

Written submission from

Marilyn Routly

MR. LEBLANC: The next submission is from Ms. Jackie Brimblecombe as outlined in CMD 11-H17.5

11-H17.5
Written submission from
Jackie Brimblecombe

MR. LEBLANC: The next submission is from Mr. Mike Kube as outlined in CMD 11-H17.6.

11-H17.6
Written submission from
Mike Kube

MR. LEBLANC: The next submission is from Mr. Kevin Wharmby as outlined in CMD 11-H17.7.

Do you want to go back?

THE CHAIRMAN: Mike Kube?

MR. LEBLANC: Yes.

THE CHAIRMAN: Just because I'm curious, he was talking about something called -- we've developed programs more importantly -- I'm looking at -- well, does anybody know what the LOTO program is, L-O-T-O? I'm just -- lock out tag?

MR. KODARIN: Alex Kodarin, for the record.

Lock out tag out is a safety program we have in place to safely disconnect and effectively lock out the electro connection on pieces of equipment before you enter them and do work or trouble shooting.

So it’s -- we call it LOTO. It’s lock out -- lock out the machine or tag it out with a tag with a name on it.

THE CHAIRMAN: So that’s a common kind of a safety, it’s not only for the uranium business, it’s a general one?

MR. KODARIN: Alex Kodarin.

Yes, that’s correct.

THE CHAIRMAN: Okay, thank you.

MR. LEBLANC: I’ll go back to CMD 17.7 from Mr. Kevin Wharmby.

11-H17.7
Written submission from
Kevin Wharmby

MR. LEBLANC: Any questions?

The next submission is from Mr. Ron Smith as outlined in CMD 11-H17.8.

11-H17.8

Written submission from

Ron Smith

MR. LEBLANC: Monsieur Harvey?

MEMBER HARVEY: In the last paragraph we're talking of zero emissions of any pollutant. My question appears strange, but how far are we from zero?

I mean, we saw earlier that you are lowering the limits for certain contaminants and we recognize the fact that zero emissions are almost impossible when you've got a plant.

But to what extent we can approach zero emission? Are the emissions -- the current emissions almost near the limit we can go or there is a space with more efforts that we could go lower than we are today?

A strange question.

MR. ELDER: Peter Elder, for the record.

You always at least look if there are ways to reduce the emissions, and as part of when we look at the reviews and the applications and how we look on a routine basis every two years or so, we expect the licensees to go through all their programs and see where emission reduction is possible. So it's not -- and it's part of continuous improvement, you always look where you can.

I guess my point was zero is really depends on your detection limit, you know, and we are detecting -- our detection limit for uranium air, let's say, is very low. We put it on the graphs when you do it in kilograms per hour where there are already a lot of zeros on the graph.

That said, we expect Cameco to continually look at is there ways that they can reduce those emissions even further.

MEMBER HARVEY: Have you ever compared the -- I don't know how many facilities exist like that facility. We've got two here but ---

MR. ELDER: Well, we'll compare and we're starting to compare and this is one of the things the annual report will do is compare those emissions.

The other fuel fabricator in Canada is not fully comparison because they do -- Cameco is split. Some things they do in Cobourg, which is not with radioactive material. GE Hitachi, which is the other one, splits it differently between two sites.

So we'll look at in terms of -- we'll start to give you comparisons and you'll be able to see, you know, where there are goals. Because I know even the licensees do look at how they can reduce emissions even when they are quite low.

MEMBER HARVEY: Cameco, can you add something to that? Do you think you made huge efforts and it'll be difficult in the future to go farther than we are today?

MR. KODARIN: Alex Kodarin, for the record.

Cameco CFM is committed to lowering emissions as much as reasonably is possible, and the ALARA principle is still something that obviously we manage to on a daily basis. Our emissions, both water and air, are very low and we will continue to look for areas of improvement as we see them materialize.

MEMBER HARVEY: Thank you.

THE CHAIRMAN: Again this is way out of left field, but you know the many laboratory work in a -- what do they call it -- negative vacuum or -- nothing gets out, everything gets sucked in and recycled, et cetera. Is that sort of not doable in a large commercial thing or is it like -- would require a completely brand new structure?

MR. KODARIN: Alex Kodarin, for the record.

We have, in the past, looked at such a negative pressure system. From ALARA perspective, it becomes not a viable alternative for the building, particularly with some of the legacy installations with the building. It's an older building and there's -- if

you were to design it again probably you might make a few different decisions. The way it sits right now it's not possible to get to purely a zero emission state in an easy fashion.

MR. RAVISHANKAR: B.R. Ravishankar for the record.

I just wanted to give you a comparative emission between Port Hope Conversion Facility, Blind River Refinery and Fuel Manufacturing. I'm going to give this a 2010 emission data in grams per hour. For Port Hope Conversion Facility it was 5.7 grams per hour. For Blind River it was 0.1 grams per hour. And for fuel manufacturing it was 0.0035 grams per hour.

MEMBER HARVEY: It's difficult to compare each plant.

MR. ELDER: Right, and -- Peter Elder, for the record.

What we want to do in the annual report is compare our fuel fabricator to the fuel fabricator so -- and you'll start to see -- I can say they're in the ballpark but we'll start coming to you with that data.

Some of them, like the conversion facilities, will -- initially, there's no other thing in Canada. Maybe we'll start looking if we can get data from the other plants in the world

MEMBER HARVEY: Would it be possible to do it in the annual reports?

MR. ELDER: The Canadian comparison ---

MEMBER HARVEY: Yes.

MR. ELDER: I'll promise you the first time as we get better at this one, we'll look at -- see if we can get more information from other comparators as well.

THE CHAIRMAN: Mr. Tolgyesi?

MEMBER TOLGYESI: The intervener is talking about accumulation of the contaminants. How far the monitoring data collected can demonstrate the level of accumulation of contaminants?

MR. KODARIN: Alex Kodarin, for the record.

I'll hand the mic over to my colleague Mike to answer that question.

MR. LONGINOV: For air deposition, we do, over the last few years, annual soil sampling. We take that soil sampling and we do provide that information to the CNSC.

Over the licensing period we have been seeing a gradual decrease in the average soil concentration -- average uranium in soil concentration, typically around four to five parts per million, which is approximately twice what we'd expect as a background number.

THE CHAIRMAN: Okay, Marc?

MR. LEBLANC: The next submission is from the Port Hope and District Chamber of Commerce as outlined in CMD 11-H17.9.

11-H17.9
Written submission from the
Port Hope and District
Chamber of Commerce

MR. LEBLANC: The next submission is from Ms. Diane Flesch as outlined in CMD 11-H17.10.

11-H17.10
Written submission from
Diane Flesch

MR. LEBLANC: The next submission is from the Friends of Music as outlined in CMD 11-H17.11.

11-H17.11
Written submission from the
Friends of Music

MR. LEBLANC: The next submission is from

Mr. Gerhard Heinrich as outlined in CMD 11-H17.12.

11-H17.12
Written submission from
Gerhard Heinrich

MR. LEBLANC: The next submission is from Mr. Alvin Barr as outlined in CMD 11-H17.13.

11-H17.13
Written submission from
Alvin Barr

MR. LEBLANC: The next submission is from Mr. Bruce Cooper as outlined in CMD 11-H17.15.

11-H17.15
Written submission from
Bruce Cooper

MR. LEBLANC: The next submission is from the Northumberland Players as outlined in CMD 11-H17.16.

11-H17.16
Written submission from

Northumberland Players

MR. LEBLANC: The next submission is from Ms. Suzanne Frankcom-Wright as outlined in CMD 11-H17.17.

11-H17.17
Written submission from
Suzanne Frankcom-Wright

MR. LEBLANC: The next submission is from the Cobourg Dragon Boat and Canoe Club as outlined in CMD 11-H17.18.

11-H17.18
Written submission from the
Cobourg Dragon Board and
Canoe Club

MR. LEBLANC: The next submission is from the Heart & Stroke Foundation of Ontario as outlined in CMD 11-H17.19.

11-H17.19
Written submission from
Heart & Stroke Foundation

of Ontario

MR. LEBLANC: The next submission is from Community Care Northumberland as outlined in CMD 11-H17.20.

11-H17.20
Written submission from
Community Care Northumberland

MR. LEBLANC: The next submission is from HMC Consulting as outlined in CMD 11-H17.21.

11-H17.21
Written submission from
HMC Consulting

MR. LEBLANC: The next submission is from Mr. John Morand as outlined in CMD 11-H17.22. We already had an oral presentation from Mr. Morand and he'll be participating tomorrow on behalf of a property value organization.

11-H17.22
Written submission from

John Morand

MR. LEBLANC: The next written submission was also an oral submission that was heard earlier from the Physicians for Global Survival, and this one is outlined in CMD 11-H17.23.

11-H17.23
Written submission from the
Physicians for Global Survival

MR. LEBLANC: The next submission is from Mr. David Henderson as outlined in CMD 11-H17.25.

11-H17.25
Written submission from
David Henderson

MR. LEBLANC: The next submission is from Mr. Marcin Ryglewicz as outlined in CMD 11-H17.27.

11-H17.27
Written submission from
Marcin Ryglewicz

MR. LEBLANC: The next submission is from Ms. Donna Snowden as outlined in CMD 11-H17.28.

11-H17.28
Written submission from
Donna Snowden

MR. LEBLANC: The next submission is from Mr. Michael Murchie as outlined in CMD 11-H17.29.

11-H17.29
Written submission from
Michael Murchie

MR. LEBLANC: The next submission is from Ms. Maricela Vosburgh as outlined in CMD 11-H17.31

11-H17.31
Written submission from
Maricela Vosburgh

MR. LEBLANC: The next submission is from the Northumberland Manufacturers' Association as outlined in CMD 11-H17.32.

11-H17.32
Written submission from
Northumberland Manufacturers'
Association

MR. LEBLANC: The next submission which was an oral presentation that was switched to a written submission was from the Canadian Nuclear Workers Council in CMD 11-H17.33.

11-H17.33
Written submission from the
Canadian Nuclear
Workers Council

MR. LEBLANC: The next submission is from Mr. Lou Rinaldi, M.P.P., Northumberland-Quinte West as outlined in CMD 11-H17.34.

11-H17.34
Written submission from
Lou Rinaldi, Former M.P.P.,
Northumberland-Quinte West

MR. LEBLANC: The next submission is from

Ms. Rose Campbell as outlined in CMD 11-H17.35.

11-H17.35
Written submission from
Rose Campbell

MR. LEBLANC: The next submission is from Mr. Lorne VanderDussen as outlined in CMD 11-H17.36.

11-H17.36
Written submission from
Lorne VanderDussen

MR. LEBLANC: The next submission is from the Northumberland Labour Council as outlined in CMD 11-H17.37. This organization did an oral presentation earlier today.

11-H17.37
Written submission from
Northumberland Labour Council

MR. LEBLANC: The next written submission is from the Northumberland Services for Women as outlined in CMD 11-H17.38.

11-H17.38
Written submission from
Northumberland Services
for Women

MR. LEBLANC: The next submission is from Ms. Kathy Krakenberg as outlined in CMD 11-H17.39.

11-H17.39
Written submission from
Kathy Krakenberg

MR. LEBLANC: The next submission is from the United Steelworkers Local 14193 as outlined in CMD 11-H17.41.

MR. LEBLANC: The next submission is from Habitat for Humanity Northumberland as outlined in CMD 11-H17.42.

11-H17.42
Written submission from
the Habitat for Humanity Northumberland

MR. LEBLANC: The next submission is from

Scientists in School as outlined in CMD 11-H17.43.

11-H17.43
Written submission from
Scientists in School

MR. LEBLANC: The next submission, which we've also heard earlier today, is from the Canadian Nuclear Association as outlined in CMD 11-H17.44.

11-H17.44
Written submission from
Canadian Nuclear Association

MR. LEBLANC: The next submission is from Mr. Graeme Lawson as outlined in CMD 11-H17.45.

11-H17.45
Written submission from
Mr. Graeme Lawson

MR. LEBLANC: The next submission is from Atomic Energy of Canada Limited as outlined in CMD 11-H17.46, which is an oral presentation we also heard yesterday evening.

11-H17.46
Written submission from
Atomic Energy of Canada Limited

MR. LEBLANC: The next submission is from Ms. Jean Huffman as outlined in CMD 11-H17.48.

11-H17.48
Written submission from
Ms. Jean Huffman

MR. LEBLANC: The next submission is from Mr. Tyler Rouse as outlined in CMD 11-H17.49.

11-H17.49
Written submission from
Mr. Tyler Rouse

MR. LEBLANC: This, Mr. President, concludes the list of written submissions.

THE CHAIRMAN: Okay. Thank you.

I think we're going to stop here and we have -- can you tell us who is -- when are we going to start tomorrow and who is left in terms of some oral

presentations?

MR. LEBLANC: Okay, we're going to start at 8:30 tomorrow morning.

There are three oral presentations left, after which we will have a round of questions for the Commission Members, after which we will do the Blind River licensing renewal hearing. It is scheduled for 11:00 tomorrow morning.

This being said, I've discussed with Cameco and should we have time at the end of the Cameco Fuel Manufacturing, we may want to start a bit earlier with the Blind River hearing. Depending if the intervenors are in the room or not, we may proceed with the written submissions first and then proceed at 11:00 as scheduled, as the notice of public hearing was issued.

I know that we have Earth Watch here, so I don't know if Madame Lloyd would be available a bit earlier tomorrow should we start a bit earlier.

UNIDENTIFIED SPEAKER: (off mic)

MR. LEBLANC: If I have a list, that's what I -- we'll proceed in that fashion; thank you.

And again, this is just tentative. We may just need all the time. You've seen how successful I was in my timing today.

THE CHAIRMAN: You did a fine job, Marc.

Okay, thank you very much, and we'll see you tomorrow at 8:30.

--- Upon adjourning at 9:53 p.m./

L'audience est adjournée à 21h53