Canadian Nuclear Safety Commission

Commission canadienne de sûreté nucléaire

Public Hearings

Audiences publiques

November 28, 2006

Le 28 novembre 2006

Town Park Recreation Centre
62 McCaul Street
Port Hope, Ontario

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

Commission Members present

Commissaires présents

Ms. Linda J. Keen
Dr. Moyra McDill
Mr. Alan Graham
Dr. Christopher Barnes
Mr. James Dosman
Mr. André Harvey

Mme Linda J. Keen
Dr. Moyra McDill
M. Alan Graham
Dr. Christopher Barnes
M. James Dosman
M. André Harvey

Secretary: Mr. Marc A. Leblanc

Secrétaire: M. Marc A. Leblanc

General Counsel : Mr. Jacques Lavoie

Conseiller général : M. Jacques Lavoie

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Port Hope, Ontario

--- Upon commencing on Tuesday, November 28, 2006
at 8:37 a.m.

Opening Remarks

MR. LEBLANC: Good morning, ladies and gentlemen. Welcome to the hearings of the Canadian Nuclear Safety Commission. My name is Marc Leblanc. Je suis secrétaire de la Commission et j'aimerais aborder certains aspects touchant le déroulement de l'audience.

The Canadian Nuclear Safety Commission is about to start a series of two public hearings. The public hearing being held today and tomorrow is with respect to Cameco Corporation's Application for the Renewal of a Class 1B Nuclear Fuel Facility Operating Licence for its Facility in Port Hope. This is Hearing Day Two. Day One Hearing was on October 4th, 2006 where Cameco Corporation and CNSC staff made their formal presentations.

The transcripts of the Day One presentations are available on the CNSC website.

This morning, after hearing from Cameco and CNSC staff on their supplementary Commission Member

Documents, or CMDs, the focus for the next two days will be on the submissions from the intervenors. Please note that there are 161 interventions, including 74 oral presentations. If it is not possible to consider all of the interventions by the end of the day tomorrow, the Commission will adjourn the hearing to another date to be determined later, probably in January or February 2007, to resume this hearing. Today, oral interventions are scheduled based on their chronological order of receipt.

The public hearing being held on Thursday is concerning Zircatec Precision Industries' application.

So during today's business we have simultaneous translation. Des appareils de traduction sont disponibles à la réception. La version française est au poste 8 and the English version is on Channel 7. If you would, please keep the pace of speech relatively slow so that the translators have a chance of keeping up.

The transcripts of these hearings will be available on the website of the Commission next week. To make the transcripts as meaningful as possible, we would ask you to identify yourselves clearly before speaking.

As a courtesy to others in the room, please silence your cell phones.

President Keen will be leading today's hearings.

President Keen.

THE CHAIRPERSON: Good morning and welcome to all of you who will be with us for some or all of the next three days here in Port Hope. The Commission is delighted to be with you today to hear from you today, tomorrow and Thursday about the points that you, as community members, wish to make with regards to these hearings. We do this regularly. We have been in Kincardine and most recently in Bécancourt, as well as doing some hearings in Ottawa as well, and so that is why we are here. We are very delighted to be here and we would like to thank the people from Port Hope from the Recreation Centre and from the various hotels who have done everything they can to make our trip here as productive and pleasant as possible.

I would like to begin by introducing the Members of the Commission that are with us today, and they will be the Members of the Commission asking the questions over the next three days. On my very far right is Dr. Moyra McDill. Next to Dr. McDill is Dr. Christopher Barnes. On my far left is Mr. Alan Graham. Then it is Dr. James Dosman and Mr. André Harvey.

As well as the Secretary of the Commission, Marc Leblanc, we also have the General Counsel to the Commission, Jacques Lavoie, with us on the podium.

I would like to emphasize what the Commission is. The Commission is a quasi-judicial, administrative tribunal. It is a court of record. It is independent of all influence, from the political government or from the private sector. Each Commission Member is independent of other members and we are all independent of the CNSC staff. The Commission Members are appointed by the Governor in Council of the federal government on the basis of their exceptional achievements and their excellent reputation in their various fields.

Our responsibility is to ensure that the use of nuclear materials and the operation of nuclear facilities is done in a manner that protects the environment, health and safety of Canadians. The Commission does not have an economic mandate and its decisions are not based on the economic impact of the facility, nor on the impact of its decision on the facility. It is the safety and security of the people and the protection of the environment that are paramount in our decision process.

The Commission is still on enhanced security status, as are many of the facilities that we regulate, including the two facilities that we’re talking about over the next three days. As such, I will take measures to ensure that security matters of a sensitive

nature are not discussed in public, and if we need to discuss that, I will ask the Commission Members and the licensee and the staff to go into the back room and we will discuss security matters in that context, which is appropriate for security areas.

With that preamble, I will move now to the agenda that we have. Before adopting the agenda, please note that there were 22 supplementary Commission Member Documents. From now on I will be using the word CMDs instead of Commission Member Documents. The supplementaries were added to the agenda after its publication on November 10th, 2006 and these additional supplementary documents are noted in the updated agenda.

With this information, I would now like to call for the adoption of the agenda by the Commission Members, and this is outlined in CMD 06-H26.A.

06-H26.A

Adoption of Agenda

THE CHAIRPERSON: Do I have the concurrence of the Members?

Noting concurrence, for the record, the agenda is adopted.

The Commission is conducting two separate hearings this week on different fuel facilities and they

are both located in Port Hope.

The Commission notes that several interventions raise similar points regarding the two facilities, Cameco and Zircatec. Therefore, to reduce repetition and to ensure that there is a complete record for each hearing, the Commission will consider any relevant information regarding common elements that are presented during the course of one or other of the hearings. If there is information, for example, from the Fire Chief that could be used in either case, we will use it without having it being repeated later. In other words, if something is raised in the Cameco Port Hope hearing and we consider it to be part of the Zircatec hearing as well, we will consider it.

Intervenors who have identical or very similar interventions for both hearings may opt to only present once during the Cameco hearing and to ask that that matter be considered for Zircatec as well.

So on the agenda today is Hearing Day Two on the matter of the Application by Cameco Corporation for the Renewal of their Class 1B Nuclear Fuel Facility Operating Licence for the Facility in Port Hope, Ontario.

Hearing Day Two:

Cameco Corporation:

Application by Cameco Corporation
for the Renewal of its Class 1B Nuclear
Fuel Facility Operating Licence for
the Facility in Port Hope, Ontario

MR. LEBLANC: This is Public Hearing Day Two. The first day of the public hearing on this application was held on October 4th, 2006. The Notice of Public Hearing 2006-H09 was published on July 31st, 2006.

The public was invited to participate either by oral presentation or written submission. October 27th, 2006 was the deadline set for filing by intervenors. The Commission received 167 requests for intervention. Six submissions were received shortly after the deadline. Based on its consideration of these late submissions the panel of the Commission accepted these interventions. However, one submission was received significantly after the deadline and was refused by a panel of the Commission.

The Commission strongly urges all parties to file their submissions within the deadline set in the Public Notice of Hearings in compliance with the CNSC Rules of Procedure.

Presentations were made on Day One by the Applicant, Cameco Corporation, under Commission Member Documents 06-H18.1 and H-18.1A, and by Commission staff

under CMDs 06-H18 and 06-H18.B.

November 21st was the deadline for filing of supplementary information. I note that supplementary information has been filed by Cameco Corporation, CNSC staff, as well as intervenors.

I also note that we have 150 chairs and I would ask that people in the room please take a seat. That would be appreciated.

Thank you.

THE CHAIRPERSON: I would therefore like to start the hearing today by calling on the presentation from Cameco Corporation as outlined in CMD documents 06-H18.1B, 06-H16.1C.

I will turn to Mr. Rogers, Mr. Terry Rogers, Senior Vice-President and Chief Operating Officer. Good morning, Mr. Rogers. The floor is yours.

06-H18.1B/06-H18.1C
Oral presentation by
Cameco Corporation

MR. ROGERS: Thank you.

Good morning, President Keen, Members of the Commission, staff, visitors and members of the community.

For the record, my name is Terry Rogers and I am the Senior Vice-President and Chief Operating Officer of Cameco Corporation.

Presenting here today is Bob Steane, the Vice-President of Cameco's fuel services division who will be providing a brief overview of Cameco's supplemental CMDs for the conversion facility that had been filed since hearing Day One. Mr. Steane is accompanied by some of the managers from the conversion facility whom he will introduce.

Also with us today is John Takala -- or John Jarrell, Cameco senior or Vice-President of Safety Health and Environment and John Takala, Cameco's Director of Safety and Radiation.

At the outset I would like to commend both the Commission and staff in holding the Day Two Hearings for Cameco's conversion facility and Zircatec in the community where our facilities are located and where the bulk of our employees call home. At Cameco we are proud of the operating history here in Port Hope and of the economic and social contribution we make in Northumberland County.

In recent years there has been voiced growing concern about our operations among some of our neighbours in the community. We are sensitive to this new

reality and we are making considerable efforts to improve communication with the community about our facilities and their performance.

Providing more information has advanced public understanding of our operations, as evidenced by the interventions in support of relicensing these facilities. We are grateful for the community support we have received and we are committed to continue earning it through exemplary safety, health and environmental performance.

Over the past seven weeks Cameco staff have worked hard to gather additional information requested by the Commission and to provide it, along with any necessary clarification, to both the Commission and to the public.

Over the five-year period of our existing licence Cameco and Zircatec have responded effectively to issues that have emerged while continuing to operate both of these facilities in a safe manner, as evidenced by our performance over that time.

The CNSC staff have recommended that the Commission renew our licence for another five years.

The length of our licence does not alter the fact that Cameco seeks continual improvement as a corporate value at each of our operations.

Now, I would like to turn to Bob Steane to

continue with Cameco's Day Two presentation.

Thank you.

MR. STEANE: Thank you, Terry.

For the record, I am Bob Steane, Vice-President of Cameco's Fuel Services Division.

Madam Chair, members of the Commission, the secretariat, staff and members of the public, I am very pleased to be here today.

With me today to my right is Kirk Vetor, the Superintendent of Compliance and Licensing. In the row behind me are Hess Carisse, our Manager of Technical Services, Tim Kennedy, the Manager of Production, and Tyler Rouse, our Emergency Services Coordinator.

In the second row behind me, beside John Takala, is Ivan Bolliger, a fire engineering specialist. We also have some other technical staff and consultants to support the discussions as may be required.

The purpose of our presentation today is to summarize the additional information provided to the Commission members and the public since our Day One hearing, and to provide clarification on certain matters and to provide new information that was not available at Day One.

At Day One the Commission members requested that Cameco provide a map showing the facility's layout,

emission points and monitoring stations. The Commission Members also requested information to verify that the environmental sampling stations are sited at appropriate locations relative to the prevailing winds and air dispersion modelling. This information is contained in the facility's Environmental Monitoring Plan, a copy of which was provided to the CNSC in our supplemental CMD.

Now, the facility draws cooling water from the confluence of the mouth of the Ganaraska River at the south cooling water intake shown on this figure. Lake Ontario is to the south of the facility and is shown on the right-hand side of the figure.

The cooling water passes through the facility and is discharged at two points, the north and south cooling water discharge. The cooling water is used on a once-through basis, non-contact, which means by design it's physically separated from the process. A very small process effluent stream, less than one per cent of the total flow, joins the north cooling water discharge stream at the MISA process effluent monitoring station location. The intake and all discharge streams are sampled and monitored for water quality.

There are 63 air emission points at the facility that are included in the Air Dispersion Model. The majority of these emission sources originate from

three operating plants, the UF_6 plant, the north UO_2 plant and the UO_2 plant. Complete details of the facilities' air emissions are contained in its Emission Summary and Dispersion Modelling Report which has been reviewed and accepted by the Ontario Ministry of Environment. The emissions from these sources are reported to federal and provincial authorities through various means, such as licences, certificates of approvals and the national pollutant release inventory.

Cameco monitors ambient air, water, soil and vegetation in the vicinity of the facility to ensure that all potential impacts are identified. The locations of these ambient monitoring locations are selected with consideration to prevailing winds and air dispersion modelling predictions.

The windrose data shows that winds are predominately from the west, fluctuating between the west-northwest and the west-southwest. The annual average concentration of uranium in ambient air, as predicted by the Uranium Air Dispersion Model, is shown by the concentration isopleth around the facility. The effects of the prevailing winds are reflected in the patterns of the isopleth. These concentrations are the maximum predicted annual average concentrations based on five years of meteorological information and assuming that all

uranium emission sources at the facility are operating.

Even under these conservative conditions the maximum predicted annual concentration of uranium in air is 0.05 micrograms per cubic metre, and this is predicted to occur at a location within the fence line. The concentration of uranium in ambient air decreases quickly with distance from the facility. The average concentration of uranium in air is about 0.16 micrograms per cubic metre at the fence line of the property and is less than 0.008 micrograms per cubic metre within a few hundred metres. This is an important consideration when determining the location for the ambient air monitoring stations.

Cameco has a number of ambient air monitoring stations both within and beyond the fence line. The facility monitors particulate uranium using high volume air samplers and dust fall jars. Particulate fluoride is also monitored using dust fall jars and the gaseous fluorides are monitored using line candles. All ambient air monitoring stations are located less than one kilometre from the facility and most are within a few hundred metres of the facility. Station 15 to the south of the UF_6 plant is located at the maximum point of impingement, as predicted by the air dispersement modelling.

Cameco has established 26 long-term soil monitoring stations and they're shown as the numbered orange boxes, as well as the uranium deposition rates that are predicted by the Air Dispersion Model. The locations for the soil monitoring stations were selected in the areas of higher predicted uranium deposition. Now, these locations were sampled in the fall of 2005 and again in 2006. The results of the 2005 sampling campaign were provided in a Supplementary CMD and were posted on our community website.

When Cameco issued its Ecological Risk Assessment Report in June of 2004, the soil model that was used in the risk assessment utilized generic soil parameters. And the CNSC commented that the generic soil parameters might not necessarily be representative of Port Hope soils and requested that Cameco validate Cameco's assumptions that had been used.

Cameco retained a consultant to obtain site-specific soil data for use in the soil model and a draft report was recently issued to the CNSC. The draft report concluded that the soil model results in the Ecological Risk Assessment were accurate. However, this is still under review by CNSC staff and Cameco's consultant. A final report will be provided to the CNSC and the public when it's completed.

The Commission Members requested at Day One that Cameco explain the trends in uranium emissions to air. Given that the facility had a number of potential emission points operating at different frequencies and conditions, the measuring of the source emission is complex. In any event, the real measure of impact is the measurement of ambient air quality. The information that follows illustrates that uranium emissions has decreased overtime.

Historically, the UF_6 plant has been the largest single-source of uranium emission with the stack emission being by far the largest component. This chart shows the measured emission relative to the action level which is the top line of the chart.

Our focus over the past decade has been on reducing the stack emissions. The success of this effort is clearly evident in the solid blue bars in the UF_6 plant emission profile.

Another component of the plant emission is the fugitive emissions which, to a large degree, are those from the heating and ventilating systems in the plant. These systems move air in large ventilation ducts making determination of the contained emissions definitely complex.

New air emission calculations were

implemented in January 2005 and they primarily affected the fugitive emission number for the UF_6 plant. This change resulted in an increase in the reported total uranium emission from the UF_6 plant from 2005 on, but it did not represent a real increase in the actual amount of uranium emitted. This revised calculation was retroactively applied to the UF_6 plant emission data for the current licence period for the purpose of this licence application, to have all of the information for the licence period on the same basis, and it's reflected in the numbers from 2002 onwards. No change was applied to the information pre-2002 which is the reason for the dividing vertical line in the chart.

The impact of these changed calculations is illustrated in the red diagonal hatched bars, post-2002. The blue hatched bars show the fugitive emission data pre the revised calculation method; the red hatched bars show the impact of the revised calculations.

The success of Cameco's efforts to reduce the UF_6 main stack emissions, coupled with the recent refinement to the calculation of fugitive emissions, have resulted in a situation where the fugitive uranium emissions are now more significant than the stack uranium emission. Accordingly, Cameco's future efforts to reduce uranium missions from the facility will give increased

focus on the fugitive uranium emission reduction.

The reported uranium emission rate from the UO_2 plant including the incinerator has been relatively constant. Our plan to shutdown the incinerator at the end of this year will result in lower emissions going forward.

The reported annual uranium emission to the environment from the facility, expressed in kilograms of uranium per year, has decreased over the past decade but has been relatively constant over the current licence period. Again, the numbers post-2002 reflect the revised fugitive emission calculation, while those pre-2002 do not.

Coming back to the concentration of uranium in air in the community, you can see that it is approaching zero, as shown by the trend line on this graph. The impact of the efforts to reduce the emissions from the facility are clearly evidenced by these uranium and air measurements in the ambient air.

Cameco has committed to working with the community to develop an emission reduction strategy in 2007. We have already started that process by compiling our plain language Environmental Performance Report to provide a basis for going forward. The next steps include community consultation, setting of priorities, technical review and developing implementation plans.

Cameco conducted studies of neutron radiation in 2000, 2005 and 2006. The results from those studies were provided in our Supplemental Commission Member document. The studies concluded that the levels of neutron radiation from the facility are very low and do not pose a risk to Cameco employees or the public. The average level of neutron radiation along the fence line were measured at 0.00007 milliSieverts per hour and the average dose from neutron radiation to the most exposed work groups was only 1 to 2 per cent of their average annual dose.

But in spite of these low levels of neutron radiation measured in these studies, Cameco has instructed its consultant to evaluate neutron radiation levels as part of a review of our Derived Release Limit and Operating Release Limit Reports. That review is currently underway.

At the Day One hearing there was discussion about the stability of a concrete block shield wall, shown in the picture in our presentation. Cameco retained a civil engineer consultant to evaluate the construction of the wall against federal and provincial building codes. The consultant concluded the wall would safely meet the applicable code to a height of five blocks. The wall is six blocks in height. Thus, Cameco will anchor the bottom

row of blocks to ensure the wall meets the Code requirements for the seismic activity zone applicable to the area.

The Facilities Health and Safety Officer reviewed the stacking of the O_2 drums in the warehouse and determined that that practice was safe.

Over the past six months, Cameco's Technology Development Group has done considerable work to reassess the flammable and explosive properties of ceramic grade uranium dioxide power. The conclusions of this work are that ceramic grade uranium dioxide is neither flammable nor explosive, as we had previously stated. The Material Safety Data Sheet for ceramic grade UO_2 has been updated to reflect these findings as well as a new NC MSDS report format.

Further information on flood grouping as well as the potential impacts of climate change on our flood proofing measures was provided in our Supplemental Commission Member Document. The flood proofing that Cameco plans to install to address the probable maximum flood includes 30 centimetres of freeboard over and above the maximum flood level.

A review of published studies and the effects of climate change on the Great Lakes show that virtually all the studies predicted a decrease in lake

levels due to climate change. Therefore, the 30 centimetres of freeboard designed into our flood proofing measures adequately addresses the current estimated effects of climate change.

Additional information on the revised preliminary decommissioning plan or the PDP was included in our supplemental Commission member document. The revised decommissioning plan was submitted to the CNSC staff in June of 2006 and was based on a decommissioning today concept.

The revised decommissioning plan estimates the costs at about $83 million. The CNSC has provided its comments on this revised PDP and Cameco is working to address those comments.

Once the PDP is accepted by the CNSC the appropriate financial guarantee instrument will be put in place.

Now, Cameco has continued its public information activity since the filing of Day One Commission member document. The focus continues on issues identified by the public as being the highest priority through the community forum process.

Our latest forum featured a panel of health experts which included a two-hour question and answer period. One hundred and ten (110) members of the public

of the community participated and a community forum newsletter and posting of videos of the presentations on a community website ensured that this information was available to those who could not attend.

We enhanced our public reporting of environmental data with a 26-page plain language environmental benchmarking report on emissions which is intended to help the community better understand our environmental performance. And, as I said, provide a basis for setting of priorities and going forward.

In conjunction with the 175th anniversary of the Port Hope fall fair Cameco mounted a major educational exhibit that attracted approximately 4,500 visitors. Every visitor received a passport to information that encouraged them to participate and read the displays.

Cameco has also reached out to the community in its first ever community walk. Employees from the conversion facility and Zircatec volunteer to visit 1,400 homes in the neighbourhood to share information and answer questions about our operations.

Employees met with the President of Families Against Radiation Exposure to explain emission data and how environmental monitoring stations work. Stack monitoring technology and methods of calculated

emissions were also reviewed.

Cameco continued to be active in the community through various events, including the Northumberland Youth Expo, the first of such events which reached out to approximately 800 young people to assist in making career decisions.

It also partnered with Habitat for Humanity in Port Hope to see the first ever Women Build which saw about 300 volunteers and many community organizations join with Cameco to build a home for a deserving family.

Now, Cameco has posted all of its CMDs and related documents on its community website; www.camecoporthope.com to ensure that information was readily available to the public. Advertising was placed in local media to inform Port Hope residents that this information was available on the website.

Cameco is proud of its performance over the current licence period. We believe that the information we provided to the Commission in support of this licence application demonstrates that operations of the Port Hope conversion facility are safe and have no significant effect on the environment.

We are committed to continually improving in key areas, such as health and safety, environmental performance and have demonstrated that commitment through

action over the current licence period.

Information will continue to be provided to regulators and the public to ensure that all parties have the information they need to have confidence that we are operating safely.

Cameco respectfully requests the Commission approve its request for a five-year operating licence.

Thank you and this concludes our presentation.

THE CHAIRPERSON: Thank you very much.

Before we open the floor for questions we're now going to move to the presentation by CNSC staff. This is outlined in CMD document 06-H18.C.

I will turn now to Mr. Barclay Howden, the Director General responsible for the oversight of this facility.

Mr. Howden, you have the floor.

06-H18.C
Oral presentation by
CNSC staff

MR. HOWDEN: Thank you.

Good morning, Madam Chair, members of the Commission.

For the record, my name is Barclay Howden; I'm the Director General of the Directorate of Nuclear Cycle and Facilities Regulation.

With me today are Mr. Henry Rabski; Director and Mr. Marty O'Brien; Project Officer in the Processing and Research Facilities Division, plus the other members of our licensing team for this facility.

CNSC staff has reviewed the operation of the facility and the licensee's application to renew its Port Hope Class 1B Nuclear Fuel Facilities Operating Licence that will expire February 28th, 2007.

Based on this review, CNSC staff has formed a position on the application which is documented in CMD 06-H18 plus the three supplementary CMDs. The position includes a recommendation that the Commission renew the operating licence for another five-year term.

I will now pass the presentation over to Mr. Rabski first and then to Mr. O'Brien who will provide you with updates from the Day One Hearing and CNSC staff's recommendations for licence renewal.

MR. RABSKI: Good morning, Madam Chair, members of the Commission.

For the record my name is Henry Rabski.

Our presentation this morning has six parts. I will first provide the Commission an

introduction followed by discussion of CNSC staff's review of Cameco's renewal application.

Then Mr. O'Brien will provide an overview of the licensee safety programs and performance in various safety areas which were presented in detail at the Day One Hearing, followed by a presentation of updates to the Day One Hearing.

Finally, to end our presentation, Mr. O'Brien will present CNSC staff's conclusions and recommendations for the licence renewal.

Throughout our presentation we will refer to the licensee, Cameco Corporation, as Cameco.

Cameco owns and operates a Class 1B nuclear facility in Port Hope, Ontario and operates under licence FFOL-3631.1/2007 which was issued on March 1st, 2002 for a five-year term and expires on February 28th, 2007.

Cameco produces two main products at the Port Hope facility; uranium dioxide powder, for use in Candu fuel and uranium hexafluoride, for light water reactor fuel production.

Each product is produced at a separate plant at the facility. The feed stock for each plant is uranium trioxide, produced at Cameco's Blind River facility.

In addition, a metals plant is used to

produce speciality uranium metal products, including casting uranium metal into shielding and counterweights for certain types of aircraft. The facility also includes a standby plant for $U0_2$ production.

The operating licence for the facility, as stated earlier, expires February 28th, 2007 and Cameco has applied to the Commission for the renewal of the licence for another five-year term.

The application did not include a request for authorization of any new activities that are not currently authorized under the licence. The application was provided in a timely fashion and CNSC staff's review of the application concludes that it meets the requirements and that an environmental assessment under the *Canadian Environmental Assessment Act* is not required.

This completes the second part of our presentation and I will now ask Mr. O'Brien to continue with the rest of the presentation.

MR. O'BRIEN: Thank you, Mr. Rabski.

Good morning, Madam Chair, members of the Commission.

For the record, my name is Marty O'Brien.

Staff's assessment of licensee performance was presented in detail at the Day One Hearing and will be summarized in the next slide.

There are eight key areas, safety areas of this facility, namely; radiation protection, environmental protection, emergency management, fire protection, operations, quality assurance, safeguards and security.

To verify whether Cameco has been operating the facility as required by the regulatory requirements, CNSC staff has conducted compliance inspections and performed reviews of information submitted by the licensee including quarterly and annual compliance reports, incident reports and third party review reports.

As indicated at the Day One Hearing, each of the safety areas included in CMD 06-H18 was given a “B” rating or meets requirements, except fire safety which was given a “C” rating or below requirements.

Each safety area was given a stable performance trend except fire safety and emergency management which were each given an upward performance trend.

Since the security program contains prescribed information, a separate report was provided to the Commission as CMD 06-H18.A. Overall, Cameco’s performance met CNSC requirements.

Next, I will provide an update on topics discussed at the Day One Hearing and described in CNSC staff supplementary CMD 06-18.C.

I will first provide an update on soil monitoring. At the Day One Hearing, the Commission indicated a need for further clarification regarding new soil monitoring activities being performed at the Port Hope conversion facility. To provide historical context to the recent studies that have been initiated, a copy of a report summarizing past studies conducted by the Ontario Ministry of the Environment, who, historically have been very active in studying Port Hope soils as provided as an attachment to supplementary CMD 06-H18.C.

Overall, these studies have indicated that contaminant levels in Port Hope soils are not expected to result in adverse health consequences and levels are below known ecological threshold values.

In regards to new soils initiatives, three new studies have commenced over the last approximate one and a half years; one by the Ministry of the Environment and two by Cameco.

The Ministry of the Environment has redesigned its long-term soil monitoring program in Port Hope due to the problems encountered during the previous 1996-2002 study on impact of Cameco’s emissions on soil and vegetation. The redesigned program is to resume soil sampling activities at locations that had been remediated with clean soil to avoid interference associated with

historic uranium oil contamination.

The initial results of this program have not yet been made available to the CNSC.

Cameco also conducted a parallel study with the MOE from 1996 to 2002 and that program has been replaced with a new program in which sampling is conducted periodically at several locations around their facility. Sampling commenced in 2005 and the original baseline results have been submitted to the CNSC.

The results indicate elevated concentrations in some sampled sites. The elevated concentrations, as well as the wide range of reported concentrations are expected due to possible historical contamination at some locations.

The other study Cameco has initiated is a follow-up study from the ecological risk assessment conducted for the facility in 2002-2003. The overall objective of the soil characterization study is to obtain site-specific soil characteristics in vicinity of the facility in order to refine and validate model parameters used to predict soil concentrations and to confirm that uranium will not accumulate to levels that may pose a potential health or environmental risk in the future.

CNSC staff has recently received a draft report for the study which indicates an improvement in

model predictions resulting from the use of site-specific soil characteristics.

However, further work is required to the modelling of uranium accumulation at locations associated with the highest expected air concentrations of uranium using the site-specific soil values. Cameco has been requested to address this issue in the final report.

Based on the available information from past soil studies completed in Port Hope and the results received to date on new soil study initiatives, CNSC staff concludes that levels of uranium and other contaminants in Port Hope soils do not pose an unreasonable risk to the health and safety of persons or the environment and there is no data indicating any statistically significant accumulation of radioactive and hazardous substances in the environmental samples collected in the Port Hope area due to Cameco operations.

Next, I will provide an update on site flooding issues. As reported in CMD 06-H18, at the February 2005 mid-term performance report hearing conducted for the facility, the issue was raised concerning the proximity of the facility to the shore of Lake Ontario and the Ganaraska River and the risk of flooding the property.

At the time of the mid-term performance

report hearing, the floodlines at the facility were in the process of being remapped by the Ganaraska River Conservation Authority. In the hearing record or proceedings, the Commission requested CNSC staff to take note of the findings of the Conservation Authority, when available, and take any appropriate regulatory action on that information as required.

The floodline study has been completed, along with the flood-proofing report applying the study to Cameco's site, including recommendations for additional flood-proofing measures. CNSC staff have completed the review of each of these reports.

In the flood-proofing report, it is proposed that a flood protection berm be built along the facility property on the west side of the Port Hope Harbour as part of the Vision 2010 Project to protect Cameco properties from being flooded by severe flooding events from the Ganaraska River, such as the hypothetical probable maximum flood.

CNSC staff has directed Cameco to further detail a timeline to implement the proposal to build a flood protection berm and conduct further assessment of the site storm water drainage system's capabilities to respond to a severe flooding event.

CNSC staff has also directed Cameco to

implement additional emergency planning measures for such an event.

CNSC staff concludes that these additional actions are needed to further enhance safety provisions to limit the risks of potential severe flooding events causing significant adverse impacts to the persons or the environment.

However, with the very low probability of a severe flooding event such as a probable maximum flood and the current safety provisions, such as the containment of radioactive or hazardous materials in storage vessels or packaging, flooding events are not considered to pose an unreasonable risk to the health and safety of persons or the environment.

I will now provide an update on work being done to assess harbour wall geotechnical stability.

As reported in CMD 06-H18 in the February 2005 mid-term performance report hearing, the issue was raised concerning the stability of the harbour wall adjacent to the Cameco site and the potential for any instability presenting a risk to plant structures on site.

In the record or proceedings, the Commission requested that Cameco assess the risk that a failure of the harbour could impose in the facility and to report on its findings to CNSC staff.

Cameco has prepared a report assessing the impact of a harbour wall failure and CNSC staff have now completed their review.

CNSC staff concludes that a complete failure of the wall is very unlikely and any failure would be localized and gradual and detectable by periodic inspection. And, in the worst case of a complete wall failure, no building would be affected. There is, however, a probability that the pipe rack beside the harbour could be damaged.

The materials transported in the rack are water, air, steam, hydrogen and nitrogen. In the event of a piping rupture, the flows can be shut off at the source.

CNSC staff concludes that a potential harbour wall failure does not pose an unreasonable risk to the health and safety of persons or the environment.

As directed by the Commission at the public Hearing Day One, CNSC staff met with Cameco staff to discuss their concerns that the proposed licence would not provide any transition period for the implementation of a proposed new fire safety standard, NFPA-801, under conditions 8.1 to 8.5 of the proposed licence.

Based on this discussion and licensee’s commitment to enhance its facility’s existing fire safety program, including performing a fire hazard analysis in

accordance with the propose NFPA-801, CNSC staff concludes that the fire protection provisions the licensee currently has in place at the facility do not pose an unreasonable risk to persons or the environment. And a transition period for meeting the requirements of NFPA-801 standard would not pose unreasonable risks to persons or the environment.

Therefore, CNSC staff recommends that the existing proposed licence condition 8.2 as given in CMD 06-H18 be amended to allow for a transition period of one year for NFPA-801.

The proposed licence attached to supplementary CMD 06-H18.C has incorporated this amended licence condition 8.2.

With regards to decommissioning financial guarantees, in the CNSC staff CMD 06-H18, it was reported that a proposed revised preliminary decommissioning plan or PDP was submitted in June 2006 and was under review by CNSC staff.

The proposed revised PDP was updated primarily to incorporate changes to the estimated cost of decommissioning, as well as to account for the use of Blind River site for management of long-term decommissioning waste.

CNSC staff has completed its review of

Cameco’s PDP and concludes that it requires further revision in order to be considered acceptable and form an adequate basis for a revised financial guarantee.

The most significant outstanding issue relates to the lack of end-state objectives set out in the proposed revised PDP.

Once Cameco’s revised PDP and financial guarantee cost estimate are received, reviewed and accepted by CNSC staff, they'll be forwarded to the Commission for its consideration and acceptance.

Subject to the Commission’s acceptance of the new PDP and financial guarantee, CNSC staff will request the licensee to submit an amended letter of credit to cover the full costs of the proposed financial guarantee in accordance with licence requirements.

I will now provide a further update on the results of a Type 1 inspection conducted at the facility in June 2006. The inspection was a multidisciplinary inspection in nature and covered the areas of quality assurance, training and environmental management system.

The Quality Assurance Program at the facility is a mature program that has been inspected several times by CNSC staff over the last two decades. The facility is currently building upon its current training program by implementing a SAT-based program.

The facility has adopted ISO 14001 model for its environmental management system. The overall conclusion of the inspection was that Cameco meets requirements in all three areas covered. No directives were issued and inspection findings were considered to be minor deviations ---

(Technical audio difficulties)

Dr. LEI: ...those buildings, Cameco would have something in place to handle it to make sure that there wouldn't be any unreasonable risk to the public, to the health.

MEMBER DOSMAN: Thank you.

And may I ask, Madam Chair, Cameco -- is Cameco confident that it can come up with this type of contingency plan?

MR. VETOR: Kirk Vetor for the record.

We have received the request from the CNSC to develop this contingency plan and we're working on it at the present time and, yes, we are confident we will be able to develop the contingency plan.

MEMBER DOSMAN: Madam Chair, I'd like to go to one or two other questions.

THE CHAIRPERSON: Perhaps we should just go back to the staff, Dr. Dosman, and then hear your next questions.

MEMBER DOSMAN: Thank you. I appreciate hearing from staff.

MR. HOWDEN: Thank you. Barclay Howden speaking.

I would just like to ask Marty O'Brien, our Project Officer, to comment further on the two-stage regulatory approach that we've taken with regard to this particular issue.

Thank you.

MR. O'BRIEN: Yes, Marty O'Brien for the record.

Yes, we're looking at the -- we have reviewed both the short term and long term implications of this and, in the long term, the issue will be dealt with through the environmental assessment that will be conducted for the Vision 2010. The stage of that is the EA Guidelines that are currently being prepared and that will take care of the longer term.

In the short term, as Dr. Lei mentioned, we have requested Cameco to develop a contingency plan to ensure they have measures in place to deal with such an incident if it came in the short term. They do have an Emergency Response Plan as required by the licence. This would give further, sort of specific application to this type of incident, and ensure that it's covered off. They

are in a better position to deal with such things now that they have onsite a 24-hour, seven-day a week Emergency Response Team, a minimum complement of four plus an incident commander to deal with such incidents if it happened at any time.

Thank you.

THE CHAIRPERSON: Do you have another question, Dr. Dosman? We'll be moving on.

MEMBER DOSMAN: Yes, I do. I have a question on the soil monitoring. CNSC staff has indicated that it's requested to ask Cameco when the modelling on the soil sampling will be complete and I wonder if Cameco would be prepared to describe what's happening in that area?

MR. VETOR: Kirk Vetor for the record.

The modelling is completed. The information was not provided in the report. I believe that's the comment that staff was making. So we will definitely ensure that that information is provided when the final document is issued to the CNSC.

MEMBER DOSMAN: Madam Chair, I have several other questions on that issue but I could either ask them now or on another round, to your pleasure?

THE CHAIRPERSON: Thank you.

I would like to just use this opportunity

to take a short break. It's going to be a maximum of 10 minutes. So in 10 minutes we will start and we would like you in your seats, please.

Thank you.

--- Upon recessing at 10:13 a.m.

--- Upon resuming at 10:27 a.m.

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MR. VETOR: ...make an oral presentation on a quarterly basis to the municipal council. We've also included much of that information in the benchmarking report that was provided in one of our supplemental CMDs.

MEMBER GRAHAM: So they're done on a quarterly basis, is what you're saying; the information is provided on a quarterly basis.

If there is -- on some of the monitoring if there happens to be a trend upward very quickly and a red flag goes up as an instance, what is your -- what do you do then to -- what is your remedial plans if anything happens if something like that shows that there is a trend of upwards and so on? Is it reported immediately to CNSC or is it done just still on a quarterly basis?

MR. VETOR: Cameco has established administrative levels. Oh, sorry, Kirk Vetor for the record.

Cameco has established administrative

levels for all of its monitoring and if we exceed those administrative levels there is an investigation that's initiated. Certainly, if the levels that we are monitoring are substantially higher than what we are used to seeing we would be reporting that to the Canadian Nuclear Safety Commission.

MEMBER GRAHAM: A question for the Commission.

A comment was made by Cameco that it's significantly higher. What do you require; if there is a 10 per cent increase, or what percentage do you require that you get immediate reporting? Could you explain?

MR. HOWDEN: Barclay Howden speaking.

I'm going to ask Marty O'Brien, our Project Officer, to speak to that in terms of the way we handle if action levels are exceeded or if there is an incident.

MR. O'BRIEN: Marty O'Brien for the record.

Yes, the reporting of increases is covered under the requirements in the licence section 10. The licence has all the reporting requirements, including if action levels are exceeded. These are required to be reported and CNSC staff will monitor whether the short term actions taken by Cameco are adequate to address the situation and, also in the long term, to see whether they adequately analyzed the situation to prevent similar

incidents from happening in the future.

We look at both aspects in our review.

Thank you.

MEMBER GRAHAM: I'm sorry, the echo, I just didn't get the whole answer.

What my question was, is you talked about exceeding action levels, but if there happens to be something that doesn't exceed an action level but you see a trend, a trending upwards, when do you require Cameco to report how big an increase even though it doesn't -- it may not reach certain action levels but there is a trend and so on, so that it is not just received on a quarterly basis?

MR. O'BRIEN: Marty O'Brien for the record.

If it's a relatively rapid increase, say, due to an incident as you see in 10(a) of the licence:

> "The licensee shall report to the Commission within 24 hours on becoming aware of any information or events revealing any situation or incident that results or is likely to result in a hazard to the health or safety of any person or the environment."

That's in section 10 of the licence.

So they'd make that call. If it was a

rapid increase we would expect them to report that immediately in that requirement.

Thank you.

MEMBER GRAHAM: I read that, and I realize, but I guess the question I'm asking is, is there a percentage that -- you know, a rapid increase. What's your definition of a rapid increase?

MR. O'BRIEN: Marty O'Brien for the record.

If it's not, say, a rapid increase and it's a gradual increase, those trends are reviewed on a regular basis during routine inspections. What it is, they submit quarterly compliance reports and in those quarterly compliance reports they're expected to analyse the data and identify trends and then we review how they're doing that and then also how they're responding to those upward trends.

First, we expect them to identify them and then to act appropriately to respond to bring them if they are going up, of course back down and, as mentioned previously, we review those during our quarterly inspections and expect appropriate action to be taken.

Thank you.

MEMBER GRAHAM: Thank you, Madam Chair.

I did have a couple of questions on fire protection and I believe we are to wait, are we, until the

officials are here?

THE CHAIRPERSON: Well, why don't we start with round two?

(Technical Audio Difficulties)

THE CHAIRPERSON: Dr. McDill, round two.

MEMBER McDILL: Thank you.

In the Day One I asked about the calibration of the 1 and 2-D models for the floodplain mapping. I wonder now that staff have seen the User Manual if they would comment again on the calibration of the model and the accuracy of the models.

Thank you.

MR. HOWDEN: Thank you. Barclay Howden speaking.

I'll ask Dr. Lei to reply to you on that question. Thank you.

DR. LEI: For the record, my name is Shizhong Lei.

Yes, we have received the manual of that code from the consultants of Cameco, and I also had a teleconference with them and the Cameco staff and had further discussions about this. Following that, they submitted this manual and the information about the calibration and validation. They didn't do the calibration and validation of the code directly. However,

in their previous applications they did it, and this code even though it was developed over 10 years ago, it's still used in many other projects across the country.

And from the information provided, I have confidence in this little code. In fact, in this Cameco application I find that this code is even more stable than the code that is recommended by the GRCA.

MEMBER McDILL: So you're confident that it can be called an industry standard, then, or better than an industry standard?

DR. LEI: It's lots of industry standards actually. This code is primarily used in Canada only but the HEC code that's developed in the U.S. it is industry standard. It's used internationally. However, at least for this Cameco, Ganaraska River particular case, HEC model code is not as stable as this 2-D code.

MEMBER McDILL: Thank you.

I'll offer Cameco a chance to comment if they wish. You may not wish to.

MR. STEANE: No, Bob Steane. I have no comment.

MEMBER McDILL: Thank you.

THE CHAIRPERSON: I understand that the Fire Chief has arrived for questions. I wonder if I could ask him to come to the intervenors' area for questions?

Welcome, sir, and thank you very much for taking part in the hearings today. The Commission Members haven't asked any questions with regards to fire protection so we will be all fresh in those questions right now.

I am just going to turn to Dr. Barnes. Dr. Barnes, do you have a fire protection question?

MEMBER BARNES: Well, I have a number of issues and I think it ---

THE CHAIRPERSON: I just would like to -- I would like to centre the fire protection questions together. If you would like to start that or someone else could start?

Would you like to start and then what we will do is a series of questions that will hopefully be more concise than going back and forth a lot. So I'll just alert the rest of the Members that that's what my intention is to do, to talk about fire protection at this point.

Would you like to start that?

MEMBER BARNES: I'll start. I think this, clearly, is one of the key issues that came up on this licensing process in Day One, particularly because it received a "C" rating. So of all the facets that were being rated this was the lowest.

There were various concerns about the internal modifications that Cameco has done related to fire which are substantial and then are documented in detail here, but there were other concerns which I'm sure will be raised again by intervenors on the capacity of the local firefighting force to cope with a significant fire today and tomorrow at Cameco. I think it relates to the number of firefighters that you have at your disposal, Chief, and the number of volunteers that can be assembled to fight.

Let's just take to some extent a worst case scenario, a serious fire of significant proportions or major proportions, assuming that you can cope with minor fires or the staff at Cameco could deal with that.

And then, thirdly, the time to reach the facility with a required number of firefighters. I wonder, Chief, if you could address that, the number of firefighters, the number of volunteers; the time to reach the facility, and to be honest, to what extent your resources as funded by the community and the town really are sufficient to cope with a major fire.

CHIEF HAYLOW: I can recall all these questions. I'll try and answer them sequentially.

We presently have an allotted complement of 58 volunteers plus myself and an Assistant Chief.

However, right now we're down about five to six firefighters which I have approval to hire to bring us back up to the allotted complement. We have an allotted complement of 22 in Station 1 in the Port Hope Urban Station, 18 in the Station 2 or Welcome, and 18 in Station 3 or Garden Hill.

The time to get from Station 1 to Cameco, travel time would approximately be two minutes. However, for us to call the volunteers there is a paging system we use, typical of all volunteer systems.

On average, to get the first truck out of the hall would be around three to four minutes and then the other trucks, depending on how soon the guys show up.

MEMBER BARNES: Let's put it another way, then. Should there be a major fire; let's take a scenario of a major fire breaking out at Cameco. In order to suppress that fire, how many men do you need in what sort of timeframe to cope with that scenario?

THE CHAIRPERSON: Or women.

CHIEF HAYLOW: We do have women on our fire service and they do a great job.

In any fire situation, the sooner you can get firefighters on the ground the more likely you are to control the situation. Our provincial body, the Ontario Fire Marshall's Office, recommends 10 firefighters on

scene within 10 minutes for a single family residential structure. They don't actually give a number for high life or industrial numbers. The only thing we have to go by is the NFPA numbers, but I would have to say from my past experience that when I started in the fire service way back in the early seventies, on a typical call we would send 14 to 16 people on the initial alarm and if there were flames showing we would automatically call a second alarm.

For a Port Hope fire to be able to get those numbers as of today, we would automatically have to send two stations and our response time would likely be on scene, would more -- to get over around 15 people, my best guess at this time would be at least 12-13 minutes.

MEMBER BARNES: Knowing something about the nature of the facility here, are there any areas of that facility where you would not be able as individual firefighters to tackle that? Are there any areas in which you have difficulty entering to fight fires?

CHIEF HAYLOW: If I interpret your question correctly, we are in discussions right now with Cameco regarding Building 24 and Building 50 where their Emergency Response Team will look after any incident within those buildings and we will be there to support them only.

With that facility it's -- the only problem there is -- I mean, there is one way in and one way out along Hayward Street. However, we have trained together. We have come a long way since a year ago. We still have a ways to go. But I'm very happy to say that we're making very good progress.

I would still have to say that our response from the Port Hope Fire is probably -- wouldn't be in line with what most people would expect.

MEMBER BARNES: Am I right in thinking that the Cameco facility is the largest sort of single facility in the town in terms of a complex in which a fire may break out?

THE CHAIRPERSON: I think probably the appropriate word might be "industrial facility".

CHIEF HAYLOW: As a single entity, yes.

MEMBER BARNES: And elsewhere in our documents there are indications of the value of this facility to the -- I'll call it the tax base of the city, the economic wellbeing of the city.

In this case, given its size, I come back to the issue of, if you could be entirely frank, to what extent are you resourced in order to provide the appropriate fire protection for this facility that is the largest and generates, apparently, a very substantial

economic base for the community?

CHIEF HAYLOW: Well, as mentioned before, other than myself and the Assistant Chief, everybody is a volunteer firefighter.

Cameco by itself being a single entity, from a fire chief's perspective, the biggest issue I would have, you know from a resident's point of view, is that we do not have a buffer zone. They do -- certainly are one of the major contributors to the tax base within the community.

I mean, it would be nice to say, yes, I'd like to have all these firefighters but, realistically, the municipality couldn't afford that and the number of calls that we do get there are very, very minimal presently. That's not to say that some catastrophe couldn't happen and if it did happen, I mean, we do have mutual aid. It's probably 15-20 minutes away.

Are we appropriately resourced to deal with Cameco? That's a tough, tough question to answer.

Yes, I guess we would have to say it would depend on the event. If we had a major fire there the answer would probably -- not probably. It would be "no".

MEMBER BARNES: But I think that you mentioned at the beginning that you have been provided -- did I interpret it correctly -- five to six new

firefighters?

CHIEF HAYLOW: No, these will not be new firefighters. These are positions that the firefighters have either retired or have moved onto other municipalities.

MEMBER BARNES: You mentioned that Cameco have internal, I guess, volunteers to cope with two of the particular buildings within the overall facility and that you have started training with them over the past year and that you have “a way to go”. I assume a way to go might be in the order of a year or so.

But to what extent does Cameco seek your advice in their own training of their own volunteers? Firefighting is a specialized business. It’s particularly specialized within the specialized facilities to which they have taken two for their own internal folks.

Are you or your staff involved in providing guidance or documents, any kind of review of the capabilities of Cameco’s own staff where they are involved in fighting fires on those two areas?

CHIEF HAYLOW: Not exactly, although I know they sent their staff to Norwood which is just north of here. It’s called the Eastern Ontario Fire Academy and the courses that they run there would be the same as if we sent our people there. A few months ago we were at

Westleyville at the fire training grounds there, doing some joint training with our instructors.

So I'm confident that as we go down the road their people, their Emergency Response Team will be as well trained as our people will be.

MEMBER BARNES: Now, a final, Madam Chair.

We talked about your capabilities largely -- at least, my questions were on the number of staff and their ability to get to a fire. What about the physical equipment that you have at your disposal? Is that adequate given the size and complexity of this particular plant which is the largest within the town?

CHIEF HAYLOW: Our equipment is fairly -- well, like any fire department we have some older stuff. We have some newer stuff. In my capital budget this year I put in for a new elevating device. Cameco has the tallest structure in the municipality. Although it's not regularly populated, I guess there is always the possibility. We do not have right now an elevating device that would reach the top of their Building 50 structure.

Pumpers, right now I believe we have an adequate number of pumpers. We do replace them on an ongoing cycle of approximately 20 to 25 years, typical of any fire department.

If we had a major fire there we would

definitely have to call for mutual aid trucks as well as our own.

MEMBER BARNES: And Madam Chair -- so the new elevator device that you have requested, would that reach the high ceiling?

CHIEF HAYLOW: That would depend on Council if they approve it but, yes, what I'm looking for, yes, it would.

MEMBER BARNES: Well, I'm just saying, the type you're asking, it would in fact do the job?

CHIEF HAYLOW: Yes.

THE CHAIRPERSON: I believe it's reasonable that we ask Cameco and then staff to comment on the testimony by the Fire Chief.

Cameco first, and then staff.

MR. STEANE: Thank you, Madam Chair. For the record, Bob Steane.

We have, I think it's fair to say, Chief Haylow and his department -- he has expressed the capabilities of the fire department and because of the Fire Department's capabilities we have our own Emergency Response Team that is capable, competent and has the equipment to deal with any credible events that would take place at the facility, and not just in those two buildings but in all the buildings. It's just those two that we

have identified as we with -- in connection with the Port Hope Fire Department, we definitely want them just to be in a supporting role outside because of the chemical nature in them, but we would be involved in any and all emergency at our site.

To give further background on our capabilities and competence and equipment and the nature of an industrial fire brigade and response teams and people required, I would ask Tyler Rouse, our Emergency Services Coordinator, to speak to that.

MR. ROUSE: Tyler Rouse for the record.

As outlined in Day One, I gave an overview of what we have as far as an Emergency Response Team goes. We do have 48 members that are on our Emergency Response Team. Our minimum number staffing level onsite is four, a four-man minimum. We schedule six onsite, you know, for a full response.

I want to emphasize that those numbers that -- during the day, throughout the day shift, we end up with 20 or more Emergency Response Team members onsite. It’s only on the nights and weekends when we fall down to six and, on a very rare occasion, four, four members. But all these members are trained to respond to fires and hazardous materials incidents at the facility. 47 of our 48 members are trained to NFPA-472 Hazardous Materials

Technician level. That's the highest level of emergency response for hazardous materials that you can reach through the NFPA Standards and 47 of 48 of our members are there.

Additionally, all 48 of our members are certified and trained to fight advanced interior and exterior fires in accordance with an NFPA-600. So for any hazardous materials incident, any fire or a combination of both, Cameco's Emergency Response Team is authorized and able to effectively mitigate an incident at the site, okay?

As far as the four-man minimum goes, I would like to point out that I did put in my report in the CMD, supplemental CMD, for the justification of the minimum staffing levels for an Emergency Response Team at the Cameco Port Hope Facility and it does outline how we meet the NFPA Standards for response numbers at our site.

THE CHAIRPERSON: Staff.

MR. HOWDEN: Barclay Howden speaking.

I'm going to ask Mr. Marty O'Brien to comment on what's been said from a risk perspective and defence in-depth.

MR. O'BRIEN: Marty O'Brien for the record.

For all these more extreme-type events we require the licensee to in-depth analysis through what we

call a safety report. And the safety report, what it basically does is document all the defences in-depth against all potential incidents such as a fire which could potentially cause an offsite release.

So in that analysis we look, you might say holistically, not just at the response side but also, say, the inherent nature of the buildings.

For example, at Building 50, the UF_6 plant is a steel, concrete construction so obviously that has less potential for a fire than, say, a warehouse full of plastics, so the demands for response and mitigation is less.

So based on that analysis -- and Cameco has recently re-submitted their safety report with this additional strengthening of the barrier defence in-depth of their onsite Emergency Response Team, which they always had, but now they have strengthened it significantly. And based on that and there was some information, of course, came maybe two years ago that there was some questioning of the offsite response.

So now we believe that they've strengthened their internal response and now the safety margins have now been adequately restored for this type of incident.

Thank you.

MEMBER BARNES: Can I just ask Cameco,

since you indicated the scope of your facilities as well as the equipment, does your equipment include facilities to get to the highest buildings that you have on your plant, a parallel to the question we asked the Chief?

MR. ROUSE: Tyler Rouse for the record.

Currently, we have all of the equipment needed for a hazardous materials incident. As far as reaching the highest building, our aerial apparatus that we have onsite will reach 90 per cent, the top of 90 per cent of our buildings. Building 50, as Chief Haylow said, is a tall building so fire suppression for Building 50 in the upper floors will have to be done internally, in the interior portion of the building.

MEMBER BARNES: So what height is not covered externally, approximately?

MR. ROUSE: Tyler Rouse for the record.

Our aerial apparatus is about 50 feet tall so we're still lacking the tower portion of the UF_6 plant which is about, I'd say, another 100 feet. But just so you know the tower is -- one of the stairwells in the tower does have a standpipe system so that the firefighters can run up the stairwell with what we call a "high rise pack" hook into the standpipe system and fight any fire in the upper portions of the plant.

THE CHAIRPERSON: Are there further

questions?

Mr. Graham, on fire protection.

MEMBER GRAHAM: Thank you, Madam Chair.

To the Fire Chief, you said you have a complement of 58 plus yourself and the Deputy Chief. With the population of the city growing and so on, how long since that complement has been -- when was the last time it was increased, I guess, would be my first question?

CHIEF HAYLOW: It hasn't -- other than myself as fulltime and the Assistant Chief, the volunteer complement has, to the best of my knowledge, has stayed the same since I have been here. I did put a report into the CEO a month or so ago to increase those numbers although I believe I have to put another report into the new Council for next year.

MEMBER GRAHAM: You said it's been -- remained at 58 since you have been here. How many years is that?

CHIEF HAYLOW: Sorry about that. I've been here three years.

MEMBER GRAHAM: My second question is with regard to the -- and first of all, the 58 is not your full complement now even though that's the number. You're still six short or five short and you're recruiting.

Volunteers are exactly what they are. They

are tremendously dedicated people to a community and so on, but they also have jobs to do and lives to live and families to be with.

And my concern is, and my question is going to be to Cameco, is because of the type of your facility there is different type of training required than just attending a house fire and National Fire Code standards and so on have to be met and since these are volunteer people and to get them up to Code and to take time out of their lives as far as vacations and so on, do you have any type of compensation or assistance in training these people, these volunteers, when they have to take a week off from work or a few days off from work to go to any training facility?

MR. STEANE: For the record, Bob Steane.

Just checking, was that question for Cameco or was that question for the ---

MEMBER GRAHAM: For Cameco.

MR. STEANE: Cameco in assisting the Port Hope Fire Department, increased their qualifications and did fund and did provide payment for lost wages or replacement wages for Port Hope Fire Department volunteers who availed themselves to take the training to increase their training qualifications to NFPA-472 operations level. So yes, we have done that.

MEMBER GRAHAM: My next question would be...

(**Technical Audio Difficulties)**

MR. STEANE: ...training to increase their training qualifications to NFPA-472 operations level. So yes, we have done that.

MEMBER GRAHAM: My next question would be the fire codes -- I believe we have read in one of the -- yes, the document of staff -- that National Fire Code 2005 you're going to have until February 29th, 2008 and then you have to after that go to the new NFPA-801. How much additional training of volunteers will be required to meet the February 29th deadline of 2008?

MR. ROUSE: Tyler Rouse for the record.

As far as NFPA-801 goes, there is a section, Chapter 4 of the section that outlines emergency response.

Currently, the Cameco Emergency Response Team is in compliance with NFPA-801. Basically, Chapter 4 just states that the Emergency Response Team has to operate in accordance with NFPA-600 and NFPA-1500 and I outlined in our Supplemental CMD a justification document where we meet those requirements.

MEMBER GRAHAM: Will there be additional training required to the volunteers, the 58 minus -- or

the establishment of 58 members here in Port Hope; will there be additional training required before the February 29th, 2008 deadline?

MR. ROUSE: Well, currently, as Mr. Steane -- Tyler Rouse for the record -- as Mr. Steane stated, the Fire Department is trained to operations level, courtesy of Cameco providing that training.

Currently, we have a Draft Memorandum of Understanding that we submitted to the Fire Chief and to the Municipality. They haven't -- well, they have given back comments but I haven't had time to check because this document went in recently. But there will be provisions in that for training and equipment of volunteer firefighters for response to the Cameco site.

Additionally, I would like to emphasize that with emergency response, with any emergency response organization, no matter where they are, training is ongoing. It never stops. You know, you never feel like you did enough. You will never have enough training. So it will always -- it will be ongoing and it will ongoing jointly with the Port Hope Fire Department.

And as Chief Haylow says, we have made great progress and I think he and I are on the same sheet of music as far as where we need to go.

MEMBER GRAHAM: I quite realize that

training is ongoing and things change in dealing with hazards and so on. My concern is, though, is that this is a volunteer group of people that are dedicating part of their career and their lives and so on to this.

Are you, is Cameco, prepared and will they -- and this is what I need for the record -- is are you prepared to provide the resources needed to the Chief and his people that he has the adequate trained people to meet the new standards after February 29th, 2008? That's the basic question.

MR. STEANE: Bob Steane for the record.

First, I'd like to come back to Cameco has and recognizes the nature of our facility and therefore have our own Emergency Response Team that is extremely well trained and would compare with that available in Toronto or Team 1 or any other place that you want to look at in terms of qualifications and skills. We do meet the NFPA-801 Standards today with reference to what it is that we need to do.

We have committed and are working with the municipality to keep their training up so that we can -- and we have offered and we are discussing with them how we can support the municipality so that the municipal fire department is able to be supportive of our Emergency Response Team.

So to the extent that we have discussions ongoing, a Memorandum of Understanding between us if that hasn't been finalized yet, but our discussion between us and the Municipality, I can't tell you today what the outcome in where it will be, but Cameco has committed and are committed to seeing that Port Hope Fire Department is a resource that can support our Emergency Response Team.

(TECHNICAL AUDIO DIFFICULTIES)

MEMBER GRAHAM :--- Cameco force that you have, what I'm questioning is, the vehicle, to get the other 58 compliment and so on and up to meet your compliment that you have because -- and we're talking a worse case scenario; a major fire in which your own compliment cannot facilitate all the action that has -- you have to depend on the volunteer -- on the city fire department.

I realize it's an ongoing memorandum that's coming forward but we just need to have that type of assurance that a major fire can be dealt with through the resources of both your own internal and volunteer department and that's the commitment I am looking for.

Then I want to ask CNSC staff if they have anything to add.

MR. STEANE: Bob Steane for the record.

We have been committed to seeing that the

resources of the Port Hope Fire Department are there to support our team. We will continue with that commitment.

Again, as I say, there is a -- we are in the process of discussing the terms of how that might be put in place and the basis for a formal agreement. And parts of that is we are going forward in our offering as to how we would train and support the training and equipment of the Port Hope Fire Department.

THE CHAIRPERSON: Perhaps we could put on -- are there any further questions?

Dr. Dosman.

MEMBER DOSMAN: Madam Chair, I'd like to ask the Chief, where is the nearest backup from neighbouring towns if you need it and what capability do they have and how long would it take assistance from a neighbouring town to get here if you need it?

CHIEF HAYLOW: Our closest response under mutual aid would come from Cobourg which is about eight miles away, just down the road. They have 100 foot aerial; they have pumpers; they have one station and our next call would probably to go Hamilton Township which is immediately next door to us. However, their closest fire station would be Bewdley which is probably 15-20 klics away.

MEMBER DOSMAN: And may I ask, the response

time if they weren't occupied with their own fire?

CHIEF HAYLOW: The response time to get the first truck here -- Cobourg has full-time staffing of I believe three on shift, so they're usually two, under a mutual aid call they'd probably wait for a couple of their volunteers, so, it would be a best guess here but I would say it would be at least 15 minutes.

MEMBER DOSMAN: Thank you.

THE CHAIRPERSON: I just want to comment that clearly the issue of fire protection has been an issue that's come up, starting back into mid-term reports, et cetera and the Commission understands why it's important; it's important to everyone, I think, in this room, to have a vigorous component and the Commission's interest in this has resulted in some changes in communications and some increased level of training and focus on fire protection.

We understand that this is a shared jurisdiction, there are many areas of the CNSC jurisdiction, when in fact we have jurisdiction, probably as a regulator, comparing ourselves to our other colleagues around the world we have more jurisdiction in more areas. There's only one regulator instead of four or five which helps to prevent overlap.

However, in this case there has to be

respect for jurisdictions that are there; municipal, federal, provincial jurisdictions and this also carries over into emergency preparedness. So that continues to enhance the focus that I think the Commission wishes to place on that.

That said, it is an area of various jurisdictions and responsibilities, there are key responsibilities on a number of people to alert each other if there is issues and also to communicate well and to provide an overall holistic system rather than well functioning individual components that don’t make the system together.

So I think the Commission wishes the questioning, although on specific points, should be looked at within that questioning of the whole holistic capacity of these areas. We haven’t talked about the standards very much. There has been some discussion about standards, there are standards and those would be the standards to which the regulation and the oversight should be measured and in fact, I think performance on that area.

Are there any other questions for the fire chief? I think he might have other things to do as well.

Well, thank you very much, sir, for that. I think you’ll be back later in the intervening portion but this allows us to do that.

Now, going back to -- we are still in Round Two. Were there other questions, Dr. Barnes, on Round Two?

MEMBER BARNES: I had two and first is to Cameco. I come back to the uranium emissions which again is an issue that comes up many times today.

So I'd just like to ask a sort of generic question. Although you provided a number of charts here, Figure 2 in your supporting document labelled "Uranium Emissions from---" sorry, not that one.

The facility wide -- I'll just go to facility wide, total uranium emissions of air. I notice that there was a significant reduction from 1996 to 1999, basically cutting the emissions in half. But since -- over the period of the last licence, five-year licence period, the total emissions have more or less stayed the same, if anything they've increased a little; more or less averaging a 100 kilograms a year.

I notice that in your slide on our page 9, the comprehensive emissions reduction strategy you indicate that Cameco will develop a comprehensive emission reduction strategy in 2007. The paragraph also that you include in here, however, is pretty general; it doesn't really say how that's going to be achieved. Whether these are new technologies or whether you're simply going to

look a piece meal throughout the whole facility about how you can bring it down.

So I guess I'm concerned, really, over the lifetime of the last licence why there has been no reduction in emissions and whether the words "will develop a comprehensive reduction" whether we're going to see any significant reduction in emissions over the lifetime of the period of the next licence that you're requesting five years.

So what would be your target? Does Cameco have a target for these annual emissions; let's say in 2011, assuming this strategy is put in place?

MR. STEANE: Bob Steane for the record.

The success, I think, going back and looking at those numbers, we had previously very consciously targeted the UF-6 stack and had been working with technology on that, adding scrubbers, adding different means of reducing that and I think our successes in that are quite evidence in the results achieved.

We have, even in the licensing period, continued adding some additional tail gas scrubbers and working on that area but as far as that technology goes in the stack emission, it seems we need to revisit and come up with a different technology.

The other thing that -- going forward, the

fugitive emission and our estimation of that fugitive emissions and new calculation method that we brought in 2005 clearly highlighted to us that our attention -- not that we hadn’t been paying any attention to fugitive emissions but it needed to be a higher priority in where we placed our attention and worked on it.

That would be the area that we would target, which is fugitive emissions.

We are also, as I say, developing a strategy. I don’t have, today, the number that we’re looking for at the end of the licensing period, 2011, if that’s the date.

Anyway, but that we continue with a continuing reduction is where we want to go.

I talk about developing a strategy, I think we need to focus on where we should be placing the priority and again, have those discussions in conjunction with the community to see that our efforts are -- we got fluorides, we have uranium, and when one looks at the uranium and air graph that was in the presentation that number is down two to three per cent of some postulated standards or guidelines of uranium and air concentrations of .3 micrograms per cubic metre that were approaching two-to-three percent of that level is at the -- and as everyone agreed, that's where we should be putting our

effort.

So, we want to develop comprehensive targets in conjunction with the community; look at the technologies and see what technologies we apply; and then go forward with working to reduce those. So, it would be a comprehensive plan, not just ad hoc here and there.

MEMBER BARNES: But you are here for a licence renewal over the next five years and what you are telling me is you don't have a target for 2011, approximately, since there has been no reduction over the last five years and you plan a comprehensive strategy of reducing it but you're not able to tell us today what the expected reduction level is in 2011, by the end of the next licence period?

MR. STEANE: Bob Steane for the record.

I think if one focuses only on uranium, you could say that it has been fairly constant over the licence period. We have also been focusing on fluoride. It's the total emissions that we're focusing on, not just the uranium and we look at it from a risk perspective and where do our efforts go. Fluoride has come down over the licensing period. We have had some successes in uranium. We've have some -- not successes, but in totality of our total air emissions, we have achieved reductions in the licensing period.

Again, do we have a target to continue the decreasing trend and I don't have today a number that I can tell you that in five years from now it will be -- we're targeting this number.

MEMBER BARNES: I'm focusing on uranium because you showed us these charts, they are your charts. You're trying, I think, to demonstrate that you are in the process of reducing these. You showed us maps showing the dispersal of this. We have talked about the soil plots which address uranium and that's why I'm asking about this.

Could I ask if staff have any comments on these issues I'm raising?

MR. HOWDEN: Barclay Howden speaking.

In talking with Mr. O'Brien, this strategy is relatively new to us. We have information from general and conceptual, but from our perspective it's appropriate to attack all the emissions systematically.

Clearly, the fugitive emissions with the calculations and better accounting need more attention from an ALARA perspective. At the moment, if you look at the environmental monitoring program, there has been no indication that -- if emissions have been increasing. It just seems to be a better accounting and certainly the estimated doses to the public remains low.

From our perspective, because of these calculations and the ability to, maybe, define them better, it is actually providing the licensee with info such that they can actually attack the issue further, so this is entirely appropriate from an ALARA perspective and it's something that we expect them to do.

As they said, they have been focusing more on the stack emissions from a risk perspective, but they have to keep their eye on those but can do more with the fugitive emissions which are the ones that are coming out through the normal ventilation system.

MEMBER BARNES: That's why I was focusing on the total emissions as opposed to just the separate curves on the stack emissions.

If I could just have one more issue, and that's on -- partly why I was raising that question is I guess as a Commission when we have these periods of review and re-licensing every five years, I would expect as part of the public process for the licensee to bring as much information to bear and the staff to analyze that and bring that forward in a public forum like this, so that we have as much up-to-date information as possible and the appropriate planning of both the licensee and the staff is such that the Commission can receive as much timely and complete information as possible.

I recognize that many of these activities are sort of ongoing through the life of a process. Nevertheless, I think the actual licence decisions should be made on the basis of as much complete information as possible.

So, if I turn to -- this is a further example and one I would, again, question in terms of a process, is the information on the Preliminary Decommissioning Plan, which is outlined on staff page 6, and it just goes back that the revision that was submitted in June, 2006 was submitted in part to resolve the concerns raised by the Commission in February, 2005, February, 2005 Mid-term Hearing of Proceedings.

Okay, so here we are in November, 2006. So we raised issues in February, 2005, which then took something of the order of 16 months to get a revision into staff in June, 2006. The second paragraph goes on to say that, "The information has now been received", but as CNSC staff provide its comments back to Cameco and request a response by November 30th, which of course is about three days after this Hearing.

So, page 11 of the view graphs that were shown by Cameco, the third bullet on Decommissioning Plan, says that the estimated cost of -- quotes, their quotes, "Decommissioning Today" concept is $83 million.

So, staff, could I ask are there any significant disagreements? Are there any significant issues concerning the Decommissioning Plan and the level of the financial guarantee accepting that it is not yet finally complete, that we should be aware of today?

THE CHAIRPERSON: If I could, as a supplementary, could you explain why knowing when the licence expired, the process was not designed in order to give those results in time?

MR. HOWDEN: Barclay Howden speaking.

I'll respond to Madam Chair's question first and then I will ask Bob Barker to comment on any significant outstanding issues.

From the perspective of the review of the PDP's, they are generally updated on a five-year cycle or when major changes occur. There is a preparation process, review process, which is often iterative and in the case here, one of the factors that had impacted this PDP is the Vision 2010 Coming Forward. It is actually putting forward things that are different than were in the original PDP.

So, that has been a complicating factor from a time perspective, but with that starting to crystallize in terms of what has to be aligned with the Port Hope area initiative and what waste can be moved up

to the Blind River facility after decommissioning. That is, I'd say, take positive to take longer to take place, and that is the reason why we don't have it for you today.

In terms of the financial guarantee, when the estimate is accepted and the guarantee is prepared, that will come back to the Commission because only the Commission can accept financial guarantees.

Whether there is any further significant issues outstanding, I am going to ask Mr. Barker to comment on that.

MR. BARKER: Thank you. For the record, my name is Bob Barker.

There are two separate reviews performed on the submission. Cameco submitted a Preliminary Decommissioning Plan, an updated PDP, in addition to a cost estimate. So those two items were reviewed in relation to our two guidance documents, G206, Financial Guarantees and G219, Decommissioning Planning for Licensed Activities.

In terms of the issues on the Preliminary Decommissioning Plan itself, and this particular point applied to the costing issue, the submission lacked the proposed end-state objective for decommissioning. This was a significant issue in terms of, if you don't where you're headed, you really can't predict how you're going

to get there. Cameco in fact stated that the objective of the site was: (As Read)

> "To return it to the conditions that existed prior to the processing and storage of radioactive materials to the extent practical."

Staff need more information in terms of what that end-state objective would be.

There were other issues in terms of the review. For example, the building type and construction detail was not provided. There was incomplete information on the radionuclide inventory of the buildings, and the wording was generally vague in parts of the Preliminary Decommissioning Plan and really did require more precise definition in certain areas.

In relation to the financial guarantee cost estimate, the main issue is that the guide requires that the licensee provide a plan that is subject to independent verification. Staff does not feel at this point that the submitted cost estimate can be independently verified. Again, the key points are the preferred decommissioning strategy is not explicit.

There are starting point assumptions on the decommissioning for the cost estimate. The starting point assumptions assume the drawdown of hazardous waste and

nuclear substances in advance of decommissioning. That is an acceptable consideration from the aspect of a Preliminary Decommissioning Plan. However, it is not acceptable in relation to a cost estimate.

In the case of the type of instrument that Cameco is providing to the CNSC, it is a letter of credit. If there is a default the CNSC would be in receipt of those monies and therefore the CNSC would have to conduct the decommissioning itself. Therefore, all the activities have to be costed from a third party costing perspective.

In addition, the cost estimates were assumed to occur in the fourth quarter of 2006. Escalation of cost beyond that period were not provided for, and the costs of maintaining the facility over the planned decommissioning period of about three years were not included in the cost estimate.

In addition, there is more clarity that was required in the designation of the facility subject to the 2010 decommissioning.

Thank you.

MEMBER BARNES: Thank you, Madam Chair.

THE CHAIRPERSON: Are there further questions for Round Two?

Mr. Harvey.

MEMBER HARVEY: I would like to come back

to the flood mapping. The hydraulic study that has been performed to support the mapping use the water level of Lake Ontario of 75.35 which is the main annual level. It has been derived, I think, from the Ontario guidelines I suppose.

But was it an obligation to use that water level and would the result have been slightly different with using, for example, 74.7 which is the normal annual maximum?

MR. STEANE: Bob Steane for the record.

I'll call on -- the question on the nature of the modelling, I'll call our consultant Peter Nimmrichter of AMEC who did the modelling. He'll give a more appropriate answer to that question.

MR. NIMMRICHTER: Peter Nimmrichter for the record.

If you just give me a moment, it is documented in our floodplain mapping report. I can just read it specifically.

Starting water surface elevations for the main channel was set to the 100 year high-water level of 75.4. So that was consistent with previous work done on this same reach and it is consistent with M and R guidelines for preparation of floodplain mapping.

MEMBER HARVEY: Well, but was it an

obligation? I mean, the water level if such the same event occurs in the spring, for example, the level might be at maximum level. My question was would the result have been slightly different?

MR. NIMMRICHTER: Peter Nimmrichter.

Yes. If the starting water surface elevation is elevated beyond that, which we used in our modelling, the propagation of that increased elevation would move somewhat upstream. We would have to remodel specific instances of higher water levels as a starting condition to evaluate how far up that would propagate.

From what I recall in tests done between using the mean annual and the maximum level, I think, it propagated about a third of the distance up the reach that was modelled. So it doesn't actually propagate very far.

MEMBER HARVEY: Okay. Thank you.

MR. NIMMRICHTER: Thank you.

THE CHAIRPERSON: Round Two questions?

Dr. Dosman.

MEMBER DOSMAN: Thank you, Madam Chair.

I'd like to ask Cameco, I note from the documentation that there are still substantial amounts of asbestos in buildings 2, 5, 22, 26 and 27, and of course the Commission is interested in both radiological and non-radiological safety for workers, public security people

and so on.

I would like to ask Cameco, firstly, if there's any potential asbestos exposure to employees or security people from these buildings, and secondly, what Cameco's plans are to deal with this asbestos?

MR. STEANE: Bob Steane for the record.

I'll get Tim Kennedy, our Production Manager, to talk to that topic of asbestos.

MR. KENNEDY: Tim Kennedy for the record.

We have an asbestos management program that measures and tracks all our asbestos inventories. It's modelled on the *Ontario Occupational Health and Safety Act* which is more rigorous than the federal.

So our employees are trained and we have this plan in place with one engineer designated as an asbestos officer. We also hire for level 3 removals qualified Ontario contractors. So our workforce is, and part of our health safety program is well versed in the asbestos hazards of our older buildings. And as we proceed along with Vision 2010 we actively remove asbestos from these buildings prior to the activities inside them.

So exposure is a possibility at our site. We log it through our medical system but we have sampling and protocols and removal in place to mitigate the risk within acceptable levels.

MEMBER DOSMAN: When will Cameco have an asbestos-free environment for its workers?

MR. KENNEDY: Tim Kennedy for the record.

Under our current plans it will be at the end of Vision 2010, with our one remaining building, which will be our power plant, and we'll have to actively, as we are kind of on an annual basis, reduce that inventory of asbestos which is largely pipe insulation.

Cameco, however, has had a program on banning asbestos from the work site from the late '70s. Just the large amount that was in the facility at that time makes it a long program.

Some transit sightings at .3 weight per cent asbestos may exist in building 24 but Vision 2010 is looking at possible surface treatments of that building. And maybe the project manager might have a more definitive answer, but we are, as he mentioned earlier, a systematic design. We have not picked building finishes and stuff. So those would be the long range view on asbestos.

MEMBER DOSMAN: Madam Chair, may I ask CNSC staff, is CNSC staff confident that Cameco is adequately protecting its workers and the public from risk of asbestos?

MR. HOWDEN: Barclay Howden speaking.

I'm going to ask Marty O'Brien, who is the

project officer for this facility.

MR. O'BRIEN: I'm Marty O'Brien for the record.

This type of area, we call conventional health and safety, is more of a focus of HRSDC and their regulatory activities, and there will be a person here later on that can potentially add to any commentary that we give, and we work cooperatively with them and any issues they flag they will often report to us as well.

And my understanding is that Cameco is in compliance with the requirements under the Canada Labour Code for Conventional Health and Safety and there is not any significant issues, including asbestos or other issues as well.

Thank you.

MEMBER DOSMAN: So has CNSC staff been apprised of HRDC's view and are you confident that the workers are being adequately protected?

MR. O'BRIEN: Based on the information we have, yes, we are confident. As I said earlier, HRSDC may be able to add the comment on that when they're here. They plan to be here sometime during the two-day hearing.

Thank you.

MEMBER DOSMAN: Thank you.

THE CHAIRPERSON: Further questions?

My question is with regards to Vision 2010 and the site's ability to meet safeguard requirements. I know that these were requirements that were somewhat changed in the last few years due to the International Atomic Energy Agency, not to -- anything to do with the facility per se.

And I'd like to know if there is any changes planned that will affect the safeguard approach that is used by Cameco and I'll ask staff for their comments too.

MR. STEANE: Bob Steane, for the record.

The Vision 2010 Project, in terms of the ongoing operation, in fact make the inventorying and accounting a little more simple or simpler, going forward just because of the site changes, but have all the uranium hexafluoride in one area and all things. And so in the ongoing operation, it will -- if it has an impact, would make it a little easier.

On the historical materials which are -- that have been the area which presented the greatest challenge to coming into the new safeguards regime, Vision 2010 is in conjunction with the Port Hope Area Initiative and those historical waste materials that are in inventory will be ultimately going to the waste management facility and come off the -- come off the books and go to a more

stringent accounting as they're being moved into the waste management facility.

So it's not going to change the day-to-day other than make it a bit easier, but overall it will provide at the end of the day a more accurate inventory going forward.

THE CHAIRPERSON: Staff?

MR. HOWDEN: Thank you. Barclay Howden speaking.

I'm going to ask Ms. Karen Owen, our Safeguards Officer for this facility from the International Safeguards Division.

MS. OWEN: For the record, my name is Karen Owen from the International Safeguards Division.

As you correctly pointed out, Madam Chair, there are a lot of changes in the International Safeguards Regime that have impacted Cameco, specifically in the past few years, and will continue to do so.

However, Vision 2010 specifically doesn’t have the changes that are coming in because of those international changes, the international regime, won’t have specific implications for Vision 2010.

As Cameco moves forward with that project in terms of safeguards, they will have to keep the CNSC staff and therefore the International Atomic Energy Agency

apprised of any changes to the facility design. So that's one area that we're working with Cameco to make sure that that information is kept updated.

As Cameco also noted, there are implications with regards to the inventory of historical scrap on site. If any of that material gets moved off site in the future due to Vision 2010, it will -- safeguards measures will have to be taken into account.

And again, we're working closely with the IAEA, the International Atomic Energy Agency, and with Cameco to make sure that Canada’s international obligations in that regard are continued to be respected.

THE CHAIRPERSON: Thank you.

This ends the first round of questioning which is the questioning to the licensee and to the staff.

I would just like to reemphasize that this is Day Two supplementary questioning and in order to fully understand the questioning, the type of material put forward, it is really necessary to see the CMDs, the Commission Member Documents, to see the website. I understand that the staff have brought some parts of the Day Two -- a copy of the Day One transcript, and all of this together represents the first stage of questioning for the licensee and for the intervenor on this licence renewal.

We will now move to the interventions and the Secretary will start in terms of the briefing.

MR. LEBLANC: Merci, Madame la présidente.

We will now move to the intervenors. Requests were made by a few intervenors to delegate someone else to present on their behalf today and tomorrow.

A panel of the Commission did not accept that third parties read the written submission of intervenors that are not in attendance today. Therefore, if an intervenor is unable to attend and present at the hearing, his or her submission will be considered as a written submission and will also be part of the record.

The Commission has also received objections from intervenors regarding this procedural decision. The Commission has maintained this decision. This is a procedural decision that is within the discretion of the Commission.

Pursuant to subsection 20(3) of the *Nuclear Safety and Control Act*, all proceedings before the Commission shall be dealt with as informally and expeditiously as the circumstances and consideration of fairness permit. The Commission is of the view that the procedural matters were addressed in such a fashion.

I also want to remind all participants,

including the intervenors, that we would ask you to please manage your microphones by pushing on the white button when you speak and pushing again when you have completed. A red light will signal that the mic is on.

Madame la présidente.

THE CHAIRPERSON: Thank you.

When we come to communities, I think it's important for us to have the opportunity to listen to as many people as possible and to provide an opportunity for Commission Members to ask you questions to clarify and to hear your responses to that. So that's why the Commission has certain rules of procedure.

The first is that as the Secretary says, written submissions are considered just as seriously as oral ones. So for that reason, some of you have made longer written submissions that you'll be speaking to orally, but your longer written submission, whether it's one page or it's 10 pages, is considered by the Commission. We're very good readers. We read a lot of documents but we read them all with the same seriousness.

So whether someone presents here today or whether this is a written submission, it is equally important to the Commission in rendering its decision.

The second is because of this item, and I know that the staff of the Secretariat have informed all

of the intervenors, we have put in a guideline of 10 minutes. Some of you may speak for one minute, some of you may speak for 10 minutes, but in order for us to ensure that we hear all the people that want to talk to us in this community, I would ask for your cooperation in this fairness which is to have an opportunity for everyone that wants to be -- that we can possibly accommodate to be heard.

That means that I will be very forceful in my oversight of the 10-minute rule and as such when I feel that someone is at nine minutes, I'm going to use this very informal way of ding, ding, ding, ding, ding to give you a sense that you're at nine so you have a chance to wrap up.

Please I would ask of you not to test me in this. I really would like not to be the person who is trying to restrict you. I want to listen to you. The Commission Members want to listen to you and we want to have an opportunity for you to hear each other too as members of this community. That's what this offers as well.

So with that bit of a preamble, either I or the Secretary will let you know if you're getting close to the edge and some of you will speak for one minute and some people for the full 10.

So with that, I'm going to turn it over to the Secretary and he's going to do the introductions and then I'm going to manage the question period, and I hope we learn a lot from each other over the next day and a half, two days. Thank you.

MR. LEBLANC: Merci.

We would like to move on to the first oral presentation which is by the United Steelworkers, Local 13173, as outlined in CMD 06-H18.2. Mr. Chris Leavitt and his colleagues are here to present this submission.

Sir, the floor is yours.

06-H18.2
Oral presentation by
United Steelworkers, Local 13173

MR. LEAVITT: Thank you.

Madam Chair, Commission Members, Commission staff, ladies and gentlemen, my name for the record is Chris Leavitt, President of US Local 13173 out of Port Hope, Ontario, representing 235 unionized members. My workplace is the Cameco of Port Hope Conversion Facility, one that I've been at for 28 years marks today.

I would like to thank the Commission today for the opportunity to come forward and support the review of the licence at Cameco Corporation at this Port Hope

facility.

I am President of a local that is growing and that has grown quite substantially over the last couple of years. Currently, there are 235 unionized workers at this facility that belong to USW Local 13173.

The positives that this company brings to both the community as well as being a responsible employer is the reason that I sit here today to add value to its application for a five-year licence.

At this facility, we produce mainly two types of products; uranium hexafluoride and uranium dioxide. The second of the two is a feed product in the Canadian made CANDU nuclear reactors. The CANDU reactor system receives world recognition for its level of safeguards and reliability.

The workforce at this facility is proud of the work that we perform in an effort to ensure that the communities in Ontario have access to clean, safe power. Of course, environmental considerations are a significant and growing factor in the economic performance of the industry. Our members, like a majority of Canadians, want well paying jobs and a healthy workplace environment.

A major focus of the steelworkers union has been to improve corporate responsibility for health and safety of its workers, together with environmental

protection. We, as a union, support the Kyoto Protocol and believe it is our responsibility to make sure corporations and all levels of government shoulder their responsibilities.

The effects of keeping these bodies responsible for their decision making will have positive benefits for a clean, safe and healthy environment.

The nuclear industry is without a doubt the most regulated industry of all, and why not. We work jointly with all levels of government. The agencies involved federally are Health Canada, Environment, Fisheries and Oceans, Transport, Natural Resources, Labour and of course the Canadian Nuclear Safety Commission.

On the provincial level, the main agency we're being compliant with is the Ministry of Environment.

All these mentioned agencies have experts who review our plant on a continuous basis and could at any time suspend production on a very short notice. They make sure that all safeguards and limit values are met and in place with protecting the community and its employees. These safeguards are in addition to our very own policies pertaining to health, safety and the environment.

The nuclear industry has an excellent record when it comes to making commitment towards continued improvement to the environment. A majority of

nuclear industries in Canada have completed and maintained an ISO 14001 standard. This standard is the world's most widely accepted measurement of a high degree towards environmental management systems. Unionized members want strong, diverse, value-added jobs. Why not?

Global warming is now real and happening. I watched the other day on a CBC network an Aboriginal chief spoke about climate change. He talked about how the ice is melting, how hunting is changing for the Aboriginal people and what we should be doing about it.

I sat and wondered where we are going as a country on policies for clean air, water and climate change; the bigger question of what the world leaders will act upon to stabilize the situation.

Several prominent environmentalists believe and agree that we have reached a milestone in the history of mankind. The fate of humanity hinges on whether we can sum the will and ingenuity to produce clean energy on a massive global scale.

This goal cannot realistically be obtained without the extensive use of nuclear power, nuclear power's sustainable energy technology. It's fuel is plentiful and the record towards safety is excellent. We must, as individuals who are given an opportunity of protecting the planet, make a concrete effort to make sure

this planet is one for further generations to enjoy.

There is commitment from the USW Local 13173 at Cameco to that continued improvement to the environment and health and safety of its employees and the community. We cannot be content with what is today's standard but always striving for that continual improvement.

Rest assured that our members don't simply go to work to collect a paycheque but are participating within the community, volunteering for the local fire department, neighbourhood walks, open houses, Youth Expo and the Habitat Project.

Our on-site 42 unionized emergency response team members are volunteers who are highly trained to combat in emergencies, should it arise.

We use steelworkers for decent paying jobs that bring a certain amount of sustainability to the local economy. Our plant is located in a small community which depends upon these decent paying jobs and the spin-off work relating to the workplace.

I can ensure you that Cameco has consistently met all regulatory requirements and we, as a union, will continue to work diligently to make sure that all acts of safety as it relates to the employee, the community, or the environment are met. We will work

closely to make sure that the ALARA Program is being followed and mark our progress on such matters.

As President of USW Local 13173 at Cameco's Port Hope facility, I believe that Cameco's Port Hope facility is being run in a safe and efficient manner. I am making a recommendation to the Commission to grant Cameco Corporation of Port Hope a five-year licence period based on the plant operating in a safe and efficient manner and meeting all regulatory levels.

I also fully recognize the Commission's right to directing Cameco to make changes necessary at any time within the licence period.

I would like to thank the Chair and the Commission Members for giving me an opportunity to speak today.

Thank you.

THE CHAIRPERSON: Thank you.

The Commission always appreciates hearing from the workers as a sign of safety culture.

Are there questions?

Dr. Dosman.

MEMBER DOSMAN: Thank you, Madam Chair.

I'd just like to pick up on the issue of safety culture, as our president indicated, and I would like to ask you, in your view, does Cameco provide

sufficient training for the workers at the plant to operate in a truly safe manner and is there a positive safety culture?

MR. LEAVITT: I could answer both.

We make sure diligently that those workers are trained both in federal 1 and 2 safety training. We are not certified members on the Health and Safety Committee, unlike the provincial sector, but we do make sure, even as a follow-up, additional training is provided to the committee members to recognize unsafe acts that may take place in the workplace.

MEMBER DOSMAN: If I might clarify my question. In your view, is the company providing adequate training to all the workers at the plant so that they can operate in a safe manner?

MR. LEAVITT: Yes, I believe that is so.

MEMBER DOSMAN: If I might, Madam Chair, I'd just like to ask, in your view, are the workers opened to being trained and to embracing a positive safety culture?

MR. LEAVITT: Yes, I believe that's so. The older worker might be much more hesitant to receive that but the younger worker is pretty open to receiving that. It's really showing true especially in our emergency response training where the younger worker is

really aggressive to get that training to be a volunteer and to help out in case of an emergency that might arise.

MEMBER DOSMAN: And Madam Chair, if I might, and how do you ensure the older worker is adequately trained?

MR. LEAVITT: Actually, with our employee profit sharing that we have now, we've made sure as a union committing to that, to make sure that employees attain up to 100 per cent in various department attendance at a safety meeting.

We feel it's a high importance to make that safety meeting and we monitor that on a monthly basis at our Health and Safety Committee meetings, which are two full days each month, and we monitor that progress, and if we happen to see it sliding down, and our goal obviously is 100 per cent, but we, you know, we prod them, those that seem to be falling a bit.

MEMBER DOSMAN: Thank you for that clarification.

THE CHAIRPERSON: Other questions?

Thank you very much, Mr. Secretary. Thank you very much, sir.

MR. LEAVITT: Thank you.

MR. LEBLANC: We move to the next submission, which is an oral presentation from Mr. Graham

Brown as outlined in CMD 06-H18.3.

Mr. Brown, the floor is yours.

06-H18.3
Oral presentation by
Graham Brown

MR. BROWN: Good day, Madam Chair and councillors.

My name is Graham Brown and I live in Port Hope. I do not work in the nuclear industry nor I never have.

The views today here are my views and I'm going to be posing quite a few questions. This will give me information and I think the public -- will give the public information as well.

I've already included some additional pages from which I've gathered my information. These include the MacLaren documents in the Port Hope Public Library of about 20 years ago which totally reviewed the Cameco operation at that time.

The SEU hearings provided another voluminous document which is in the public library, the Cameco documents supporting this application and a quarterly report.

I'm going to go to my first edition of document number 1.

"Question: What has Cameco done in the last six years to correct 23 deficiencies in their fire system ordered by the CNSC in 2000?

Answer: None."

What does this Commission think of that?

Next question:

"How much uranium oxide and radiation is there in Port Hope's drinking water?"

This has never been recorded in public. Can we get the Commission to ask that this be brought forward to council every quarter so that this can be disseminated to the public?

Three: previous Cameco buildings were radioactive. They were demolished and nobody seemed to know this and employees were able to take these home, use them to improve their own residences.

Now the question is:

"The present production buildings, are they radioactive? And if they are, what is the reading?"

I understand these are going to be dumped

in the new super-dump that we're going to be having here in the next 10 to 20 years; so they must be radioactive.

Can we get an answer on that, maybe after I finish speaking?

If we turn to my pages 2 and 3, I'm not sure why Cameco is doing this other than Mr. Rogers said that Cameco is sensitive to the feelings of the public.

Their pages 2 and 3 spelled out that there's 7,000 people in Port Hope; these are adults that are concerned, worried or upset about Cameco and their practices.

How does Mr. Rogers -- how is Mr. Rogers and Cameco going to handle the concerns of these people?

My extra page 14: CNSC and staff are monitoring the local newspapers and I'm only bringing this up because Cameco and the CNSC staff have brought it up. I think this is a total waste of time to even be talking about it but I guess I'm going to waste your time.

They seem to place a lot of value on letters to the Editor. Do you know that the Editor does not publish all letters that are sent in? In fact, I've had two for sure I know of that were never published and I know another person had one not published.

So actually, I think you're wasting a lot of time because the **(technical difficulties)** before

they're actually being published.

Cameco has recently reported -- the numbers that have been given out to the public on release of radioactive uranium dust has gone up to 260 pounds a year from 132 because of fugitive emissions.

I wonder if Cameco can tell us if all fugitive emissions are now being accounted for and does that include liquid and chemical materials as well?

If I can go to my page 4, this is a Cameco document. The approved emissions of Cameco and uranium to the -- excuse me, yes, Cameco's -- there's uranium dust and there's fluoride, a very poisonous, gas and uranium. This is a Cameco document. The licence limit is very, very high and the Commissioners can read that for themselves. The actual emissions by Cameco are very, very low.

Why doesn't the Commission lower the limits? If Cameco have proven they can meet the lower limits, then why are they allowing high limits?

I worked -- my last job I was doing a lot of environmental matters and I believe the government works -- this is the way the government works; bit by bit, they lower the improved emissions allowed. That's my question.

Cameco puts out a lot of, not only uranium, nitrous oxide, sulphur dioxide, fluorine, and ammonium. In an effort to help the environment, will the Commission ask that Cameco reduce these emissions during the next five-year period they're asking for a licence?

If we could go to my page 5 and 6; now, we're hearing the words that Mr. Grandy, he's the number one chief of Cameco. They've got a mission statement which is great; safe to the environment, super. What he says is:

> "They want to fulfil the corporate promise of improving the quality of the environment."

And also on page 6:

> "Their objective is to move beyond legal compliance requirements."

So I'm asking Cameco, what is your plan in the next five years to achieve those aims?

Those have been posted worldwide. It comes from the Worldwide Web and we've got a picture of Mr. Grandy right there. He's promising to do this.

So what are you doing to fulfil that promise? And what are you doing during the next five years to move beyond legal requirements and be good corporate citizens?

On page 12 -- the hearing that I was at yesterday ---

THE CHAIRPERSON: Nine minutes, sir.

MR. BROWN: One minute.

On rating in the safety area, you've got a "C". We were told yesterday but the Commission that "C" is not acceptable. What are you doing to move away from "C"?

I've got several other points; the Commission has got my notes and have read them.

I thank the Commission for listening to me today and I hope we can get some answers to questions and I hope that Cameco will make plans to improve their operation and reduce health and safety risks and help the environment.

Thank you very much.

THE CHAIRPERSON: Thank you very much, Mr. Brown.

You've asked a number of questions and rather than go through a process from each Commission Members, what I would suggest is Cameco has questions that you've asked, I'll ask them just to start with their views of some of the high priority answers; go to staff and then the Commission Members can ask if there are matters that were not answered adequately.

So Cameco.

MR. ROGERS: For the record, Terry Rogers.

I'll speak to Mr. Brown's questions regarding the sort of corporate view. I think it was the fourth question. You talk about 7,000 people upset about Cameco and its practices; that's not a number I'm familiar with. I know there are some concerns in the community but the polls that have been conducted show strong support for Cameco in the community.

As I addressed in my opening comments, we know that there are some concerns expressed and we are stepping up the efforts to improve communication and give more information to the public so they can make better informed decisions than perhaps they have been able to in the past.

Another question Mr. Brown brought up regarding the corporate vision and values about safe, healthy, rewarding workplace, protect the environment and specifically about beyond compliance.

We have really prided ourselves in the past and it's a continuing effort. We do talk about continual improvement and that happens at all sites and it is a constant theme in our meetings. We have regional meetings, meeting with our operations people, with people that are specifically tasked with safety, health and

environment issues.

Safety is always the first topic of meetings we have of our management committees and at sites as well.

The goal in moving beyond compliance is, we are beyond compliance in our operations. The numbers you have seen here, even today, and through these documents before the Commission, indicate that we are at just fractions of what an allowable limit may be in most instances. So that's where we're going. That's our intention to continually improve on the record we've already established.

As far the information that is available, we had published last year a Sustainable Development Report that talks about corporate-wide environmental performance and that is available as well for perusal.

And in the specifics for the site, I'll probably turn to Bob Steane now for further explanation.

Thank you.

MR. STEANE: Bob Steane for the record.

First, maybe I'd start with where Mr. Brown finished, in that he ended saying he hoped that Cameco would continue to improve their operation and from safety reduce the risk and have a -- improve their performance of the facility. I think I'm paraphrasing what he said but I

concur.

Cameco concurs with that completely. That is our objective. We want to improve our operation, reduce the emissions, reduce the risk and continually improve. So I thank him for that observation and confirm that is where we are intending to go and where we have been going and focusing.

There are some specific ---

(**Technical Audio Difficulties)**

MR. STEANE: There was one about the drinking water and uranium in the drinking water in Port Hope. That is something that is measured, is reported.

Mr. Vetor, perhaps you could outline it.

MR. VETOR: Kirk Vetor for the record.

We are monitoring drinking water on a routine basis. I believe the frequency is monthly and the results are generally at or below the detection level.

We have not been reporting those numbers in our quarterly report but that’s certainly something that could easily be added and we would commit to do that.

MR. STEANE: Then there was a question about the -- and comment to the emissions and we have shown and we’ve spent some time in our presentation talking about how the calculation of the fugitive emissions have gone up and the total uranium up, compared

to what we had reported in the past.

I think if I understood Mr. Brown's question correctly he asked -- the question was does that information on the uranium include that which goes from effluents and liquids and other sources and the answer to that question is, yes, that is the combined total from all sources.

No, I'm sorry.

MR. VETOR: Kirk Vetor for the record.

The numbers we were asked to provide to the public were specifically air emissions and those are the numbers that have been provided and been revised. However, we do report all of our emissions, emissions to water in the quarterly report, so all the information is available.

The quantity of uranium that's discharged in our cooling water process effluent is very, very low and if you were to put it on a graph it wouldn't even show up relative to the air emissions.

So the air emissions are far and away the predominant source of uranium emissions to the environment from our facility.

MR. STEANE: I'm Bob Steane for the record.

And perhaps I could ask Mr. Brown, in his third question, a third point that he made, it wasn't

quite in the same order as his presentation -- was to do with radioactive materials being taken from somewhere or from homes or ---

MR. BROWN: These are the buildings, the original buildings that were used, I guess, going back to the days of radium and those buildings were demolished and because I guess it was easy for -- save the company the hassle of taking them to the dump, people were allowed to take them home and they used these materials in improving their own home or building a garage and they were radioactive.

And here about 20 years ago there was a big hassle of the waste soil, the radioactive waste soil. The initial plan was to extract radium and the uranium was not extracted.

In the first case the original ores from northern Saskatchewan contained 15 per cent uranium so that was all sitting in this waste dirt and material and people again took that home. It was under a school. It all had to be removed and all these people that had taken building materials, bricks and blocks to build garages and garden sheds, that all had to be removed.

So we've already proven that the buildings in a nuclear facility like yours become radioactive. My question is the buildings now, how radioactive are the

buildings now and you are going to demolish them in the 2010 program and you're going to take those bricks and all that material and dump it in the new super dump that we're going to have here in Port Hope? So they must be radioactive.

I just wonder right now, what is the number? Maybe it's very low, that's okay, but I would just like for the record to know what is the amount of radioactivity in the bricks and in the buildings right now?

MR. STEANE: For the record Bob Steane.

You discuss things in the past and the clean-up in Port Hope, I guess a Port Hope area initiative and a low-level reactive waste office are carrying out that final removal of the historical contaminated materials.

You are correct in that in the Vision 2010 Project some of those materials, and those materials, most of which is soil, but those building materials and so on which cannot be cleaned and free released would ultimately go to the waste management facility.

There was a provision for those historic materials there by the federal government as they developed that management facility.

We have very rigorous standards in the

facility today. Nothing leaves the site without it being monitored and assessed and only things that meet standards for free release are released out into the community.

And going forward with Vision 2010, I can't tell you today what the level of radioactivity on a brick-by-brick basis, but that is something that as the buildings are being demolished things will be decontaminated and that which meets standard for release will be released and that which doesn't would go into the long-term waste management facility.

THE CHAIRPERSON: That's a low and medium-level waste facility as I understand. So that gives you a sense of the levels per se.

MR. STEANE: Bob Steane for the record.

In fact it's low. There is no medium level. So yes, the levels of contamination are all low-level contamination.

THE CHAIRPERSON: Would the staff wish to comment either on what the licensee has said or on the original questions for Mr. Brown, and then I will open the floor for any clarification?

MR. HOWDEN: Thank you. Barclay Howden speaking.

I'll just run through a few points here. The original question was on the fire program. Our

assessment of the fire program is outlined in our CMD, page 18, with an improving trend, indicating that many of the items have been resolved but there are some outstanding items that are left and we could detail them, if required.

Uranium and drinking water, I think the response by Mr. Vetor was correct, but staff has independently looked at that and has information on that.

With regard to building materials, anything that is to be free released, they have to be monitored or decontaminated to make sure that they release criteria.

There was some questions on the public information program and one comment on Letters to the Editor. In our CMD 06-H18.B, we did an assessment of the Public Information Program where Letters to the Editor was part of just sort of an indicator, along with other indicators, and that information was there.

There was also discussion of emissions and we were prepared to speak to how emission limits are set, because there are limits and then there are operational levels, but the limits are set based on public dose and protection of the environment. I think that's it.

THE CHAIRPERSON: Perhaps though, Mr. Howden, you could explain where those levels come from?

I think the question from Mr. Brown is,

where do those levels come from and would the CNSC consider lowering those limits per se? What is the scientific basis for those?

MR. HOWDEN: Barclay Howden speaking.

I'd like to ask initially -- they are based on dose limits but in terms of setting emission limits, I'm going to ask Malcolm McKee, who is the Director of the Environmental Risk Assessment Division to speak to how the actual emission limits are set, and also to bring into context action levels.

MR. McKEE: Malcom McKee for the record.

In terms of licence limits for various emissions from this facility, the radioactive releases are based on dose established within regulations which is the one milliSievert dose.

Other emissions are based on standards in various situations. The majority of the standards for atmospheric emissions come from the Ministry of Environment standards. In our Act on legislation, we can adopt other legislative standards if we deem those to be reasonable, and it's similar as well with the liquid emissions.

The licence limits then are set at levels that are perceived to be –- that are known to be considered safe emission levels, reasonable risk emission

levels. After that the CNSC has full expectations that licensees add additional levels. We have action levels and administration levels.

So the action levels are expected to be established at levels that are substantially lower than the licence limits, with the understanding that if those action levels are exceeded, they have to be established at levels that are low enough that we can expect the licensees to be able to immediately respond and get those levels back under control, back to beneath the action levels.

Licensees if they trigger action levels have to report to the CNSC. We oversee their responses. All of that licensees generally consider onerous, so to ensure that they don't have to do that, they themselves establish administrative levels. The administrative levels are set to make sure that they don't trigger their action levels so it ends up with sort of a three-level tier level of control.

THE CHAIRPERSON: Now, for questions.

Dr. Barnes.

MEMBER BARNES: Three questions in regard to the last one. I think some of the concerns of the citizens of Port Hope relate to the cumulative effects that might be present and so, just to clarify that, in

setting those particular limits, which you have explained relative to dose, do you take into account the issues of cumulative effects in this particular case for this particular licensee?

MR. McKEE: With respect to radiation, since dose is a calculation based on all of the radioactive elements potentially exposed, it is a cumulative dose; a cumulative exposure issue.

With respect to other elements, the standards and emission limits are based on the scientific studies and then a safety factor is added on. The cumulative effect of various exposures is a little more difficult to handle. That's why the safety factors tend to be put on when setting these numbers, though in many instances often the safe approach is to just do an additional additive approach when doing risk assessments of adding up the numbers based on those.

MEMBER BARNES: Madam Chair, I think it would be helpful through these two days of process and on our third day as well with Zircatec, for us to provide as much, I'll say, factual and quantitative information as possible, and so I'll just pick up on two points.

The other answer from staff related to Mr. Brown's question of uranium values in the municipal water, and you indicated that you had some values but I don't

think you answered where they would be available and Mr. Brown, I think, argued they could be on chemicals. But this is municipal. Is this value not available somewhere either on the staff website, Cameco website or municipal website?

Staff responded, so maybe I should ---

MR. HOWDEN: Barclay Howden speaking.

I'll ask Malcolm McKee to comment on that.

MR. McKEE: Malcolm McKee, for the record.

The water treatment plant at Port Hope posts annuals reports. Uranium levels are posted within their annual report. They are -– if I remember correctly, though, there is a delay in how soon they soon they come up on their web page. The most recent results, every water treatment plant has a responsibility of reporting to council, so I presume that the water treatment plant does report to council on their performance. I haven't checked to confirming on that.

Another additional source is that the Minister, the MOE, the Minister of the Environment, has a drinking water surveillance program in Ontario and the Pembroke Water Treatment Plant is part of that program, and it gets sampled for the full suite of anyl. It's twice a year in this case for Pembroke, which include uranium. That information is not posted, but you can –-

it is mentioned on the websites that you can request it, and I receive it quite readily upon request for the last five years.

THE CHAIRPERSON: Excuse me, Mr. McKee.

It's a very long answer. I think what Dr. Barnes asked –- my understanding is, Dr. Barnes, and correct me if I'm wrong, but Cameco said that it's measured and that you will endeavour to make sure that the City Council has it. I think that's the answer to the question in succinct fashion, and I think that answers that question.

Back to Dr. Barnes for further questions.

MEMBER BARNES: The third one was Cameco's response to the question how radioactive are the buildings that are going to be demolished. And again it was a long answer that didn't go anywhere. It was sort of well, you're not sure what the answer is brick by brick. I think the bottom line is that it is to go in a low-level facility, therefore the value is low.

But one might have responded that you don't know. Maybe no one on the staff knows, but perhaps that is a value you could provide by tomorrow. There may be a number of these issues that we can at least get some information, quantitative information on the public record, so that there aren't these sort of vague responses

to public concerns when it’s possible to get firm responses.

THE CHAIRPERSON: I think all the Commission would echo what Dr. Barnes said. The questions today have been available in the CMDs for some time and our job here is to make sure that questions are answered if they’re reasonable.

If there are areas that don’t belong in a licensing issue well, then I think it’s up to us also to make that clear. There may be issues where Cameco wishes to go above and beyond the requirements of a licence and certainly it’s up to them to look at that. Our job as the Commission and the staff, is to ensure that the levels are set and maintained for facilities.

One comment I would like to make is the work of the Commission is not a popularity contest. We neither take surveys to see if people like a facility, don’t like a facility or whatever. It’s not a like, like type of area, it’s science based, it’s health and science based. Is this facility doing it’s job under this.

Clearly, if there is public opinion issues that have to be resolved in terms of information or lack of comfort about certain things we’re very interested in that and that’s why we’re here today. But it isn’t -- I wish to assure the intervenor that we don’t take surveys -

- the Commission -- and then decide we'll licence something because people like it in the community or don't like it in the community for other areas. We do it because of health and science, and that's exactly why we're going to make the decision here today.

So we're interested in the public information campaign because we think it's essential that people are informed.

Are there further questions?

I just wanted to get -- we're going to take a lunch break because it's been a couple of hours. So it's 12:30 p.m. We'll be back at 1:30 p.m. And we'll resume, Mr. Brown, if you're here, with further questions.

Thank you.

--- Upon recessing at 12:27 p.m.

--- Upon resuming at 12:32 p.m.

THE CHAIRPERSON: Before lunch, we had listened to the oral presentation from Mr. Graham Brown, which is outlined in CMD 06-H18.3, and we were commencing with questions after the licensee and the staff had made some comments at that point.

So now, we will continue with questions.

Dr. Dosman?

MEMBER DOSMAN: Madam Chair, thank you.

I'm not sure that Cameco answered Mr.

Brown's question about fire protection.

If my memory serves me correctly, Mr. Brown, I think you asked Cameco when their fire protection system would be upgraded from a “C” to a “B”. Am I paraphrasing your question accurately?

And I'm not certain, Madam Chair, that that question was answered in the discussion.

Can I ask, Madam Chair, Cameco to answer that question for Mr. Brown?

MR. STEANE: Bob Steane, for the record.

Dr. Dosman, also I think when I went back over my notes, the question that was asked was, "What has Cameco done in the past six years to address those items that have been outstanding in the fire audits?"

To that extent, I think I will call on Ivan Bolliger, our Fire Safety Specialist and Engineer, to talk about how we have addressed the outstanding findings from 2000 and on with the audits and what we have done in the fire improvement.

MR. BOLLIGER: Ivan Bolliger, for the record.

If I may, I might just spend a little bit of time answering this question fully because it may come up again. So to answer the question accurately, I would just like to provide a brief history of what we have been

through and where we're going.

We have had three audits that we are looking at; the 2000 audit, the 2004 and the 2005 audits. I want to point out at this stage that all the mandatory items raised in these audits, mandatory or high priority items, have been addressed.

The three items -- they raised approximately 350 items over those three years. Ninety-three (93) percent of all the audit items from the 2000, 2004 and 2005 in total have been addressed. On average, that is one item addressed and completed per week over the six years. These completed items represent a huge amount of work both physical and person hours.

I'll just go quickly through a couple of these items that we have addressed to give a little bit of light on that.

We have installed flammable and combustible liquid cabinets throughout the facility. We have installed spill kits throughout the facility. Fire extinguishers have been upgraded throughout the facility. Fire separations have been upgraded throughout the facility. Fire separations have been added and constructed.

Emergency lighting has been upgraded. The commissioning of an additional emergency electrical

generator for the emergency lighting has been added. Spray paint booths have been upgraded. Fire alarm systems throughout the site have been upgraded. Fire sprinkler systems have been installed and upgraded throughout the site, and exiting has been upgraded.

These are a few items that have been completed. As I say, these have taken a huge amount of both physical and person hours there to get those up and to compliance.

All new projects that are undertaken are undertaken under -- will comply with the applicable codes and standards that we're licensed to and that includes, now that we are starting at look at NFPA-801, we're starting to look at that as well.

All these are followed under our Cameco quality procedure and any fire, life safety project that has a potential to impact on fire or life safety is sent out for an independent third-party review.

I'm not sure exactly what the initial question was. I think Mr. Brown's question was something about 23 fire alarm items not being addressed. I'm not sure I can speak to that because I'm not sure if I understand the question.

However, for the 2000 audit, as I said, the mandatory -- the 2000 audit split up audit items into

"mandatory", "legal non-conforming" and "good engineering practice". All mandatory items have been addressed.

Of the 210 odd items there, there are four remaining. These are being addressed, these four items, the sprinkler system in Building 50 for the ground and second floor and the standpipe system.

This project is very large. It's a big building. It's very complicated. We have some challenges there, and the project was initially delayed due to some environmental concerns and some life safety concerns for our operators. These concerns have been addressed and, in fact, the scope has been expanded quite considerably for installing sprinklers throughout the building, through the tower, and all areas, and a standpipe to all areas of the building. So that is a pretty huge project.

Construction has started. It's progressing very well and we're expecting that to be complete mid-June 2007.

As for the remaining audit items, all I can say to those is that we are addressing every single audit item that has been raised, even if it was brought up originally as "legal non-complying" or "good engineering practice" or "low priority". They are all being addressed and we see the majority of these being finished mid-2007.

But stating that, the remainder of the

items were installed to code, we believe, and the inherent way that codes are written is that items are generally not retroactive. You don't have to go back and comply with current codes. However, we are looking at every single item and addressing them and we think we are moving forward very well.

MEMBER DOSMAN: Thank you.

Does staff have any comment?

MR. HOWDEN: Barclay Howden speaking.

I am going to ask Henry Rabski.

MR. RABSKI: Henry Rabski, for the record.

CNSC staff, as a result of the audits that have occurred over the 2000, 2004 and 2005 periods, has been monitoring the progress on addressing the items identified in the audits.

As stated by Cameco, we are prepared to verify that the mandatory items have all been completed. We have assessed these through our routine inspections of the facility's progress on these items on a regular basis, as well as bringing our specialists on-site to verify progress is being made on the items identified in the audits.

As said before, we have verified and all the mandatory items have been completed to our satisfaction.

The "good engineering practices" ones, we encourage Cameco and see that they are continuing to progress on implementing those and we feel that that is essential to improving their rating and bringing their ratings up, as well as to overall strengthen the fire protection program at the facility.

MEMBER DOSMAN: Thank you very much.

THE CHAIRPERSON: Dr. McDill?

MEMBER McDILL: Thank you.

I would like to ask Cameco to answer questions 10 and 11, but first I would like to ask Mr. Brown, have you ever asked these questions before either to staff or to Cameco?

MR. BROWN: This is my first -- well, actually second; I was in Ottawa yesterday. This is the first time I have intervened in Port Hope. I applied when the SEU was being considered, but Cameco decided to go a different route and this is my first time and this is the first time I have asked those questions.

MEMBER McDILL: Thank you for that answer. Perhaps Cameco could answer 10 and 11 for the intervenor.

THE CHAIRPERSON: I think, Mr. Brown, what Dr. McDill is referring to is, the Commission encourages dialogue in communities on matters and the licensing process happens relatively infrequently.

And so either, you know, we really encourage that there's dialogue, that questions get asked and answered through public consultations that take part in the communities so that citizens are not waiting for answers till we go through the Commission route and back out.

If we feel that citizens are asking questions to companies and they not getting answers, that's one thing, but if citizens are not asking the questions of the companies well then there's a two-way balance of responsibility here in terms of that.

We have a question from Mr. Graham.

Oh I'm sorry.

MEMBER McDILL: No, I asked if Cameco would, for the intervenor, answer 10 and 11 because he had posed those questions.

MR. VETOR: Kirk Vetor for the record.

And I assume you're referring to 10 and 11 from the written intervention.

Question 10 asks if the uranium emissions from the incinerator have been included in the total uranium emissions to atmosphere and the answer is yes, that is included.

Question 11 asks in the production and handling of uranium metal, specifically metal, if measures

are taken to prevent particles from being released to the atmosphere. I'll start by saying we no longer produce uranium metal at the facility. We do handle uranium metal though and yes, the main discharge from the metals plant is equipped with bag house to remove particulate matter.

MEMBER McDILL: Thank you.

Does the staff want to add anything?

MR. RABSKI: Henry Rabski for the record.

We can confirm that the incinerated emissions are part of the overall emissions from the facility.

MEMBER McDILL: Thank you, Madam Chair.

THE CHAIRPERSON: Mr. Graham.

MEMBER GRAHAM: I think almost -- really my questions have been answered but just to reiterate. We have the benefit as the Commission in Day One to go over a lot of these things like fire protection and so on. But Mr. Brown has asked a series of questions.

Will you, as a company, endeavour to go through these questions? I know these questions have been out there now for a period of time as interventions but to answer some of these questions that have not -- I shouldn't say have not been answered but are questions in the community and the Chair is correct, it's a two-way street.

So, when there are a series of questions like this, what type of vehicle do you have to go out and be proactive and answer those questions? Go find the source and try and get the information out to people?

MR. STEANE: Bob Steane for the record.

Through our community forum process, we provide opportunity to meet with the community, answer questions, take questions and answer those questions. Answers to other questions as they come in are posted on our community website. We provide information to the community website and so we'll carry on with that process.

The next community forum will be the seventh in our series of them, is on the environment. It's coming in February and that's an opportunity as well for people to meet with Cameco and discuss questions on their mind in those areas, or other areas as they see fit.

THE CHAIRPERSON: Other questions?

Thank you very much, sir.

Yes sir?

MR. BROWN: I've attended the Cameco community sessions. I didn't find them -- they were to give information to the people of Port Hope, to the public. I didn't find them the same format where you could maybe present a specific question that could be two or three pages long and that was not -- the forum didn't

allow that.

Thank you.

THE CHAIRPERSON: Well, I think that what I would encourage you to do is to write a letter to Cameco with your questions and ask for a written answer. That quite often happens with companies and I think that's a perfectly legitimate thing.

Cameco, that would be satisfactory to you?

MR. ROGERS: We do respond to written questions, yes.

THE CHAIRPERSON: Thank you very much.

MR. LEBLANC: We'll now move to the next submission which is an oral presentation by Families Against Radiation Exposure or F.A.R.E. as outlined in CMD 06-H18.4 and 18.4A. Mr. Miller is here is present this submission.

Mr. Miller, the floor is yours.

06-H18.4/06-H18.4A
Oral Presentation by
Families Against Radiation
Exposure (F.A.R.E.)

MR. MILLER: Thank you, Madam Chair and Commissioners.

Welcome to Port Hope! I thought somebody should say that. Bienvenue. We're very pleased that you came here to allow so many of us to intervene in person.

I represent -- my name is John Miller, I represent Families Against Radiation Exposure and very obviously I'm not an employee of the nuclear industry.

Our citizen's group is an environmental group with 1,500 members. I read ahead to some of the written interventions; a lot of them from Cameco employees and contractors and so on. I just want to clear up who we are and who we're not.

We are not an anti-nuclear group; we don't consider ourselves that. Many of our members, including me, acknowledge that nuclear has a place in the power grid and it's necessary.

We're also accused of wanted Cameco and Zircatec out of town. We've never taken that position as an organization. It's quite possible that some of our members might think that but we've never made that our position. It would be quite an indefensible position given the economic impact of the company and our community.

I'm sure, quite sure, that for many people it is a wonderful place to work. That's not why we're here. We're here to assess the performance of the company

and I would like to address those issues.

We do not have a problem with much of what goes on inside the plant gates. Our problem is how they're regulated because of where they are; without a buffer zone in the middle of our community and that's what I'd like to address.

We're here mainly because Cameco wants its licence renewed for five years. The position of my organization is that we urge you not to do that. And I hope I can talk to the power point; I'm trying to summarize the main points I'm making in my presentation.

And by the way, I hope we leave you a bit of time to enjoy our wonderful community, too.

I take you back to Mid-term Hearings. We asked for a number of things because we presented detailed evidence that Cameco was not in compliance in 10 key areas. We wanted conditions written into the licence requiring compliance. We wanted firm time limits with no further extensions because in many cases those lack of compliant items had gone back years.

And, we didn't want you to proceed on hearings with SEU until Cameco was fully compliant. In your wisdom you declined to do that.

To just bring you forward to the present, it's our assessment that things are worse now. There's no

compliance on emergency response despite a firm deadline of July 30, 2005. There's increased emissions of radionuclides in terms of volume. I don't care whether there's a new counting system or not, the number is going up and your rules, your ALARA and the company's own corporate policy, is that they should be going down.

There's further non-compliance in fire and building codes and they're going to be required to meet new and higher standards.

Neutron radiation is a new concern which we brought to your attention and there is undoubtedly increased public concern. I don't pretend that public concern in this community is in any way unified or which side is, you know, in the majority, I don't think it matters.

Our community is literally torn in two over this issue. It's a matter on which my group keeps getting the blame for it. The last time I looked it wasn't F.A.R.E who was standing eight stories tall on our waterfront with a company logo on our forehead. We are just raising questions as our logo indicates. That's been our logo since we started; a big ugly question mark.

Since then, since the mid-term hearings, you've been given even more responsibility for our safety. Your staff has constantly told us that the CNSC is not in

the business of health studies. The ministers of the Environment and Health said you are. They also said in a statement in September that the Act gives you a broad range of regulatory powers and we're merely saying it's time to use them.

Just to summarize what we would like you to do, we would like a shorter two-year extension of the licence for reasons I'll explain. We would like enforceable conditions with deadlines on cutting emissions, full fire and emergency response, compliance with all relevant codes and the elimination of neutron radiation.

There are a few other things we want that are covered in -- mainly in the way of information that I've covered in my written remarks. I'm not going into them here.

We also would like, as you suggested in the screening of the SEU Project, which was not proceeded with by the company, some kind of public representation on a Port Hope advisory body to address issues of public concern, including compliance. And above all, no CNSC hearings before all reports are received and considered for 30 days by the Commission and the public.

This morning, I received this which is the first opportunity we had to see Cameco’s supplemental

report. It was too big to send by email and so I had to wait for this morning to get 520 pages of stuff, including stuff that we are specifically addressing here.

I don’t have time to read -- I didn’t have time this morning on my laptop to review this and I would respectfully ask that if this hearing is going to be adjourned until February, that we have a chance to reappear and address what's on this disk.

Why do we want a two-year licence? I take you back to the last licence. Commissioner Barnes I think wisely dissented from the decision to extend it for five years on the grounds that a shorter licence would have greater influences on ensuring that the company addresses significant remaining concerns of people potentially affected.

The CNSC’s own six-point guidelines for what a company needs to pass in order to justify a longer term I would argue at least two of those have not been satisfied by this company. One of them is that there is a good record of compliance and the other one is that there are no new projects, no significant new projects on the horizon.

Our position is, which I think is a reasonable one, that longer licence terms should be granted only when there's an excellent record of

compliance and when it will be business as usual.

The Vision 2010 plan, which starts in two years, there is no indication, at this point, that the company can continue safely while they tear down two-thirds of their buildings. That's a different process and we argue, why would you extend the licence for five years when they're undergoing a significant change in their operations?

Emissions were referred to this morning. I take you back to the Day One Hearing when Bob Steane said, “Our numbers ought to be going down and not to be going up”; exactly. Cameco’s own consultants in the material you were provided say;

> “Emissions are the overarching concern of citizens, a prerequisite to the continued operation of the company”.

That's what their consultants told them after consulting the community.

We've discovered this worrisome term “fugitive emissions” and the first mention of it in any documents before this inquiry were on this disk. We noticed that emissions had gone up since the documents of the SEU when they reported to you that uranium emissions were at 60 kilograms a year. All of a sudden, they jump to 120 and we didn’t know why. So I went down to the

company and said, “Surely, somebody is wrong here” and they said, “No, no, no”.

THE CHAIRPERSON: You’re at nine minutes now, sir.

MR. MILLER: I see. What we want is a goal of zero emissions and a timetable for achieving that.

Fire response, you called it unacceptable. It was a firm deadline. It wasn’t met. There are still outstanding issues. There was no regulatory action taken and it's not true that the problem has been resolved.

Here’s your standard, as in the Hare Report; the reality, four firefighters on site, up to 40 on call. And Mr. Rouse from Cameco, this is a quote from the Day One Hearing:

> “It doesn’t sound like compliance to me.”

And this is given a “B” grade.

The fire code compliance has been covered. I think we need a firm deadline for “A” level compliance in this area as a condition of licence.

Neutron radiation, we brought it to your attention. The company and the CNSC said it's not a problem. Do you believe them or do you believe this inspection report which was available to us through Access to Information? It says there is a problem there of some

sort, sufficiently high to justify continuous monitoring.

When I read that, I said, “We've been lied to” and I use those words exactly because my business is words and that's what we believe. We believe there should be no exposure to workers or members of the public to neutron radiation.

So in summary, a shorter two-year licence, conditions with deadlines in all these areas, and in the spirit of our logo, I would like and I think a lot of people here today would like the answer to just one question and that's, could you list for us all the extra precautions the CNSC has taken to protect us in Port Hope because we have no buffer zone.

THE CHAIRPERSON: Thank you, sir. You're over time.

Noting that there has been a fair bit of discussion on some of the items that you have raised, but there are other ones that are not -- haven't been covered before, questions from the Commission Members.

Dr. Dosman, do you have a question?

MEMBER DOSMAN: Madam Chair, I would just like to ask CNSC staff on the issue of neutron radiation, if you could document for me the occasions on which CNSC staff has lied to the proponent?

MR. HOWDEN: Barclay Howden speaking.

I'm going to ask Marty O'Brien to respond.

THE CHAIRPERSON: There is another way to answer that question.

MR. O'BRIEN: Marty O'Brien for the record.

The neutron issue was raised I believe just before the mid-term more in the context of transportation. I believe there was some monitoring done by some public group to determine -- they had measured some levels that they believed were high.

CNSC staff took then to follow up on that and one inspection was done by our transportation inspectors. They went and actually did measurements on cylinders and looked at the levels and saw that they were quite low, the dose levels of neutrons relative to gamma, and gamma levels are the controlling factor when they monitor cylinders and they maintain the -- and they check them before they ship them out. They check the gamma fields and therefore, if the gamma fields are sufficiently low, then the neutron fields are a fraction of that. So they should be also okay.

Secondly, CNSC staff undertook to also see whether the levels of the fence line of the facility were okay, sufficiently low. So we had asked Cameco to do further monitoring around the fence line because they have a number of these cylinders stored around the fence line

and they completed that. And again, we saw the levels were quite low.

However, they seemed to be sufficiently low to at least justify further monitoring on a due diligence basis and to ensure going forward in the future that they remain low. And that actually was the intent of the statement put up on the overhead.

Another area where we asked Cameco to look into this was for the worker. They have a number of workers who work in close proximity to these cylinders that are involved with shipping them. So we had asked them to undertake a study to see what kind of doses the workers were getting due to neutron, and they've completed that study as well and submitted that and that's been reviewed by our radiation protection people and maybe we could get them to comment further. But the levels there, again, look to be low, but may, as with the fence line, justify some continuous monitoring just to ensure the levels do remain low.

Thank you.

THE CHAIRPERSON: But I think the question wasn't that. The question was that Mr. Miller contended that you lied. So if you feel that you've supplied information, Mr. Miller, I think the onus is on you to say what was the information that you got that was incorrect

so that you can say that people lied to you.

MR. MILLER: I referred in my written to an email that I got from Mr. Pereira of your Commission staff on May 3rd, 2005, which was the same time period that the Commission was in a position to know from that inspection report that I put on the slide that there were significant levels of neutron radiation measured. I was told in this email, and I quote -- in the written, so I'm not going to repeat it, but I took that to mean that there is nothing to worry about, which is the message we got very plainly from the company. And my jaw literally dropped open when I read that paragraph in the inspection report because I don't know what the intent of the language was but the English meaning of that language was that there was significant levels found and there was further action required. We weren't told that.

THE CHAIRPERSON: Further questions, Dr. Dosman?

MEMBER DOSMAN: So is the CNSC staff aware of anyone who lied to this proponent, yes or no?

THE CHAIRPERSON: I'm sorry, Dr. Dosman, that's not suitable language. You don't tell people to say yes or no.

MEMBER DOSMAN: Sorry.

THE CHAIRPERSON: So let's ---

MEMBER DOSMAN: I withdraw that. I was really only trying to be brief. But I do respect the suggestion.

MR. HOWDEN: Barclay Howden speaking.

From our perspective, we took due diligence action. We determined that the risk was low. But it was still sufficient to do further monitoring and that was reported. That's the way we communicated it. If it was misinterpreted that's what -- there was no intention to mislead anybody with the information.

MEMBER DOSMAN: Thank you.

THE CHAIRPERSON: Further questions for Mr. Miller from here, Mr. Harvey, Mr. ---

Thank you very much, Mr. Miller.

MR. LEBLANC: We will move to the next submission, which is an oral presentation from Mr. John Dietz as outlined in CMD 06-H18.5.

Mr. Dietz, the floor is yours, sir.

06-H18.5
Oral presentation by
John Dietz

MR. DIETZ: Thank you.

Madam Chair, Commissioners of the record,

my name is John Dietz. I am a retired banker and a resident of Port Hope. I would like to thank you for coming to Port Hope to listen to the concerns and the viewpoints of those of us concerned about the relicensing application of Cameco for the next five years.

I have been attending the Port Hope Council for the last eight years. Some people consider me the longest serving non-elected council member and the conscience of council, but others think otherwise.

During the past eight years I've had the opportunity to witness a split council, united council and council which are unable to move forward until there is a consensus in the community on the issue.

During the Cameco SEU application there was a badly split consensus in the community and on council. The same holds true for the licence renewal application.

This application continues to pit residents against each other. It has broken friendships, created enemies and created friendships and alliances of convenience. It has created new political alliances and fractured existing alliances.

In short, Commission members, don't believe the polls and the skilfully asked questions. Port Hope is still badly divided on this issue and the current process has done nothing to heal the riffs. Rather, it has

exasperated the problem by not completing the SEU environmental assessment that in excess of 60 unanswered questions, most of which concern the existing facilities and the problems which are highlighted in the municipality's intervention in part or of any others that you have heard or will hear.

Week after week at council community forums sponsored by Cameco or the Concerned Citizens Group, questions raised are not answered and frustration grows. Individuals come to council, organizations come to council with issues and concerns about Cameco and Zircatec and are faced by a public relations effort of unparalleled expenditures that produce no real action for change requested by residents.

Council has turned a deaf ear in the past but recently Mayor Austin, who chose not to run in the local elections, said if he had to do it all over again he would listen to the concerns of the citizens groups, which include fairer community health concerns, et cetera.

Council's initial reaction was to control the flow of information to retirees, of which I am one, and past legislation restricting the access to the agenda material by charging us a measly $10 for those of us who want to attend the council and be fully informed and who do not have a computer to download the agenda material.

Subsequently, council changed its procedure by allowing it to control and indeed limit delegations and limit the ability of the public to tell their story publicly and on camera to a large viewing audience to offset, in part, Cameco's ability to buy the media.

I can identify with council on this, but the real issue that the public does not feel that council is meeting their needs to keep them coming back with more information, more logic and more emotion and angst.

Further, council realized that some delegations that would come work in Toronto so they changed the meeting date to 6:00. So the delegations couldn't get to the 7:30 time, so now they arrive in the train, on VIA train, Mr. Miller, et cetera, at 6:30.

The SEU proposal and panel review debate which finally abandoned Cameco -- was finally abandoned by Cameco, after the peer review supported by the Jacques Whitford, recommended a panel review resulting in some 1500 residents buying membership in FARE, which was done in tongue in cheek but even then founders knew that there would be a concerned attack to rank the membership in the organization as "anti-nuc loonies". This was and did not work. FARE asked over 700 questions and got council to demand answers or they would ask for a panel review.

We are tired of the ALARA mantra. Port

Hope is changing dramatically and as 300 new citizens a year relocate from the GTA, Ottawa, Montreal, more and more questions are going to be asked by better educated and well-funded individuals who will not put up with breathing fine particles of uranium that are spewed out over the downtown. There is no buffer zone.

Council has a history of too little, too late in terms of addressing real issues which are raised by residents about emissions, fire and emergency services, flood plane and security issues. The battle lines have been drawn in a changing community that will only result in an ultimate rejection of a facility that does not have zero emissions over our downtown and residential neighbourhoods.

Council must act on two environmental assessments over the next few years and respond to the scoping document. They must request panel review assessments of Cameco's 2010 plan and Zircatec.

I applaud the CNSC staff recommending an EA for Zircatec's ESU proposal. It avoids legal action but community groups to enforce the CEAA requirements.

Madam Chair, Commissioners, as I pointed out in my introduction, I am a retired banker. In effect, you are asking our community to approve a loan application, in this case Cameco's relicensing, without

all the information.

You are asking our community to approve the loan of our soil, our air and our water to Cameco and Zircatec for five years without all the information being made available to us.

As a banker if I were in your shoes I would not even consider this application for the company because it is incomplete and I would suggest a career change for the CNSC's officers who brought you a recommendation to accept the application without all the information being available.

Finally, I have three recommendations for this relicensing application. They are;

1) Suspend this hearing until all the reports are in your hands and those of the public so we can fairly comment. You are not meeting your legislative responsibility if you go ahead, in terms of fairness and legal action may result.
2) Only renew the licence for two years with conditions that all the fire, and particularly the fire, building code, soil, air and water studies be completed and that fire requirements -- excuse me -- and that the municipality have been met and have monthly reports to the community and Commission from staff on progress. And,

3) Reject this application until you get a proper relicensing application.

Thank you.

THE CHAIRPERSON: Thank you very much, sir.

Are there questions for this gentleman?

No, thank you very much, sir.

MR. LEBLANC: We will now move to the next submission which is an oral presentation from Mr. Anthony Mancktelow as outlined in CMD 06-H18.6.

Sir, the floor is yours. Welcome.

06-H18.6
Oral presentation by
Anthony Mancktelow

MR. MANCKTELOW: My name is Anthony Mancktelow; a resident of Port Hope. I wish to thank Madam Chair and the Commissioners for giving me this opportunity to present my submission.

A retired high school geography teacher, I moved to Port Hope nine years ago but before that I was a frequent visitor and well read up on the Eldorado history. I was not deterred from buying a house here which came complete with a radiological certificate.

Cameco is seeking a five-year extension to

its operating licence and while I oppose this extension I must assert that I am pro-nuclear and acknowledge that nuclear power has an important role in Canada's energy supply.

At the present time Port Hope is on the verge of seeing millions of dollars invested in the movement of its scattered historical low-level radioactive waste to a single outside of town site using state of the art storage technology.

The so-called low-level clean-up will address what was then. It is what is now and trends to be that I find worrying if a five-year extension to Cameco's operating licence is allowed. My remarks are my own personal opinions and concerns.

Since Cameco withdrew its application to produce slightly enriched uranium in 2005 before an overwhelming number of interventions could be heard at the scheduled CNSC hearing, hundreds of thousands of dollars steered by Cameco's public relations consultants have and are being invested to improve its communications with the community. These include forums and a monthly Cameco newspaper.

The latter and Port Hope's Evening Guide quote Cameco's determination to stay and be a big contributor to Port Hope's economy and to grow the

industry.

It is my understanding that the nuclear industry in Port Hope will be required to meet higher levels of uranium production and at what is destined to be at the enriched level.

Port Hope citizens thus, in my opinion, face the following reality;

1) A confessed growth path to increase the output from the nuclear industry in Port Hope.
2) The move from uranium to enriched uranium will be the norm and,
3) There would be no independent agency looking after the health of the town in spite of increased emissions.

Cameco’s location at the geographical centre of the town is the fundamental course of the issues that worry me. There is no buffer zone between the plant and the residential and downtown land use around it. Prevailing winds from the south and the west direct emissions across the town. Radioactive products are trucked through populated streets.

I am a non-expert. The information behind my concern comes from attending panel discussions organized by activist groups; reading opinions expressed in the local press and the Cameco forums and monthly newspaper.

Its latest issue arrived yesterday and includes a centre page fold-out of emissions graphs. I believe that other interventions will aggressively challenge these calculations.

I re-emphasize that the plant is located in the centre of the town. A five-year extension should be denied while there are persistent issues that Cameco fails to address. I have examples here.

Neutron radiation that's been detected in public areas. Uranium released into the air increased two times this licensing period over the previous licensing period. Soil in Port Hope is seven times more contaminated than uranium elsewhere in Ontario. What happens to uranium discharged into Lake Ontario?

If CNSC allows up to 2,500 kilograms of uranium to be released in a year over Port Hope, not protected by a buffer zone, what does this figure anticipate from the future increased production expected from the nuclear industry?

There is no biomedical input in arriving at figures for emissions. There are mathematical constructions and extrapolations by nuclear physicists and engineers.

There is no tracking of alpha and neutron radiation; most damaging to human tissue beyond the fence

line. There have been no health tests to measure exposure to and inhalation of radioactive materials.

Now, what saddens me is the divisions that have formed among residents within this beautiful town of Port Hope. There are no dirty smoke stacks on our waterfront. The emissions from Cameco are invisible. The sky is always clear over the Cameco stack while Port Hope continues to attract new residents and tourists. They enjoy the image of the town with its preserved Victorian streetscape, its heritage downtown, continually being enhanced by store owners, house tours, garden tours, architectural conservancy, jazz festival, Friends of Music, capital theatre, the agricultural fall fair, the list of cultural organizations and events goes on an on.

And I might just insert here that Cameco is always quick to support many of these organizations.

It is stressful to some to have this good image tarnished by the ongoing involvement with nuclear pollution in the middle of the town. It is understandable why some would prefer to ignore the ongoing agitation.

On top of this there are those with generational loyalties. Many Port Hope families go back generations in employment at Eldorado and Cameco. Present day personnel quite naturally become part of Port Hope’s social fabric and participate in service, commercial, and

recreational organizations, a third division of the volunteer activist groups, such as Families Against Radiation Exposure and the Port Hope Community Health Concerns Committee.

While there is increasing rigour in their investigations and research that press hard on the local industry and the CNSC it is significant that Cameco has now started to invite some dialogue with leaders of these groups and vice versa.

I was visiting my family doctor yesterday at the Port Hope Medical Centre and he said to me, “Oh, it is horrible having that plant in the middle of the town. Why can’t they move to Wesleyville?” “Oh, a great idea, bold envision in 2010 with a nuclear centre of excellence complete with buffer zone.”

In the desire to heal these divisions I can conclude as follows. If a public corporation such as Cameco is to be permitted to produce increased quantities of nuclear fuel in the geographic centre of the town of Port Hope with its profits being distributed to shareholders, is it not equitable that a health protection cost be factored in?

This would be the cost of zero emissions technology or the cost of independent health tests to prove that emissions that escape are not harmful.

Would it not be a fair premium for the company to pay to gain its licence?

Now, I've added, it's not in my original but since my doctor's visit I'd just like to add this question, alternatively, let me leave a question with the Commissioners. With the projected increased growth of nuclear production, why would Cameco not consider establishing state-of-the-art operation on its land in Wesleyville?

I thank Madam Chair and the Commissioners for listening to my submission.

THE CHAIRPERSON: Thank you very much, sir.

Are there questions for this intervenor?

Yes, Mr. Graham.

MR. GRAHAM: Yes, Madam Chair.

The bullets on page 2 of 3, I believe, "neutron radiation more damage than gamma has been detected in public areas chemical plant".

I know there has been discussions this morning already, but would Cameco care to comment on those first two bullets? The second one is that, it is two times higher in the licensing period than over the previous licensing period, of uranium releases.

So I wonder if you would care to comment on those two statements so that we as a Commission can know

exactly what you're doing?

THE CHAIRPERSON: Could you also comment on four tons of uranium being released as well, please?

MR. MANCKTELOW: What they release is minute, but they would be allowed to release that under this.

MR. JARRELL: I guess just to go further from what the CNSC staff had commented on, that the levels in the three studies that we have conducted all showed very low levels of neutron radiation, but because we couldn't conclusively say that they were negligible or diminimous, we have asked our consultant to include neutron radiation in the current review of our drive release limit and operating release limit and so we will wait to hear back from our consultant as to whether neutron radiation needs to be included in the public dose calculation or not.

As far as the uranium release-to-air increasing by two times during the licence period, Cameco had previously reported emissions of uranium to atmosphere in the neighbourhood of 60 kilograms per year and in the last two years, as was shown in our demonstration, the numbers are around 117 kilograms per year now. That is largely due to the change in the calculation of fugitive emissions as was explained by Mr. Steane in our opening

presentation. It is not an actual increase, it's a better accounting of emissions than we had in the past, so the emissions were there, we just were not accounting for some of them and we are accounting for those emissions now.

The third point was -- the statement here is, "If CNSC allows up to four tons…", that's short tons, "…of uranium to release to Port Hope". I believe that this is a calculation, an extrapolation of if the emissions were -- I don't know where the four tons come from. In the oral presentation, Mr. Mancktelow states 2,500 kilograms and that is a direct ---

MR. MANCKTELOW: This is the limit. I'm presenting this limit that they would be allowed to release. They obviously release a miniscule amount compared to that but, my point is, if we are on a path of increased demand for nuclear fuel as, you know, the burgeoning nuclear energy industry, then what are we to expect? There’s more fuel production and presumably the emissions will go up and there's no concern if there's a higher ceiling to rest under.

THE CHAIRPERSON: We'll ask staff to comment on that since the statement starts with, "CNSC allows…".

MR. HOWDEN: Barclay Howden speaking.

I am going to ask Marty O'Brien to reply.

MR. O'BRIEN: Marty O'Brien for the record.

The limits on uranium in the licence are expressed in "grams/u per hour". That's average stack emissions from each plant, and the maximum is based on a dose of 50 microsieverts per year from that source to the critical receptor. There is a different number for each plant, for the UF_6 plant, the average emission is 290 grams per hour over the course of the year. For the UO_2 plant that's 150 grams uranium per hour. How that works out in total kilograms, I would have to get a calculator but we track the grams U per hour, that is the compliance parameter that we track.

THE CHAIRPERSON: Further questions for this intervenor?

Thank you very much, sir.

MR. LEBLANC: We will move to the next submission which is an oral presentation from Ms. Alice Mailath as outlined in CMD 06-H18.7.

Ms. Mailath, the floor is yours.

06-H18-7
Oral presentation by
Alice Mailath

MS. MAILATH: Thank you very much.

My name is Alice Mailath and I am a citizen of Port Hope.

In the summer of 2006 I, as a householder of Port Hope, received a beautiful flyer with the caption, "Cameco Vision 2010 Connecting with Port Hope's Future". It's intention, "To enhance the appearance and operations of the site." A look of park-like features; a benefit for our historic town.

The humble beginnings of this enterprise under the name of Eldorado Nuclear to have been the supplier of the world-known devastation of two Japanese cities. Later, it provided landfill for various sites in Port Hope. I gather at the time no one knew it was harmful. Can we call it an uneducated accident?

After Canadian Mining and Energy Corporation, Cameco took over this fastidious enterprise in 1988, it now, in 2006, tempts us with the plan to remove its inheritance of 150,000 cubic metres of contaminated materials still sitting near or on our flood plains. An enticement.

In the Northumberland News Wednesday, June 23rd, 2004, page 21, headline, "Cameco says incidents at plant had no adverse impact on Port Hope residents". Incidents, not incident, not one but three. The first, a leak of hexafluoride; the second, an empty tank of

hydrogen fluoride; the third, a burn-through or corrosion of a pipe or valve for fluorine gas. The article cites all this was managed ably and coped with.

Now, I ask myself, how could it ever happen? And since it did, what is to say we should not worry that at any point something else could not take place? Just so we're clear, an incident is just a benign way of calling it an accident.

At this point, I should like to emphasize that an accident is the absent of a positive plan or intent or, in other words, a catastrophic mishap or chance. It may never materialize, or be upon us tomorrow.

The nuclear accidents worldwide definitely don't seem to have been planned. I don't need to point out the havoc they wreaked.

Is it fear mongering to expect in 2006 to have some comprehensive warning and safety program? But then, it seems in such a case we’re talking of gases. We won’t be going far. My home, of course, has the dubious honour of being located deep in the core of what by right should be a true and serious buffer zone from Cameco.

An elementary buffer zone, as I perceive it to be prudent, engulfs at least all of Port Hope and then considerably more. The concept of such a true buffer zone eludes to the fact that in the eventuality of a

catastrophic accident outside this buffer zone, there is a relative chance of safety. How can I feel safe while sitting as first front inside it?

When I voiced my concern at an open house held by Cameco, the explanation given to me; the idea of a buffer zone is a concrete structure and some little hill. Not that I ever saw such a hill other than I'm sitting on it. This sounds absolutely grotesque to me. It would protect who from what? What regulatory body enacted such a folly?

Every day I look at the smoke stack of Cameco emitting white plume. I'm being soothed. Such levels of non-threatening poisons. To make me feel really good and stupid, I often read articles in the paper by self-appointed advocates. The emissions are no more than car emission or smog or any number of other unpleasant and definitely unhealthy things foisted upon us, especially since now I have to add the emissions to all this other offensive poison. Thank you very much. Now I feel really better.

Who decides a safety level? Is it per chance under the level of not safe? I would like to think no level is safe. Definitely not on an accumulative basis. If the human body seems to store such poisons, therefore I must in my pedestrian apprehension conclude

that there is no proven safe level, and it is a social or political choice.

Someone decided we should live on the razor's edge. I should hate to think that it is our governmental regulatory agency. I find that arrogant.

From reading the publication, "Uranium, A Discussion Guide" by the National Film Board of Canada, a documentary presented by numerous doctors, I understand that cancer and various dread illnesses do not occur like poison ivy where presto, you have a rash; rather it creeps up over a period of time. It does not appear with a convenient label. So it can be dismissed or blamed on just about any other origin.

Without the complete study of our region, we're spitting against the wind. All things considered, if our concerns were so unfounded, how then is it that there is no insurance, private or public, for public liability if risks were deemed so low for a catastrophic event?

I would think it basic there should be an emergency evacuation plan. If it exists on paper, we should have to admit that we have a problem. Much easier to be cavalier about it and call it fear mongering. Heaven forbid prudence. Can you imagine all of us at some alarm that most of us are surely not aware of, hopping in

our cars and leaving town in an orderly and calm fashion? But it is ludicrous since our danger perceived will be most likely gases. No running like hell. Hell, I haven't heard any, however efficient, fire equipment or fire fighting unit battling gases. Did anyone ever ponder that a bigger event would cut off the three vital east-west arteries? Does the highway department and the railroads have an eventuality plan or are they too squeezing their eyes shut?

For the life of me I cannot fathom that after the contaminated land fill accident, a succession of mayors and town councils allow themselves to be so perplexingly oblivious to the community to protect our town ---

THE CHAIRPERSON: Ma'am you have a minute left.

MS. MAILATH: --- for surely that would have been the time in their infinite wisdom to put their foot down. But I guess our little town of Port Hope did not have the will and the luxury to vote into office a scientist to standing up to the giant.

I would like to put forth these recommendations. Do not put the licence for more than one year until the fire and emergency plans are in place and tested. Do not extend the licence before they run an

environmental assessment for 2010 plan, but do not allow the EA to, on the 2010 plan, to start until all conditions on the licence are fulfilled, that the fire preparedness be ruled A; that emissions of heavy metal gases from the stacks be eliminated; that an emergency plan for shelter be in place and/or evacuation plan be accepted by the council, explained to the community and tested; that an emergency warning plan be put in place to notify all residents at risk if there should be a hazardous spilled fire or gas leak. Thank you very much.

THE CHAIRPERSON: Thank you very much, Ma'am, for taking the time to be with us today.

Are there any questions? Dr. Barnes.

MEMBER BARNES: Yes, I'd like to just follow up on what other intervenors have mentioned about the possibility of UF_6 accidental release in the form of atmospheric plume, the evacuation plans, notifications, possible siren systems and so on. To Cameco and staff.

MR. STEANE: For the record, Bob Steane for Cameco.

For the release of $UF_{6,}$ the first and foremost in the plant, there are systems of secondary containment, alarms, emergency ventilation to detect, divert and contain any release of hydrogen fluoride. Then through Cameco's involvement in the CAER organization, we

have worked with CAER on developing shelter in place plans. We have distributed, again through CAER and through the municipality, brochures on shelters in place, as well put into place the community alert network telephone system, which would provide a means of early warning and call out to people to let them know that a situation has arisen where they would have to take some action. So those are the ---

Further the development of evacuation plans, that is something that is outside of the domain of Cameco to do. The municipality is looking at that and Cameco is supporting and cooperating. We'll cooperate with the municipality as they evolve and work on evacuation planning and emergency measures.

MEMBER BARNES: Let me ask before staff, how many times, if any, have there been significant releases like this chemical?

MR. STEANE: Bob Steane, for the record.

We have not had a release requiring implementation of these plans.

MEMBER BARNES: And under what conditions within the plant do you think such an event could take place?

MR. STEANE: Again, we think we have through our detection and divert systems, emergency

ventilation systems, have in place all the credible scenarios covered that it wouldn’t happen.

We also have as a protocol though, that if -- and it is written -- if you have six -- if HF -- sorry, if an HF plume, visible plume left the building, at that point we have a group of predefined zone, initial notification zone. The CAN system would be activated and notify those people.

So we have thought it through and defined at what point do you do that and it's as soon as any HF cloud is visible or HF leaves the building.

MR. HOWDEN: Barclay Howden speaking.

I'm going to ask Marty O’Brien to comment.

MR. O’BRIEN: Marty O’Brien, for the record.

I think as I mentioned earlier in the day, one of the key areas or documents we look at is the safety report for the facility and that is a report that's somewhat 630 odd pages which analyzes a number of postulated incidents that could take place and ensures that -- or it analyzes all the safeguards that are in place to reduce the risk of those incidents to an acceptable level.

So that’s one approach and on the -- and what's on the deterministic side, we have a number of

codes and standards that the licence requires them to follow as well, a key one being for pressure vessels, CSA Standard B51 for pressure retaining components. That is the key standard they have to follow to maintain integrity of the pressure vessels. Thank you.

MEMBER BARNES: So would it be fair to say that you would see this as an extremely remote possibility?

MR. O'BRIEN: Yes, that's the conclusion of our assessments.

THE CHAIRPERSON: Are there further questions for this intervenor?

Thank you very much.

MR. LEBLANC: Ms. Mailath, before you leave, as you will also be presenting the same submission on Thursday for the hearing ---

MS. MAILATH: I won't.

MR. LEBLANC: You will not? So we'll count this one as being filed also for Zircatec.

MS. MAILATH: It's all right. I have a new one for Zircatec.

MR. LEBLANC: Okay. We would need to have it provided to us so we can circulate it because we have the same one on record.

MS. MAILATH: Well, that was an accident.

I have -- I can give it to you. Do you want me to give it to you?

MR. LEBLANC: Yes, just provide it to Madame Levert and we'll see what we can do with it. Thank you.

MS. MAILATH: Okay. I shall drop it up?

MR. LEBLANC: No, Madame Levert who is right here, on your right. Thank you.

MS. MAILATH: Thank you.

MR. LEBLANC: Okay. So we will now move to the next submission which is an oral presentation from Ms. Rose Bungaro. However, Ms. Bungaro had to leave and has asked to present tomorrow evening if possible.

THE CHAIRPERSON: In that light, we will consider this as a written submission and endeavour to fit it in if we can. And if we can't, we will accept it as a written submission.

MR. LEBLANC: We will now move to the next submission which is from Mr. and Mrs. Parrott. They are not here today either. So their submission will be considered as a written and will be addressed later with other written submissions, later in this hearing.

The next submission was also an oral presentation from Mr. Ray Morand, as outlined in CMD 06-

H18.10. Mr. Morand has asked to present tomorrow evening, if possible, to which the same caveat applies as the President mentioned earlier.

So we will now move to the next submission which is an oral presentation from Mr. Dennis Landwehr, as outlined in CMD 06-H18.11.

Mr. Landwehr, the floor is yours, sir.

06-H18.11
Oral presentation by
Dennis J. Landwehr

MR. LANDWEHR: Thank you. For the record, my name is Dennis Landwehr.

I have made some modifications to my written submission. I can give you the revised text either in print or in electronic form if you like.

Good afternoon, Madam Chair and Commission Members. I would like you to consider my regards in regard to both the Cameco and the Zircatec licence applications.

Thank you for allowing me to speak. This won’t take long. My partner and I own our home at 217 Walton Street. I can sit on my toilet and see the top of Cameco Building 50. As an electrical and mechanical

engineer, I understand power generation technologies. I have no irrational fear of radiation, just a healthy respect for the now well-known dangers.

I am aware of the pertinent technical and economic issues. I urge you not to re-licence the applicants to process nuclear materials and produce fuel rods and their present locations.

Nuclear energy may be economically and environmentally justified, particularly with modern concerns about greenhouse gases. Given the history of cost overruns, I am unconvinced that nuclear energy is a better investment than conservation and renewable energy development over the next few decades, but that is not the question before us today.

Others who are more conversant with all of the published information can point out many specific grounds to deny this licence. I hope they will and they have quoted chapter and verse, statements and minutes, falsehoods and failures. Instead, I will make my case with direct and perhaps blunt language.

Do not allow these activities in my neighbourhood if you would not allow them in your own.

The existence of these facilities in our community is an accident of history. The applicants have every reason to wish to continue their operations here.

Among other things, they would be obligated to clean up their sites which would cost many millions, an expense they can postpone as long as they stay licensed, but they can't afford to do the right thing.

For their 2005 annual report, Cameco has a stock value of approximately $15 billion and they have a growing market of which they are very proud.

Port Hope's nuclear industries are known to have left us with a legacy of low-level waste. Cameco now acknowledges emissions of 10 kilograms of uranium per month. The health effects have not been adequately studied. Their facility is a symbolically tempting and intrinsically vulnerable target for terrorists.

Unlike the region's reactors, it needs relatively little cooling water, let alone a lakefront location. It lacks the sufficient containment structure and lacks any buffer zone relative to a population. That would be us.

With the planned construction of several new nuclear power plants in Ontario and their business elsewhere, the applicants will need to expand their fuel rod business. They should build a new facility with a buffer zone and state-of-the-art fire protection and emissions controls to handle any new SEU process, as well as the continuing processing of non-enriched uranium.

A new facility could be built as near as Darlington or even closer on their property, away from all residential property, allowing local workers to keep their jobs. Rebuilding the plant elsewhere would resolve most of the issues discussed today: fire protection, floods, storms, exposure of the local population to emissions, and the consequences of potential accidents or sabotage, et cetera.

In your opening statement, Madam Chair, you stated that your licensing decisions are made on the basis of safety, not economics.

My question is this: given a map of Ontario and the problem of citing a uranium processing and fuel rod production facility, would you zero in on the Port Hope waterfront as the best possible location?

Would these facilities be welcomed in your neighbourhood? Today, they would not be built in any neighbourhood. There is no compelling reason they should be allowed to operate in mine any longer.

I want to be clear that my point is not “NIMBY” but “NIABY”; not in anybody’s backyard. Thank you for consideration of my comments.

THE CHAIRPERSON: Thank you very much, sir.

Are there questions for this intervenor?

I don’t see any questions. Thank you very

much, sir.

MR. LEBLANC: We will now move to the next submission which is an oral presentation from Mr. John Morand, as outlined in CMD 06-H18.12.

Mr. Morand, the floor is yours.

06.H18.12
Oral presentation by
John Morand

MR. MORAND: Thank you. Madam Chairman, through you to the Commissioners, welcome to our community. I hope you have an opportunity to walk around the two facilities and see for yourselves the issues and concerns that are going to be raised.

I bring with me today the new kit that all Port Hopers are going to be asked to have in their home two weeks from today when they receive a brochure saying that if there's an accident, here is how you shelter in home. Do not leave your car. Do not leave your home.

Take your duct tape, take your plastic sheeting; go into the most secure room in your home; tape the doors; tape the windows; before you do it shut off your furnace and air conditioning system so that if there’s a problem it’s not going to get sucked into the

room.

That wasn't sent out over the last six weeks; it was supposed to have been. I'm sure there's no reason why it wasn't but in the next two weeks it will be sent out to everyone in the community. This is, in fact our buffer zone.

I have only four issues I'd like to discuss with you; you've got the material in front of you. The first is fire. In 1978 when it was proposed to build a UF_6 plant in Ontario, Wesleyville was a selected site.

This is one of seven binders. In that EA there was a requirement for an onsite fire hall with 22 full-time firemen. In a report produced for you, your consultant Cyril Hare and Consultants indicated that they have proper fire service to the facilities here. You should have 22 fully trained individuals onsite within 10 minutes 90 per cent of the time. I don't see how you got a "C" when you don't make half of that.

What we also have is we have a situation with only one access road. You didn't ask our fire chief all the right questions. Let me give you a few to ask.

First of all, we've come a short distance in a long time. If you look at the issues that have been raised in terms of fire service; there is no access roads and escape roads to the south and west of the facility.

So fire-fighters, without proper moon suits cannot get down in there, particularly with the changes to the *Criminal Code* in terms of the responsibilities.

Secondly, our municipality has done a lousy job -- and I was chair of that committee -- in terms of stepping up to the mark. Cameco spent a lot of money to train our firefighters and our council refused to pass a bylaw to allow them to perform to the operations level. So we have a bylaw in this community that says our fire-fighters can only go to the awareness levels of Hazmat. You didn't ask the right question.

We have trained firefighters with a bylaw that says they can't do what Cameco paid to train them for. Not only that, but the $30,000 in recommended equipment wasn't purchased by council, it will be considered sometime in 2007 and by that time is the training still certified. So we have those problems.

The next problem is we had a fire at Town Hall recently, it took 8 minutes and 52 seconds for the first fire truck to arrive.

The third problem is -- and ask this question, why doesn't Cameco and Zircatec notify immediately when something happens onsite. They don't, they try and handle it themselves. The fire chief, any fire chief will tell you that the first thing you do is

you call because in the first three to five minutes if it gets out of hand you're not going to put it out.

And I bring you that information as a former Chief Administrative Officer of the City of Toronto, responsible for fire service, former Chief Administrative Officer of the City of Kingston, Gloucester, Markham,

I've been there in terms of fire service; I've budgeted it, I've looked at it; I've looked at the composite forces. We don't have enough firefighters here. When our ---

Perhaps I was speaking too fast, Madam Chair.

Our firefighters went on a tour. I don't believe you got that report. I have a copy for you. Bonnyville was the community in Alberta that they thought really had the best type of service that we should have. There are between 180 and 200 volunteers there. We don't have enough firefighters here to deal with the issue and we don't have the equipment to deal with the issues. That's reality.

Nothing has improved since I last appeared in front of you and raised this issue and Commissioner Graham really understood it. He got it. Nothing has improved.

My issue isn't really radiological problems, it's 90,000 litres of hydrofluoric acid.

I heard issues here about climate change and I'll address that in a moment. What I haven't heard is any analysis whatsoever done on tornados, none, zero, nada.

At Letourneau Conference two weeks ago one of the major issues, annual climate conference, in the Province of Ontario was increasing tornados in the Province of Ontario. Would you have six buildings that withstand a Category 1 tornado? How about a category 5? No research done whatsoever in the impacts of climate change.

I heard one of your consultants a PhD, I think, this morning, say that in terms of the flood plain that going from 755 -- and you don't have the numbers in front of you but I have -- you do have them in front of you, I gave them to you.

If you look at the information you're going to see that the 100 year recommended -- the regional flood line of 748 cubic feet per minute. The probable maximum flood is 1,454. One of your consultants said the water depth will be twice that. He doesn't know what he's talking about, it's one to four, it spreads out.

What you didn't hear this morning on that

is that -- I was a Katrina volunteer. I saw the damage, 25 miles of it in Katrina. It wasn't caused by water, it was caused by cars, houses, trees, et cetera. If a dock wall washes out -- and I'm a former CEO, Chief Executive Officer Toronto Port Authority -- if a dock wall washes out in part what will happen -- and Commissioner Barnes was absolutely right, it will bifurcate and the water will be driven towards the buildings.

And, as that study says, it's wet soil in there, it's porous, it'll disappear, you're going to have major subsistence.

Get proper information. Call Mark Peacock before you tomorrow from the Ganaraska Conservation Authority and ask him the questions about climate change; look at the presentation I presented to you on climate change information.

There are only three gauges on the Ganaraska River. There's no consideration given in terms of the information you've got on the probable maximum flood in terms of what will happen when the buildings in the centre pier go because you haven't been told by your staff that all of the numbers are based on keeping the buildings on the centre pier, on that low-level radioactive soil that's currently on the centre pier unprotected, which in a flood will disappear out into the

lake, not the big pile probably but the smaller pile.

If those buildings disappear the water heads over to Cameco. In fact, as a municipality develops and Mill Street is developed in terms of the plan and there's a wall of buildings along Mill Street that's also going to act as a buffer and shift the water over.

I have heard nothing in any of the reports from your staff that talks about that major problem. So there are a whole lot of unanswered questions and getting 512 pages of information this morning that I didn't have a chance to analyze doesn't bode well for the fairness of this process, which is one of your criteria.

So there are a series of questions to ask. First of all, how do we get 22 firefighters on scene within 10 minutes the right percentage of the time?

How do we get our volunteer firefighters who are doing a heck of a job, taking time off from their family et cetera to get the full training that they require?

How do we get the equipment; ladder truck, moon suits, 200 employees so they can properly be trained and actually enter onto the scene?

Thirdly, how do you get an extra access road in there because the four employees that are onsite with Cameco, if they're in fact is a problem and there's a

release of hydrofluoric acid can't get to the equipment. Ask that question. How do they get to the equipment if in fact there's a release and those roads are blocked?

The final issue I'd like to make is that there was a series of recommendations from the previous CAO of the community in terms of security. I haven't heard them mentioned. Those recommendations were to close the street, move the street over, limit access to the site, put marine radar in. And again, as former Chief Executive Officer Toronto Port Authority we use marine radar there at the airport to keep away people that we didn't want near our planes; didn't want near the runways.

This facility cannot be protected, impossible. Walk around it, look at it. I can park a boatload of anything next to it, I can bring a truckload of anything up to it. I can run a gate and lay a truck right in front of a concrete barricade in front of the UF_6 facility; do it in seconds. You need better protection.

Three years ago I met with Aldo D'Agostino and I said I had two concerns. Concern number one was a berm, put a berm around the facility so no truckload of whatever can get close enough to cause problems and also to prevent any water. I was told at that point, can't do that because inside the berm will become a swimming pool if there's a really bad storm and I said buy bigger pumps.

The second issue was the security issue in terms of closing the roads.

Finally, when I look at the health information from UNSCEAR what I see, and it's in the material you have, that a single particle of airborne uranium, one, two, three, four, five microns will cross the barrier into my lungs, it's an alpha particle, high energy, not low, it's not gamma, alpha. It will break -- has the capacity to break the double Helix band.

One of three things happen to that cell; it dies; it heals itself or it mutates, positively or negatively. This was discussed at the Cameco Health Forum. Let's get zero emissions.

Let's target zero emissions. Let's stop having our citizens in this community breathing in small particles of uranium.

So to reiterate, I have four issues; one, there are major problems ---

THE CHAIRPERSON: You are already over, sir.

MR. MORAND: Fine. I think ---

THE CHAIRPERSON: I took your hint by when you said you were summarizing.

MR. MORAND: I'd be very happy to answer any questions, Madam Chair.

Thank you.

THE CHAIRPERSON: Thank you very much.

I didn't give you the little knock because you said summary; so I was hopeful.

Any questions?

Yes, Mr. Graham.

MEMBER GRAHAM: My first question is at the outset you held up a book.

MR. MORAND: Sorry?

MEMBER GRAHAM: At the outset you held up a book which was an EA or guidelines, the black book on your elbow. You referred to that. What was that again?

MR. MORAND: That was the Environmental Assessment in 1978 through 1981 to site a UF_6 facility, a new UF_6 facility for Eldorado, and in that are all of the criteria that were used for the facility, including fire service.

MEMBER GRAHAM: Thank you.

A question to CNSC staff. Are you aware that in that report it was reported here and the intervenor reported that a fire hall should be built with at least 22 full-time employees at all time? Is that part of the recommendation or are you aware of that report?

MR. HOWDEN: Barclay Howden speaking.

Yes, we are aware that that was an EA done

for a particular facility that was being planned on a particular site.

MEMBER GRAHAM: The adequacy of fire protection, which I had lead to when the Chief was here and so on and you reiterated earlier that 58 volunteers for a city of this size, and I'm not sure, but I understand the city is what population, 30,000 or something, 25 to 30,000 to Cameco?

MR. STEANE: Bob Steane for the record.

The population of Port Hope is about 16,500 people, and that's including the Ward 1 and Ward 2.

MEMBER GRAHAM: Anyway, coming back to even 58 volunteers to service that large an area, I'm wondering -- and again, I want to come back to it to CNSC staff, that is there adequate fire protection? Do we feel that there is adequate fire protection in the case of an emergency, in the case of also I know there are remedial measures have been taken with onsite staff and so on, but we've heard today that there may be a problem.

My concern is or my question is, is there adequate fire protection from a volunteer department for a major hazard -- a major disaster? I'm sorry.

MR. HOWDEN: Barclay Howden speaking.

I'm going to ask Marty O'Brien to start with a response and then it's going to go back to our fire

specialist Grant Cherkas.

Thank you.

MR. O'BRIEN: Yes. As discussed at the Day One Hearing and mentioned in our CMD, we evaluate the combined fire response of the onsite force and what's available offsite, and we are satisfied with the actions Cameco has taken to upgrade their onsite response, that it compensated for some of the potential deficiencies identified in the offsite.

So we're now satisfied that the combined force is adequate and we did an onsite emergency exercise review in May in which Cameco conducted an exercise in conjunction with the Port Hope Fire Department in the UF_6 plant and Cameco's staff led the response into the building and the Port Hope Fire Department acted as a backup. We were satisfied with the performance in that exercise of that combined force.

MEMBER GRAHAM: The question is there a by-law that exists that was referred to this afternoon? Is there a by-law that exists that does not permit firemen to go beyond a certain point or so on?

MR. HOWDEN: Barclay Howden speaking.

That's a municipal issue. What we've looked at is the combined response of Cameco being the primary responder to events on their site supported by the

Port Hope Fire Department in a support measure.

MEMBER GRAHAM: The reason I ask the question, and I don't want to prolong it, but I think it's an issue that -- it's the only one that's got the low rating in this, is that hypothetically if there was -- this community is not very far away from 401. If there's a major traffic accident on 401 and the volunteer department responded to that, at the same time there was something happening at Cameco, has there been any model put together to see that you have adequate facilities?

The reason I say that is 58 volunteers doesn't sound like very much for a town or a city this size compared to what my experience has been, and I just am concerned if there was another major accident at the same time, has there been any model put together to see if there can be a response? And I guess that question should go to Cameco first.

THE CHAIRPERSON: It is unfortunate that we didn't ask these questions this morning. It's the same question that was asked this morning, Mr. Graham, when the fire chief was here. I don't see much difference in the questions. But we'll ask Cameco to respond and we may have an opportunity to talk to the fire chief again.

MR. STEANE: Thank you.

For the record, Bob Steane.

There are a couple of things in your inquiry I think we'd like to address. The first one is we've heard it mentioned several times and it's been in several interventions, and the 22-people response that was in a consultant's report, and I'd like to ask our emergency services coordinator to address that particular issue.

MR. ROUSE: Tyler Rouse for the record.

With all due respect to the author of that report, it was written from a municipal response perspective, and having a number of years of experience as a full time firefighter in a large city in the United States and also a number of years of experience as a full-time firefighter and company officer at an industrial facility in the United States, I know that municipal firefighters tend to fear the unknown aspects of an industrial facility. It's human nature to fear the unknown.

But one of the major advantages that industrial fire brigades have, like the Cameco ERT, is site familiarity. These guys spend one fourth of their life at the incident site, so to speak. Okay? And this even -- it's clearly defined and stated in NFPA-600, and this is the reason NFPA-600 was written. It's because there is a difference between 1710 and 1720, which are the

municipal response standards, in NFPA-600.

And just to paraphrase what was said in NFPA-600, industrial fire brigades constituted in accordance with NFPA-600 will of necessity have much more thorough knowledge of the buildings and facilities where they respond than do municipal firefighters, as they respond to a significantly greater variety of buildings and facilities, which many have unidentified undisclosed hazards.

This distinct advantage of familiarity achieves a higher level of industrial fire brigade safety and allows for the fundamental difference between a municipal fire department and an industrial fire department.

So that’s the major advantage of having an on-site emergency response team.

And just to put it into perspective for you, we’ve stated before that there is 58 firefighters for 16,500 residents. We have a 47-member emergency response team to cover six acres. All of these members are, again, I’ll state, they’re trained to the highest level of hazardous material response.

And to put it into perspective for you further, I checked the Toronto’s CBRN’s response capabilities. That’s the Chemical, Biological,

Radiological and Nuclear Response Team that responds all over the province, and if you were to have an incident, they would send 12 to 18 hazmat techs to that incident. We have 47.

Team 1, a major private sector contractor who responds all over the province, I spoke with a representative there; they have between 30 and 35 techs on staff. We have 47. If there was a railcar leak in the province, Team 1 -- and Team 1 was contracted to respond, they would send between 8 and 12 hazmat techs. Again, we have 47 hazardous materials technicians with the same qualifications as these guys.

To go even further, to the issues of hydrochloric acid, our response team members have also been specially trained in responding to and mitigating hydrochloric acid leaks.

So with that, we have the capabilities onsite to respond to anything that comes up.

The Port Hope Fire Department not having -- not being able to respond to operations level, you know, it is an issue but it’s just an issue from their response capabilities throughout the municipality. It’s not really so much of an issue for us. We’d like to see them in operations level since we did train them to that level, but they’d only act in a backup role anyway. And as far

as equipment goes, if they did come to our site to respond to an incident we could provide them with all their equipment; we have more than enough hazardous materials equipment to handle any incident on our site.

Okay, so as far as that goes, they'd still act in a backup role. So, we definitely have the capability to respond to fires and to hazardous materials incidents on our site.

THE CHAIRPERSON: Dr. McDill.

MEMBER MCDILL: Thank you.

I wonder if I could ask staff to comment on the centre pier comments made by the intervenor. I did read the report but I think it would be helpful if the modelling experts talks about the centre pier.

And we could ask Cameco to comment, of course.

MR. HOWDEN: Barclay Howden speaking.

I'm going to ask Bob Barker to respond to that.

MR. BARKER: Bob Barker for the record.

Just to clarify the question, Commissioner, would you like to clarify the means by which the mound was authorized to be placed on the centre pier?

MEMBER McDILL: No. I believe the intervenor is concerned with flooding and the centre pier

and I would like you to comment on the analysis that was done and then Cameco to comment as well, please.

MR. BARKER: Okay.

MEMBER McDILL: I can direct you to the summary page of the AMEC report for example.

MR. BARKER: When the proposal was forwarded to the CNSC by Cameco it was reviewed in the context of the authorities under the licence. It was determined that there was no authority required from the CNSC for Cameco to place the mound on the centre pier.

Nonetheless, several parties had a meeting with the Ganaraska River Conservation Authority. These parties were the low-level office who in fact assisted in the placement and development of the mound. Two of their consultants, members from the Conservation Authority, members from the Municipality of Port Hope, and members from Cameco met to review the design for the centre pier mound.

The concern of the Conservation Authority was that the ring well for the mound be above the 100-year high floodplain in the area. This was confirmed by the consultants for the low-level office to be in fact in place and the follow-up to the meeting was that the Conservation Authority had no further concerns about the design of the mound.

MEMBER McDILL: Thank you. My question is ---

MR. HOWDEN: Barclay Howden speaking.

Mr. Barker has given sort of the general -- in terms of the specific risk of flooding, I'd like Dr. Lei to comment on that, to just complete the answer.

Thank you.

DR. SHIZHONG: For the record my name is Lei Shizhong.

The centre pier -– and I even went there yesterday to take another look and we walked around and from the previous studies, even the 100-year flood cannot reach the top of the concrete blocks. The top of the concrete blocks are around the pile.

For flat that's bigger than 100-year flood there will be overtopping but I don't think the pile of soil would be washed away into the return basin.

Besides, this whole pile will be removed. For the moment, actually the pile there is acting to retain the flood so it wouldn't reach the other side. In the future, near future, when they remove the whole pile of soil, the GRCA also is requiring Cameco to do something to make sure there wouldn't be additional flooding because of removal of this pile.

In our comments that were sent to Cameco we

are also asking them that once the hydraulic conditions on the centre pier change, we will ask them to reassess the design of the flood partition berm for example and other flood proofing measures will also have to be updated when the hydraulic conditions change.

MEMBER McDILL: Thank you.

Could I have Cameco's comment on the same thing, please?

MR. STEANE: Bob Steane for the record.

I think I would call on our modelling consultant, Peter Nimmrichter, to discuss flood modelling was done and the materials on the centre pier. They did the work for the GRCA which was then pier reviewed by the GRCA's consultant. So I'll get Mr. Nimmrichter to address that.

MR. NIMMRICHTER: Thank you. Peter Nimmrichter for the record.

First of all, in looking at the hydraulic properties of the centre pier we had a specific meeting with GRCA staff, Mark Peacock was involved, as well as the Conservation Authorities Pier Reviewer, Greenland Engineering or Greenland International. Cameco was in attendance and AMEC.

We discussed what the current condition was going to be, particularly in terms of the centre pier

recognizing that it had certain hydraulic properties that influenced flood lines on both sides of the centre pier.

We were directed by GRCA staff, they, recognizing that floodplain mapping represents a snapshot in time, the centre pier and features on the centre pier should be viewed in their current state.

So, the soil pile exists. There are certain buildings that exist and that’s the way our model is developed.

I just want to read for you from the summary from our report; the last bullet item that speaks to this:

> "The buildings and stockpile located on the centre pier act to contain the flow in the main Ganaraska River Channel under high flow conditions". (As read)

In paraphrasing:

> "As such, any future grading or structural alterations along the centre pier and up to Hayward Street must first be modelled and approved by the GRCA to ensure no change in water surface elevations as this could potentially increase the flood line

elevation adjacent to the Cameco site". (As read)

Meaning that at some point in the future when the soil pile is removed, at some point in the future perhaps when the buildings are removed, the hydraulic function of those features needs to be replaced by a new feature; a new engineered feature so that the flood lines don't change. Or, as Dr. Lei suggests, a re-evaluation of the floodplain mapping at that time if it is decided not to replace it with a new hydraulic feature.

MEMBER McDILL: Thank you.

With respect to that issue does the intervenor wish to comment?

MR. MORAND: Madam Chair, you got wrong information from the experts.

I have here the actual floodplain map which I'll table with the Commission. You may want to look at it a little later.

I heard "pile" referred to; "low-level pile". There are in fact two. The individual that walked around obviously didn't see the one that doesn't have the concrete base; the one that's been there for about 10 years. Not the one with 11,000 cubic metres but the one with about 5, that's absolutely exposed first to any flood waters.

So I will table with you this map and in addition the actual report that goes through in great detail, and I would urge the Commission to get Marc Peacock here tomorrow to answer the questions which have only been partially answered.

THE CHAIRPERSON: Further questions from the Commission members?

Dr. Barnes.

MEMBER BARNES: Just a couple.

One has been, I think, answered, at least indirectly. I asked staff about fire issues, but I would ask staff to confirm again that you are confident that the licensee has the capability to deal with fires or serious leaks dealing with the rather large volumes of hydrofluoric acid on site.

MR. HOWDEN: Barclay Howden speaking.

Yes, we are confident.

MEMBER BARNES: The second question I raise is the issue this morning of hurricanes in the context of climate change. The intervenor raised a somewhat separate issue of tornado issues and this has been more directly developed in recent months within Ontario and whether this EF_6 facility could withstand a tornado hit, and is there a response from staff to that?

THE CHAIRPERSON: Perhaps, Dr. Barnes, we

should start with the licensee and then go to staff, if you agree?

MEMBER BARNES: Of course, yes, thank you.

MR. STEANE: Bob Steane for the record.

We have not assessed a tornado.

MEMBER BARNES: Any reason why you wouldn't or why you wouldn't have included that in the issue of climate change? Report from your consultant?

MR. STEANE: Bob Steane for the record.

I think I have to go back and check. It's not that old of a plant design and see what the original design work did assess before I could give you that answer.

MEMBER BARNES: Any comment from the staff?

MR. O'BRIEN: Marty O'Brien for the record.

We can follow-up further on that issue, but I believe the buildings are built to the *National Building Code* which does incorporate that factor.

MEMBER BARNES: Thank you.

It might be nice if someone could check on that but whether it's possible to check within the timeframe of the Hearing. Something for staff to look at it.

My last question, Madam Chair, you might wish to -- I don't wish us to necessarily break and go in

camera, but the intervenor raised the issue of security and general aspects of security have been covered, I think, in staff documents. This intervenor did indicate that one could approach the plant by boat or car, more or less in the immediate vicinity, and discuss basically, issues of the layout of roads, et cetera, so could you comment in general on two things?

One, whether the expressions of concern by the intervenor have any merit? Secondly, whether you think Cameco in its "Visions 2010" are looking at the issue of security in their re-design of the facility?

Perhaps, Madam Chair, Cameco may wish to answer that question first and then go to staff, but I want to make sure that the issue of security is not -- the concerns of security are essentially respected in terms of the detail that we need go into in a public session.

MR. STEANE: Bob Steane for the record.

I would like to assure the Commission that indeed security concerns are recognized, both in our day-to-day operation and in our future plans.

The road that Mr. Morand was referring to; we have had some discussions with the Municipality of Port Hope which is redirecting the road around the south end of the property. It's part of the Vision 2010 proposal and part of the concepts and there are some ongoing

discussions with the municipality as to how that can -- may be achieved.

Also, with the Vision 2010 project, we certainly are looking at and addressing, in consultation with the CNSC security staff.

MR. HOWDEN: Barclay Howden speaking.

In broad terms from a security and robustness standpoint, there has been work in this area.

I am going to ask John O'Dacre, our Acting Director of Security, Nuclear Security Division, to comment in a general fashion because I don't think he can provide certain details.

MR. O'DACRE: For the record, John O'Dacre, Acting Director of the Nuclear Security Division of the Canadian Nuclear Safety Commission.

At the present time, we do regular inspections of the Cameco Port Hope facility. Any findings that we have are addressed immediately by the licensee.

In Cameco's Vision 2010 project, there have been additional security considerations taken into account that in some cases go beyond what the regulatory and legal requirements are in place right now.

MEMBER BARNES: There was, I think, a presentation on it by Cameco, on Visions 2010 on Day One.

I think you shared some of those plans. Was it at that Hearing?

MR. STEANE: Bob Steane for the record.

Was the question, could we share this ---

MEMBER BARNES: No, no. The question was, as I recall, you did show some images in your PowerPoint of what you conceived of as some of the developments for the site in the Visions 2010 plan on Day One? Correct?

MR. STEANE: Bob Steane for the record.

Yes, there was in the Day One presentation some pictures of two models before and after the Vision 2010 and a very high-level view of the Vision 2010 program.

MEMBER BARNES: I had direction that the image being given was one of taking down buildings, of opening it up and making a much more attractive site, et cetera, as opposed to one that was potentially much more secure.

So, are both of those objectives being developed in your Vision 2010?

MR. STEANE: Bob Steane for the record.

Those don't need to be mutually exclusive objectives. You can achieve additional security with additional open space.

MEMBER BARNES: Public access though is an

issue.

MR. STEANE: Bob Steane for the record.

As I mentioned, one of the aspects of that is re-diversion of the road and actually in the Vision 2010 plan there is less public access than there is today.

MEMBER BARNES: Would that changing of the road system meet some of the difficulties that have been expressed in terms of evacuating the site or getting fire response teams in in a better way?

MR. STEANE: Bob Steane for the record.

We have been looking at that. The road itself, the re-direction of the road and moving it farther away from the facility, of and by itself doesn't add an access point, so it doesn't change the single point of entry at Hayward Street. But that is also something that we have been discussing; is there a possibility to do something like that?

THE CHAIRPERSON: Excuse me, I haven't -- I'm asking a question. Thank you.

I have a question for staff. The word "robustness" was used and used in context I think as another factor that is looked at with security.

Could you explain the concept of robustness and if there had been any review of the robustness of the facility here under consideration?

MR. HOWDEN: Barclay Howden speaking.

Yes, the term "robustness" is to refer to basically the engineered and defence and depth strength of a particular facility to withstand, let's say, an external intruder or an attack. This -- then you combine with your security program which is basically to prevent them to all extents. There has been an assessment done for Canadian nuclear facilities and the Cameco Port Hope facility was included in this assessment.

THE CHAIRPERSON: Thank you.

First of all, are there any other questions?

Mr. Morand, you have a point?

MR. MORAND: In response to that?

This is from our Deputy Police Chief in response to my request to Council and a report to Council about security on the site and off the site.

As you know, the municipality has complete responsibility for security outside the fence, at our cost. The Deputy Chief said: (As Read)

> "The one area of security I would like to focus this portion of the report on is the erection of guardhouse and gate system on what is currently municipally owned property at the

corner of Marsh and Choate Street. This would provide a security buffer at the facility which is currently lacking. The guardhouse and gate system would prohibit unauthorized entry into Eldorado Place. It would secure the front entrance which provides ingress to the current guardhouse and administrative areas".

MR. MORAND: Currently -- and the reason he raised this issue -- currently, you can drive right up to the entire security facility of the corporation where are windows, you will see them on your walk-around, and anybody has complete access to all of the security system in terms of whatever they want to do to it.

What he is recommending here is to actually block that street and not permit access into there. It's a recommendation made in 2005 and it still hasn't been acted on.

THE CHAIRPERSON: What I would suggest, Mr. Morand, is that the security staff of Cameco and the security staff of the CNSC review that report and have discussions with the police chief -- the police chief here which I'm sure they do anyway, and review that. We'll leave that with the Commission. If there are issues, the

Commission staff will let the Commission know.

MR. MORAND: That was unanimously approved by Council and Cameco was requested to do it, unanimously.

THE CHAIRPERSON: I think what will possibly be an issue is Cameco is also regulated by the CNSC and has to do whatever is known to be essential by the experts in nuclear facilities and security as well. So we'll -- I think it's important that your issue get handled and I think we -- the Commission can request that of Cameco and ask the staff to take that on for that.

I do have concerns though about security matters being discussed in a public forum and I appreciate that municipal politicians have responsibilities. I really do appreciate that, but I also have real concerns about that. So I think that just as the Commission has certain needs to know, I think that in this request that we make to Cameco and to staff, that they will respect the restrictions on security information which the CNSC Commission has placed upon them, but I will ask them to do that.

Thank you, sir.

We will now take a 10-minute break and we'll be back.

--- Upon recessing at 3:34 p.m.

--- Upon resuming at 3:51 p.m.

THE CHAIRPERSON: Ladies and gentlemen, could you take your seats, please? We are ready to start.

MR. LEBLANC: We will now move to the next submission which is an oral presentation from Ms. Deborah Panko, as outlined in CMD 06-H18.14.

Ms. Panko, the floor is yours.

06-H18.14
Oral presentation by
Deborah Panko

MS. PANKO: Thank you.

I just have to get used to the mic for a minute. Okay.

Thank you for listening. My name is Deborah Panko. Three years ago, my husband and I moved from Toronto to Cobourg, 10 kilometres downwind from Port Hope’s Cameco, and three streets over from Cameco’s Zircatec.

Making decisions for me is more than just examining the facts in a linear logical thought process. We learn to think through our memories, emotions and instincts and we ignore these human qualities at the expense of our health.

While house hunting, we were shocked to

find out how much hazardous low-level radioactive waste existed throughout Port Hope. I wondered how many other people like us would refuse to live here because of it.

Last year, Cameco was pushing to process slightly enriched uranium despite the fact that the contaminated waste from over 70 years of neglect by the industry had still not been cleaned up. If it has taken 70 years to attend to this matter, isn’t it reasonable to feel mistreated and suspicious of an industry that pushed a new project or product without having resolved the existing problems.

A train derailed east of Cobourg in March ’05. A massive toxic fire at a plastic factory next door to Zircatec in Cobourg last April pumped this black river of God-knows-what over our house for hours. It was unnerving.

Was there contaminated material at Zircatec that the flames could reach? Isn't it reasonable then and rational for the average citizen to feel vulnerable especially in Port Hope where a nuclear facility is located in a harbour front with no buffer zone, bound by a lake, a river, a highway and a railway?

I have been told that one subatomic particle that is the by-product of processing uranium, a man-made technology, one spontaneous radioactive emission

of a single neutron can slice DNA.

I want to know how many neutrons are emitted in Cameco stacks each day.

Even if the filters are 99.9 per cent efficient, can you tell me how many neutrons there are that would escape daily in the 0.1 per cent contaminated emissions or through the building walls themselves?

Can you tell me why you would allow continued toxic emissions from Cameco stacks when zero emissions is an objective that has not yet been achieved? Why allow continued emissions when the relocation of the low-level radioactive waste over the next decade could also further contaminate the town?

On a quantum level, we know that particles' electrons can be in two places at one time. Neutrons have been found 60 feet outside of their concrete containers in Port Hope.

Recently, two Princeton mathematicians claim they have proven that subatomic particles possess free will. That is what a particle does is not determined ahead of time.

Can you tell me where these fugitive neutrons go? How can you accurately predict what is unpredictable?

When I attended an information meeting

given by Cameco and quietly said to one of the attendants that nuclear energy was dangerous, he walked away in a huff. Burying lethal nuclear waste up north or burying the shameful waste left in Port Hope may put the matter out of sight, but it doesn't solve the gap between us.

Can you explain to me why I should not feel the way I do? Can you tell me why nuclear energy is advertised as clean? If one neutron can slice DNA, what is so clean about it? Is it cleaner than coal because we can't see radioactivity with the naked eye? Are we confusing clean with convenient?

Given that half the uranium used in rods holding uranium pellets comes from decommissioned Soviet weapons, there is something psychologically dirty about it.

Does the CNSC condone such marketing that to me is a form of brainwashing? And if I can’t ask you for an opinion, then who can I ask?

In a society ruled by convenience, we have become adept at wasting energy. It keeps the economy growing but puts us at war with our own public safety.

Can you tell me why we prefer to extend Cameco’s presence in the heart of two small vulnerable lovely lakeside communities where there is the potential for harm in every aspect of its production, from

processing to transportation and delivery, rather than confront why we are so wasteful or confront why we feel entitled to every imaginable want being satisfied? Don't you feel shame?

In Toronto's Union Station at the GO Train waiting area from monitors suspended from the ceiling, I saw a simple message moving across the screen, "Ontario needs nuclear energy". The sponsors were not identified. I was horrified.

If this statement is true, why then is the industry working so hard to market itself? Regarding nuclear energy as a necessity is in the words of Milton, "the creed of slaves".

The government says it has set scientifically reliable standards for safe radiation exposure to this man-made technology, but medical experts can't even agree on recommendations for alcohol consumption, let alone radioactivity.

Standards are evolving. Dr. John Gofman, co-discoverer of uranium 233 and the world's first workable quantity of plutonium, concluded that the risk of cancer death increases as the radiation dose decreases. He calls it "supra-linearity".

"We don't know what mechanism causes it but radiation effect is steepest at the lowest levels", he

writes. I want to know if low-level radioactivity is more harmful in the long-run than a strong dose from a criticality.

Strongest effects at lowest levels are seen in homeopathic remedies, an internationally respected complementary medicine available even in Loblaws.

Homeopathy uses diluted substances from the plant, mineral, animal or chemical kingdom to stimulate the body's own defences. The more a substance is diluted, the stronger its effect, even though it is improbable that any molecules of the original substance remain.

Homeopathy then appears to work on an energy level beyond the realm of so-called scientific proof.

I want to know to what extent you are prepared to acknowledge that a person could be adversely affected by radiation on an energy level that we don't yet understand. Are you willing to acknowledge that science cannot accurately predict acceptable and allowable levels of radiation in the human body over long periods of time?

Isn't there an ideal window of opportunity at this time to study the effects of long-term low-level radioactivity in those who have resided in Port Hope for many years?

Wouldn't it be a great service to mankind,

in general, to undertake such a study, given the uniqueness of the Port Hope situation?

Can you tell me why the citizens of Port Hope have to finance their own comprehensive independent studies ---

THE CHAIRPERSON: You have one minute, Ma'am.

MS. PANKO: -- studies -- just a second, I lost my place, hang on.

Regarding radiation exposure, much like those who thought the tobacco industry -- can you tell me why the CNSC is not demanding such studies? If there is a shadow of a doubt about the ---

THE CHAIRPERSON: Sorry, ma'am, that is not a substitute. There are translators who are trying to do their job down there. So please, sum up.

MS. PANKO: Can I just -- I have just that much more, is that okay?

THE CHAIRPERSON: Please is one minute to sum up, ma'am. That was clearly put out in front of you.

MS. PANKO: Okay.

Shouldn't the re-licensing of Cameco Zircatec be done after such studies?

I want to know what plans for expansion Cameco Zircatec has for both Port Hope and Cobourg over

the next five years.

I want to know if we will continue to have a say in the direction that nuclear energy is going.

I want to know if -- let me see, the defining feature of a cancer cell is that it becomes uncontrollable. It escapes the body's mechanisms that regulate growth and reproduction. Do we understand why cancer rates are rising at such an alarming rate?

Is what's happening on a psychological level to the human body simply a part of the pattern of a society that promotes uncontrolled economic growth at any cost and don't you agree that your decision-making process regarding the re-licensing of Cameco Zircatec touches every aspect of what it means to be human?

Rather than renewing Cameco's licence, have you considered suspending nuclear activity in this area until after the clean up of the low-level radiation?

Let me see. I'm sure the monetary goodwill of Cameco will be extended in perpetuity to the capital feeder and other organizations? I'm also hoping that the federal government will take the moral responsibility to help Port Hope get on its feet as it changes its industrial allegiances.

And I would just like to say that we're all in this together and if we refuse to allow memory,

emotion, and instinct to inform our decision-making processes, our species will not survive.

With Dalton McGuinty embracing the nuclear industry ---

THE CHAIRPERSON: Thank you very much, Ms. Panko.

I just wanted to make a couple of points because I am the best person to make those points.

First of all, you talk about the mandate of the Canadian Nuclear Safety Commission, and that is clearly outlined in the *Nuclear Safety and Control Act.* It is absolutely given to us. It's a modern mandate. It's not very old, so it's not aged or out of touch.

And it's really very clear and as I mentioned at the beginning, it's not to talk about policy. What I didn't specify, and thank you for the opportunity to help me clarify this, is that we are not involved in all the nuclear policy.

If the Government of Ontario or the Government of Canada decides globally that that's part of their energy mix, then that's the decisions of the government to do that and we don't get involved in all in those policy choices.

Our role is if there is a decision to have a nuclear facility and it's completely legal in this

country and is considered an option, then our job is to make sure those facilities are safe. That's our job. That's our sole job.

In fact, in countries where they've tried to mix things up together, it actually works out to the detriment of health and safety. So as a modern country, I think Canada has decided that we just have a specific job.

So when you ask about who is responsible for the policy, it is really the government in this country who decides that they have, as you point out, decided that nuclear energy is part of that mix.

And as you quite rightly point out, that does involve a cycle, a nuclear cycle some place in the world in order to supply uranium and products of various parts to do that; so just to clarify.

Thank you for asking the question so I could clarify that further.

Questions from my colleagues; Dr. Barnes?

MEMBER BARNES: Madam Chair, Ms. Panko mentions towards the end of her presentation issues of health studies and elevated cancer rates and this has been touched on by some other intervenors and I think intervenors to come.

Would it be appropriate at this stage if we asked staff just to briefly summarize what health studies

have taken place in this community?

THE CHAIRPERSON: Yes, and I believe that there is a doctor here as well from the Radiation Protection Bureau of Health Canada who can help us to clarify this, Rachel Lane.

So I believe that's Ms. Lane coming but it's Mr. Howden's choice as to how he does that.

So perhaps, Dr. Barnes, you could word a question to the staff?

MEMBER BARNES: Well I just repeat, this intervenor and others had referred to health studies but we haven't really discussed that in this meeting so far and it might be beneficial since I think it's going to be touched on by other intervenors.

If Commission staff could summarize the type of health studies that have been done in the past and briefly some of the outcomes or recommendations that have flown from them?

I don't think it needs to be a long history because there have been quite a number and some of these have had their own difficulties, but perhaps to bring it up to the present day.

MR. HOWDEN: Barclay Howden speaking.

I would like to say, Dr. Barnes, that we take this in two parts. The first part I'd like to ask

Dr. Tracy from Health Canada to talk about the work that he has done in terms of exposures to people and then ask Ms. Lane to speak to the specific health studies afterwards, if we could do it? Thank you.

So I'll ask Dr. Bliss Tracy to respond.

DR. TRACY: Yes, for the record, I am Bliss Tracy, with Health Canada.

I guess my part of the question is just to describe the studies that we have done in Port Hope in the past.

I should mention that at the Radiation Protection Bureau of Health Canada, we do air monitoring for radioactivity. We've been doing this since 1958 at about 28 sites across Canada. Port Hope is not one of our regular sites but we did come here to do two special studies in 1981-1982 and again in '88-'89.

Just summarizing that briefly, we did find that our results basically corroborated the ongoing measurements of Cameco where we had co-located samplers.

We did document quite a significant decrease from the early 80's to the late 80's. So I think a pretty good idea of what the air concentrations are like. We're generally out in the community seeing levels of uranium and air down around sort of the .001 to .005 micrograms per cubic metre as you get out into the town.

Now, when we work out the doses from this it's only a fraction of millisiervert per year. So any reasonable hypothesis that we can come up with to assess what the health risks would be at these levels, it comes out to be something really immeasurable; that it's not going to -- we cannot see that it would have any impact on cancer rates or on any other known condition that might be linked to radiation.

But maybe I should pass the next part of the question over to Rachel Lane to talk about the health studies that were done here.

MS. LANE: Rachel Lane for the record.

There have been several epidemiological studies done in Port Hope over the last several years.

May I -- I'll sort of categorize them. First of all, the mortality disease surveillance, there was a mortality atlas in 1984 done by Health Canada, another mortality surveillance study done that was called "The Great Lakes Study" and it was done in 1998, and that also was done by Health Canada. Then in 2002 the CNSC, with the assistance of Health Canada, conducted the Cancer and General Mortality Report. These three studies were disease surveillance studies looking at cancer and general mortality in the area.

The general conclusion from the Cancer and

General Mortality Report that we published was that there was no overall excess of cancer in the community, however, there was an excess of cardiovascular disease.

The second type of study that has been conducted has looked at cancer incidents, and this is also disease surveillance. And the Cancer Instance Report in Port Hope was published in 2000 and overall there was no overall excess of cancer incidents in Port Hope.

Now, this Cancer Incident Study was a follow-up for 25 years looking at the residents in Port Hope and the Cancer and General Mortality Study looked at mortality in Port Hope for 41 years.

The next type of study is called a Case Control Study and this was conducted by Lees et al in 1987, and he looked at lung cancer cases in the community to see whether these people with lung cancer had higher rates of radon exposure, and in fact they did not. So this type of study is trying to determine whether radon in these peoples' homes was causing their lung cancer, and in this case the study could not show that.

Finally, there have been two cohort studies in Port Hope that have looked at Port Hope workers. The first study was conducted in -- well, it was published in 1994 by Dr. Naire, I believe, and Dr. Howe, and it's the original Eldorado Study. This looked at Port Hope workers

who worked for Eldorado Port Hope between 1930 and 1980, and these men were followed up between 1950 and 1980 looking at their causes of death.

The Port Hope workers did not have an excess of lung cancer or any other cause of death in that original study.

Most recently we have just completed the update of the Eldorado study and it includes approximately 3,000 Port Hope workers who worked for the Eldorado Port Hope from the 1930's right up to 1981. We collected detailed information on their individual ionizing radiation exposures up to 1999. So that's present.

These men were followed up for 30 years looking at the cancer incidents and 50 years of their individual cancer mortality. The findings were just finalized and overall Port Hope workers had fewer cancers than the general Canadian male population and they had a similar number of overall deaths. No cancer cases were different from what would be expected in a general male population after 30 years of follow-up.

Of all the possible causes of death, only hypertensive disease was elevated in this group of men. When we did the study we looked to see whether hypertensive disease was related to their radiation exposure and it was not.

We have done a further examination of hypertension in these men by going back over their death records. When we look at these death records we realize that there have been errors made in the coding of hypertensive disease over the years that would actually change the statistics of the study.

Dr. Zablotska, who is working on the study right now will have a report out in the fairly near future to let us know whether there was actually any excess of hypertensive disease in this group of 3,000 workers.

Now, just as a note, I think it is relevant for you to know that workers have the highest -- are likely to have the highest rates of radiation exposure in Port Hope and after 30 years of cancer incidents follow-up and 50 years mortality follow-up, these workers did not indicate any -- they had no indication of excess cancer, and the only thing that appears to be a little bit unusual is hypertensive disease and we are following up on that now.

Thank you.

THE CHAIRPERSON: Dr. Barnes.

MEMBER BARNES: I've been to Port Hope I think maybe two or three times in meetings like this and reading through the documents again for this licence activity, it's quite clear that health issues are a

concern to the members of the public. And I think that's the clearest expression and summary I have heard of the number of studies, in part because several have been brought to the fore in recent years, in part by the expressed concerns of members of the public here in Port Hope asking for such studies.

And I would just urge that that summary, not necessarily the one that you gave verbally today, but a written prepared summary of that, including perhaps the one that's ongoing at the moment, be provided on our website so that it's there in a fairly easy accessible record and can be linked to other things like City Hall or Cameco or whatever. I think it's very important, perhaps even for our purposes here, critical information, and from what I can see it's really quite remarkable information.

THE CHAIRPERSON: Thank you.

Dr. Dosman.

MEMBER DOSMAN: Thank you, Madam Chair.

I'd like to ask Ms. Lane if the studies presumably included all of the most common types of cancer, and presumably those types of cancer which could conceivably be linked to radiation. Would you be able to confirm that supposition for me, please?

MS. LANE: Rachel Lane for the record.

Yes, they did.

THE CHAIRPERSON: I think just to follow on Dr. Barnes' view, there will be -- we've read through the interventions, both oral and written, and there is a number of intervenors who do raise health studies.

So it would be the intention of the Commission to have the testimony of Ms. Lane and Dr. Tracy stand for those other inquiries, and that I would give the Commission members the ability to reference this part of the testimony, if they wish to, in answering specifics at a later date so that we aren't repeating that particular testimony by those two witnesses later in the proceedings.

Are there further questions on that topic? Are there any further questions that result from the testimony of this intervenor?

Thank you very much, Ma'am.

MR. LEBLANC: We will move to the next submission which is an oral presentation from Ms. Paula Evans-Gould as outlined in CMD 06-H18.15.

The floor is yours, Ma'am.

06-H18.15
Oral Presentation by
Ms. Paula Evans-Gould

MS. EVANS-GOULD: Good day, Madam Chairman,

Commission Members and all concerned citizens.

I'm nervous but I'm much more nervous about not coming and being here and speaking to you so that's far more important so please bear with me.

For the record my name is Paula Evans-Gould.

I live at 34 Smith Street in Port Hope. I am the buffer zone. I can see Cameco from my front porch; it's right to the south of me. I can, with my walker, walk down to Cameco to their -- where the security is, where the plant is, I can walk right alongside it and I am not one that has a very large mobility, but it's that close to me.

I believe a buffer zone is supposed to be within 1,500 metres of most facilities. As you know, we have none.

There's been much discussion and debate about the minisieverts and the radiation pollution and these things concern me greatly but I have another issue that affects me more immediately and it's a more immediate concern and that's noise.

Cameco has a series of loudspeakers around this facility that constantly are blasting out messages down the street and in my neighbourhood. While sitting in my dining room having a conversation with my roommate,

just last summer, we were interrupted by overpowering sound of a speaker. It was someone being called to the telephone and it was that clear; so and so to the telephone.

My windows might have been open but I do believe that that's invasion of privacy and I believe that's noise above.

I did phone the Mayor. The Mayor in return led me to -- gave Mr. Prendergast's number. I had spoke to Mr. Prendergast, he gave me the number to security, he told me any other time it happened for me to phone there.

It was very inconvenient, it was a very large interruption of my life and I made several phone calls of all times and hours of the day. At one point I was told that the noise level was at its lowest. I bought my home on Smith Street seven years, it has been the loudest ever for me.

It was pointed out also to me that it was a very hot summer and they had their doors open due to the air conditioning system inside was not satisfactory for the employees. And so I suggested they improve their system because I'm being exposed to excessive noise pollution. When they violate your home and you're sitting inside your home it's past the point, I believe.

There's also sirens running at all hours of

the night, you have the beep, beep beeping of the trucks backing up, it's not contained. As the years have gone on it is any time now, you're waken up out of sleep, it doesn't matter, early in the morning, late in the evening.

When I hear these sounds I'm not quite sure what's going on because on Monday's they have a test run, and I'm used to that in the morning, but just yesterday as an example, a couple of hours later there was more sirens going and there was more trucks going and lots of hustle and bustle going on over there.

Well, I didn't get a phone call. I don't know if I'm supposed to evacuate. I didn't know if there was something going on. I don't know if the Fire Department was -- the Municipal Fire Department was made aware. This is not the first time this has happened. I often look in the papers to see if I can find something out about it and many times, I would say 9 times out of 10 I never find anything in the paper about why I heard the fire trucks and all the commotion.

I go out on my porch and look and see all the commotion that's going on. So, I never find any answers to this but I do find it very disturbing and it's quite scary. You don't know if you need to evacuate and I've never been told how to evacuate. Indeed, what am I supposed to do if there is an acid plume heading my way

form the UF_6 plant, which is 200 metres to the south?

I cannot begin to tell you how unpleasant it is to be awakened up by these back-up trucks and this heavy truck engine noises. They are entering and leaving the facilities at all times. There's more and more transport trucks, diesel fumes, forklifts. I don't find Cameco a good neighbour.

Like all of us the plant is aging and like all of us on occasions things don't work the way we like them to work. Over the last three years some of the 2,900 grams of fluoride were released in the air within 100 metres of my home and two additional accidental releases of fluorides occurred. I am told, and you would know, that a triple redundant system was involved in one of the accidents and one of your staff was injured.

I have another concern, what if there's a fire? I couldn't run. If there's a fire at Cameco my house is gone, it's as simple as that.

I have an even greater concern and upon my purchasing my home, after all the dealings were done and the papers were signed and dealed I was handed a piece of paper where the real estate agent said to me, you can check and there's a 1-800 number and you can find out the radiation content of your soil, and if the levels are high they'll come in and replace the topsoil, as a matter of

fact, the soil was replaced in the ‘80s.

I had no idea what she was talking about, it was signed and sealed, I had them come. The man came with the meter, he went around my house, it was tick, tick, ticking away, he said it was acceptable.

He went back to the back corner where it really went crazy. I was told if there was any digging to be done in that back corner of my house I was to phone that agency and the Town Hall and he wanted to come out and do some further reading.

What is acceptable? For me, zero is acceptable.

One of the few pleasures that I enjoy is gardening. I was told don’t dig any holes unless they come and they measure again, my yard.

I have grandchildren. I have children. I have to tell my grandchildren, “No, you can’t help Nana in the garden” because I’m worried about their health.

This is not acceptable to me. If I can’t dig in the ground then how can my grandchildren and would you let yours?

Since I’ve lived in the home I’ve had a number of infections, they’ve been lung infections and viruses. My roommate, she has had pneumonia three times in five years. Neither one of us have had any such health

issues prior to living in Port Hope.

I should say, I lived 11 years in Newtonville which is not too far away from here.

THE CHAIRPERSON: Ma'am, you have one minute left.

MS. EVANS-GOULD: Okay.

Well, I'll just end that with, I believe Port Hope -- I moved here because it's a wonderful, beautiful place, full of character and beauty. I believe that we should have a waterfront that is the same. I believe that, this being my home, that the people, all of us here in Port Hope, we should not have to be worried about our health, our children, our grandchildren's health.

Such simple things as digging in the soil, such things as hearing alarms and beeps and things going off, which you don't understand, which are not addressed, and I have to say was very little help. I just gave up with the phone calling.

And I do hope that you will really dig deep. I'm hoping to recommend that you would limit your -- I can't find my words now -- limit your -- they're applying for. There it is. That application that they're applying for, if you would limit it to two years instead of five years.

I would hope that you would do much further studies, more on the lung and the heart, which is the problems that I'm finding in my home, and in the soil and this "acceptable levels". Who sets the guideline? Acceptable to who?

I thank you very much for coming here and I thank you very much for giving me this opportunity.

THE CHAIRPERSON: Thank you very much for coming.

Are there questions?

Dr. Dosman.

MEMBER DOSMAN: Thank you, Madam Chair.

I would like to ask Cameco if they have any comment on the issue of noise.

MR. VETOR: Kirk Vetor for the record.

Cameco applied for and received a basic comprehensive approval from the Ministry of Environment in 2003. One of the requirements of that certificate of approval was that we conduct a thorough noise assessment of the facility and ensure that we're in compliance with the provincial standards.

At the conclusion of that original assessment we hired an independent third party to conduct this assessment. The site was in compliance with two exceptions. The first exception being the large fork

trucks we used to move cylinders around during the evening hours. The provincial noise regulations are broken into different time periods throughout the day. So we have since restricted the traffic of those large fork trucks at the north end of the facility to satisfy that requirement and to come into compliance.

The second issue had to do with air louvers, air discharge from the northwest corner of the UF_6 plant and we brought in a consultant, a noise impediment consultant who installed noise dampening equipment in there. We subsequently tested for the noise levels and found that we were in compliance and the Ministry of Environment has accepted those findings.

With respect to the truck traffic, aside from the tailors, we restrict the tailors at night, and the truck traffic is just normal regular routine traffic throughout the day. The tailors are the large fork trucks that we use to move the UF_6 cylinders around the yard.

THE CHAIRPERSON: I just wanted to mention that I'm not absolutely sure this is the jurisdiction of the CNSC, so I just -- but please continue, Dr. Dosman, if you wish.

MEMBER DOSMAN: I was just going to ask if the company was aware of the concerns of the neighbours.

MR. VETOR: Yes, Cameco receives and

records all community concerns and we follow-up with them as promptly as we can, so we are aware of the neighbours concerns with this respect.

MEMBER DOSMAN: Thank you.

THE CHAIRPERSON: Dr. McDill.

MEMBER McDILL: Thank you.

Just so the intervenors questions are answered, I wonder if Cameco could respond to her question as to movement of heavy equipment off the second and third floor, and perhaps staff could answer the question acceptable to whom.

Go first, please.

MR. STEANE: Bob Steane for the record.

Actually this movement of heavy equipment off the floor was raised in a letter from another member of the public, almost the same comment. But I believe what they were seeing was we were replacing a piece of equipment so we took from the third or fourth floor of the UF_6 plant a calciner. It's a large horizontal cylindrical shell that's used in the process. We removed that. It's lowered down to the ground with cranes. But then we replaced that in exactly the same place with the new piece of equipment onto that floor.

So there has not been any relocation of equipment from one floor down to another floor for

stability reasons or, in fact, for any other reasons.

MEMBER McDILL: Thank you.

When you do things like this as a facility do you put it up on your website that you're going to be doing, you know, some noisy stuff and it's going to be temporary, you're going to be moving some heavy stuff, just so the community is aware of what's happening?

MR. STEANE: Bob Steane for the record.

If we are conducting things that -- or doing things that are going to be causing noise or, as the intervenor mentioned yesterday, we were, with our new fire alarm systems that we're installing in the UF_6 plant, they were being tested yesterday. We did notify through using the CAN system. Perhaps she wasn't home at the time, but we did notify people and try to take out ads in the paper and let people know that that's going on.

As far as moving -- lifting equipment in and out of buildings and so on, it's not an unusual day-to-day occurrence. It's usually done during daylight hours and with cranes, so we haven't been publicizing our maintenance practices in terms of when we're moving some equipment in or out for maintenance.

MEMBER BARNES: I guess my other -- yes, to staff, please.

MR. RABSKI: Henry Rabski for the record.

You asked if we had a comment about maintenance practices. We would expect that these were routine maintenance activities and were needed to be undertaken for the continued safe operation of the facility.

However, we also expect that a company should be cognizant of their neighbours and where possible take appropriate measures to plan these types of activities should they not be threatening the safety of the facility. They should be cognizant of good neighbourly relationships since they're in this community.

MEMBER McDILL: Thanks.

My other question to staff would be to address the intervenors concern about her soil being -- her quote is "acceptable to whom"?

MR. RABSKI: The question is acceptability of the soil?

THE CHAIRPERSON: I believe it's to do with standards. When we talk about the issues that are to do with radiation protection or environment or -- I think it was a broad question, if I'm correct.

MS. EVANS-GOULD: Yes. When the gentleman was on my property and it was beeping and I said "What's that?" and he goes "Oh, it's radiation" and I go "Oh, my goodness" and he goes "Oh, it's okay. It's acceptable"

and as he went on, and in the far corner, as I say, when it really went much louder he just said “Don’t dig.” Well I’m not supposed to dig at all, “Don’t grow vegetables”, anything at all so ---

THE CHAIRPERSON: I think what you’re facing is a historical ---

MS. EVANS-GOULD: Where is this ---

THE CHAIRPERSON: I think there is an issue here to do with historic waste that is in Port Hope.

My understanding, and I can be corrected by staff, is that there is a low-level waste office. Is it still located here in -- and that would be the appropriate place to ask about the waste, which is historic waste.

That’s different then the present facility, and they should be able to give you some information about -- sit down and talk to you about the various kinds of levels of radiation and how to interpret the data that comes from your soils, because I think that is important for you to know. But that isn’t the responsibility of this licensee per se.

Am I correct, staff, in that interpretation? If I’m not please tell me so.

MR. HOWDEN: Barclay Howden speaking.

Yes, you are.

THE CHAIRPERSON: So further questions?

Yes, Dr. Barnes.

MEMBER BARNES: Well, I think one sentence in the intervenors was certainly directed to issues of our concern and that was in the second paragraph when she said: (As Read)

> "Sirens ringing at all hours and we wonder if it's an emergency that is being handled internally or will we be hearing emergency vehicles next and then we will be forced to evacuate."

So, given the issue of other kinds of events that may or may not even remotely take place at the Cameco facility, I think it is important that members of the community living near the plant understand what -- if sirens are to be used, what kinds of sirens are being used in real emergencies as opposed to just moving vehicles around.

So, I guess one kind of question is, do you have special types of sirens for real significant emergencies such as fires or major things where you expect emergency vehicles to come in and out of the facility as opposed to other sirens that might just be for internal purposes? If that is the case, are those sirens at a sufficient level that they are not in fact a significant annoyance to the local public or nearby home-dwellers?

MR. KENNEDY: For the record, Tim Kennedy.

Yes, Dr. Barnes, we have a number of sirens on the site that are designated for emergency response and other activations of systems in the plants.

The ones that the intervenor would hear at her house would be our fire P.A. system which, with the completion of the new system, will be a common sound across the site and it's described as a loud siren sound.

Our emergency response vehicles, of which we have three of, respond to all fire alarms with their sirens on and that is on the initial stage of the fire alarm and that is a very conservative response position for us to respond in that manner.

As per our pre-incident plans, we put out fire only if the fire is above incipient level. After our rapid-attack team has investigated the fire we escalate to calling 9-1-1 before we would call our own people and then they would respond with sirens or within their own protocols to the site.

So, they will hear sirens on activation of our fire alarms and on activation of our emergency response team. Those are the main ones I would say.

On the truck traffic, we do get some around-the-clock deliveries of nitrogen, but they are usually on the backside of the plant and those large

vehicles have back-up alarms that are required for safety when they back into position. They can come any time of the day.

But the other bulk shipments we have, both our product and the receipt of other chemicals, are roughly between 7 o'clock in the morning and 19:00 hours at night and then that complies with shutting down our large lift trucks at the 19:00 hours that is required by our Certificate of Compliance with the MOE.

THE CHAIRPERSON: Are there any other questions?

Ma'am, I just wanted to clarify one thing in your comments about needing to have testimony done in an atmosphere that allows for oaths; that people are required swear an oath.

I just thank you again for the opportunity to clarify the -- because the Canadian Nuclear Safety Commission is a court of record, in fact people are required to tell the truth in front of us. There are transcripts of all the proceedings of the Commission Hearings and people are allowed to examine those and people do have to tell the truth in front of us or bear the consequences thereof.

We haven't had to use the subpoena power of the Commission. We can subpoena people if we need to, but

we generally find that when we request people to come, they come, and I think that bears well for the people who need to appear before us.

You should rest assured that the proceedings here are very serious and that it is considered that we are a court of record. So, thank you for letting me clarify that.

Thank you, Ma'am.

MR. LEBLANC: The next submission CMD, 06-H18.16, is a submission from Mr. Gary Donais. Mr. Donais is unable to attend so his submission will be considered as a written submission at the end of the Hearing with the other written submissions.

MR. LEBLANC: The following submission, which is CMD 06-H18.17 which is a submission from Mr. John Belle, will also be considered as a written submission.

MR. LEBLANC: The following submission, which CMD 06-H18.18, which is a submission from Ms. Juliet Fullerton will be presented tomorrow evening, as Ms. Fullerton had so requested some time ago; if this is possible tomorrow evening.

So, we will move to the next submission, which is an oral presentation from Mr. John E. Rainbird as outlined in CMD 06-H18.19 and H18.19A.

Mr. Rainbird, the floor is yours, sir.

06-H18.19 / 19A
Oral submission by
Mr. John E. Rainbird

MR. RAINBIRD: Thank you, ladies and gentlemen.

For the record, my name is John Rainbird and I have serious concerns with Cameco's licensing issue and the continuing operation at its present site, Port Hope. I would appreciate that if there are questions after my presentation relative to individual names or detailed personal specifics, that I am allowed to answer in camera.

As a former Eldorado Cameco employee, with over a decade in the electro-heating refrigeration maintenance department and a member of the Steelworkers' Union, I am familiar with the Cameco health safety statements that many appear to be so proud of. It also appears very impressive in the printed version. The United Steelworkers' website also states in its propaganda that, and I quote: (As Read)

> "Steelworker members are entitled to a harassment-free environment."

In reality, Cameco management has harassed,

intimidated and interfered in medical issues plus financial issues of the ill and injured, and I have to feel these actions apparently are also acceptable to the U.S.W. I say this from experience. Not quite what they would have us believe, is it? Definitely not what I paid union dues for.

I also recently witnessed an attack on a Port Hope councillor that I feel can only be described as an attempt to intimidate. Indifference toward, and the sweeping under the table of such issues by regulatory staff do not appear to be what the mandate of the CNSC dictates in the protection of workers, the public and the environment.

With such damaging disregard to the health and livelihood of an employee and family, I definitely continue to question the integrity of Cameco's health safety commitment to the Port Hope residents and tourists that are often in very close proximity to the existing facilities and its numerous incidents.

That, and the questionable attempt to silence me, after saying I was going to the media in reference to a particular issue and also with the apparent indifference by various entities towards the continued harassment, including a statement of having a bullet applied to my head if I pushed the issues, adds greatly to

my concerns for the health, safety and livelihood of others.

I personally am not in the least impressed with the financial help that Cameco has bestowed upon various local projects, as it appears to be only publicity driven.

I have my suspicions, but still question why Cameco even in a small way will not financially help the Port Hope Health Community Health Concerns group in their help to have studies done.

My perception is that there is a real fear within the industry in having comprehensive and truthful health issues known. I feel the same applies in reference to the resistance shown towards having panel reviews of their proposed activities.

With all due respect, and I say due respect, I suggest that when an employee has reason to believe their health has been affected by the industry, and when the potential is there to have the individual's concerns arbitrarily dismissed, be locked out of a facility and forgotten, that no one, and I repeat no one, including the panel of experts assembled at the latest Cameco information session can truthfully say that a comprehensive health study of employees has been accomplished.

By extension, the interests of public health issues in general has not been honestly served.

I request that Cameco be issued an intensely scrutinized two-year operating licence as recommended in the Jacques Whitford Report and not the five-year that Cameco has requested.

I believe with the proposed activity that will be taking place such as the decommissioning and cleaning up of various sites within a five-year timeframe, it would be more intelligent to grant a shorter licence period, in part because of possible unforeseen developments and the questionable non-compliant issues.

I feel that the AECB/CNSC staff have a proven track record of continuing to licence questionable and non-compliant facilities with impunity and I believe the integrity of this issue also should seriously be challenged by yourselves.

Thank you.

THE CHAIRPERSON: Thank you very much, sir.

Are there any questions for Mr. Rainbird?

Yes, Dr. Barnes?

MEMBER BARNES: Have you in the past provided written specific information to CNSC to support the -- I will call them “charges” or assertions that you're making here? I mean you're generally not being

specific and I recognize that you may feel in your last written -- that you would like perhaps or you could report in camera, but because these are perhaps very specific and some may go back some years, it may not be appropriate within this licence activity.

But have you and at what time and how many times have you provided this sort of documentation to the staff?

MR. RAINBIRD: Yes. I was in touch with staff early ‘90s, ’92, ’93, somewhere around there, and basically all I got back from that was sarcasm. It took seven months to get a reply that with one phone call to me could have been straightened out in 10 minutes, not seven months. And as I say, it was nothing but bafflegab and sarcasm, indifference. This went on for a while. It wasn't just one letter and one reply.

And again, as I say, the farther I got into it, then the harassment and the threats took over. So I've had to put it on the back burner. I wouldn't even come into town for quite a few years.

MEMBER BARNES: Are you saying that harassment comes from CNSC or from the company?

MR. RAINBIRD: Because of what I was trying to -- what was going on with me, yes.

MEMBER BARNES: And is the CNSC staff aware

of this situation?

MR. HOWDEN: Barclay Howden speaking.

We have some general knowledge of the investigation that occurred in the early 1990s, but we don’t have information on allegations of harassment.

THE CHAIRPERSON: Yes. I think because this is a personal issue for you, sir, what I would suggest is that you put your comments in a letter addressed to me, that are marked “Personal” because that means that they aren’t -- they aren’t looked at more broadly. And if there are any issues that involve either the former AECB or CNSC, that's my responsibility to look at.

If it's issues to do with your relationship with Cameco precisely, of course that is a Cameco issue, but I think we expect that the citizens around nuclear facilities particularly have access the CNSC if they have allegations that they want to make about companies and issues.

So thank you very much, sir.

Are there any ---

MR. RAINBIRD: Thank you.

THE CHAIRPERSON: --- further questions?

Thank you very much.

MR. LEBLANC: We will move to the next

submission which is an oral presentation from Ms. Sarah Clayton, as outlined in CMD 06-H18.20.

Ms. Clayton, the floor is yours.

06-H18.20
Oral presentation by
Ms. Sarah Clayton

MS. CLAYTON: Thank you, President Keen, and CNSC and thank you for coming to Port Hope. That's very important and appreciated.

I am not a member of F.A.R.E. or a nuclear worker. I'm a resident and observer of the debate that's been occurring. I've been an economist by trade since leaving university and I've gained experience both leading and analyzing economic and financial studies on facility and proposals including energy projects. Most of this work was completed while employed at the Ministry of Energy in British Columbia.

I also bring a unique perspective to you today for another reason. I grew up in Port Hope with a nuclear activist mother while my late father was a nuclear engineer at the former Eldorado Nuclear and then at Darlington. He actually worked on the design team to build the components of the newest part of the Cameco

facility.

I've been around the debate my entire life in my community and in my home. Evenings at our house were never boring. My parents were able to respect each other's differing views and often even discovered common ground. It is my hope that Port Hope can achieve the same and it is my view that this can be achieved through increased information and more local opportunities for constructive discussion and debate.

So while I'm here as a supporter of the current re-licensing, I ask that the CNSC or Cameco, on its own accord, assist our community in moving forward by ensuring additional information from the company. Specifically, I think the community needs to see the results of a comprehensive socioeconomic cost benefit analysis.

Cameco could utilize the report for its Vision 2010 environmental assessment so it wouldn't be extra work; only expedited for the benefit of Port Hope. The analysis needs to go beyond current studies to follow best practices for socioeconomic cost benefit analysis.

Secondly, I would also ask that the CNSC ensure the timing of the next re-licensing hearing or at least a mid-term review following closer to the time of the initiation of Vision 2010 and the LLRW cleanup between

2008 and ’10.

The Port Hope Area Initiative and the Cameco Vision 2010 will require such investment and remediation that Port Hope could become a major centre of expertise for this industry. Cameco’s success in meeting the regulatory requirements of this current hearing need to be known, analyzed and announced prior to work on Vision 2010 and the long-awaited low-level radioactive waste cleanup.

This is because from an economic development viewpoint these projects are related and represent an opportunity, an important potential turning point in Port Hope’s history with the nuclear industry.

The CNSC Regulatory Policy P-242 entitled “Considering Cost-benefit Information” pertains to your decision making in relation to licences. Your policy notes that compliance with CNSC decisions entail social and economic costs borne by licensees and others.

Therefore, as a matter of policy, you will consider as one of many factors all relevant information on costs or benefits submitted by persons participating in the process. The CNSC has heard as part of the licensing that Cameco’s operation represents a significant economic impact in Port Hope.

I think this information is key to the

significant level of support in our community for continued operation at its current location on our waterfront. I think everyone agrees that an industrial site located on the waterfront between residential areas and the downtown core is not ideal by today's standards. However, it is an historical fact.

Much of the recent debate is focussed on this location and the lack of an adequate buffer. F.A.R.E. members are not even the first to discuss the possibility of relocation. A few years ago, a former long-time mayor of Port Hope also made the case for relocation to Cameco lands at Wesleyville once the current facility was fully depreciated.

I have heard that Cameco's Vision 2010 makes up for the lack of a buffer zone through facility design setbacks and technology. I leave this technical analysis to you and I will trust you to ensure any deemed risk from proximity to urban area will be addressed through requirements for increased investment and compensating risk mitigation measures.

Wouldn't it be great though to have the best of both worlds? Imagine a Port Hope free of industrial and radioactive contamination, the harbour area free of industry and revitalized, and a new Cameco facility located on industrial lands within the

municipality with a buffer between it and residential and commercial areas.

We've been told that facility relocation within Port Hope is cost prohibitive, although Port Hope residents have no reason to doubt or alternatively to buy into this argument, since the analysis has not been shared with the community. We need to put this question to rest so that we can move forward.

The community needs Cameco to walk through an economic analysis of the social and an economic costs and benefits of their alternatives for reinvestment in Port Hope.

A benefit cost analysis guide developed by the Treasury Board of Canada calls for several steps to be included in the analysis. Development and disclosure of key assumptions, definition of the base case under analysis; in this case, it would be modified to the Vision 2010.

The definition of any reasonable alternatives to the base case allowing for fair comparison, adjustments for the occurrence of costs and benefits at different times, calculation of incremental or net benefits for each alternative, including opportunity costs, the economic analysis of total impacts to Port Hope is a starting point that can allow you to get to the net

benefits but more work needs to be done.

A risk analysis providing probabilities, potential impacts and risk waiting and assessment. The analysis of request would involve a framework and organized methodology for analysis of net social and economic benefits, trade offs and risk factors. It's a hybrid of several techniques from the management, financial and social science fields.

Some might wonder why someone who supports Cameco and a future for nuclear in Port Hope would request such an analysis be done. The request might even be viewed by some as hostile, but I don't see it this way.

Sir Francis Aiken, author of the *Advancment of Learning* in 1605 pointed out that if;

> "One begins with certainties, he shall end in doubt, but if one will be content to begin with doubts, he shall end in certainties."

I have a passion for my municipality and see immense opportunities unfolding before us. After struggling over many years to shake a negative image of industrial and radioactive contamination in Port Hope, we face a new beginning. I think we need to do things differently. Instead of secrets, I see a need for transparency and openness.

The world already believes Port Hope is contaminated. In British Columbia, Alberta and Newfoundland, I've been asked about it. In the GTA, where I currently work, I am asked about it. Aren't you afraid to live there? Recently, Mayor Austin was invited to Europe to speak about the Port Hope initiative, perhaps proof that Port Hope might possibly be viewed as a place where nuclear can be done right.

It is understandable why many are dubious about embracing nuclear again. We have had a troubled past with our own federal government as operator. But are we in a transition period? The federal government promises to clean up and accept its liabilities.

We have a new regulator with greater powers to ensure health safety and security. We have a new operator, Cameco Corporation that has made great operational and safety improvements and is showing its willingness to engage the community and address concerns. And we have an organized community group in F.A.R.E. that promises to keep everyone on their toes.

Questions, answers, debate, analysis; I say let the information flow. Don't leave a rock unturned, but let's all focus on resolving what is best for Port Hope within the next couple of years. By maximizing information flow up front, we can conquer fears and make

the best decisions. If the current Cameco location is an economic decision, show us the economic analysis.

THE CHAIRPERSON: You have one minute more.

MS. CLAYTON: Let's get this done before the excitement begins. By the end of this decade, we should be shouting a different tune and letting the world know we're clean and moving forward.

As an observer, I see recent improvements but the debate still rages in circles. It's not often constructive, and is often without adequate back-up information or a forum. A debate needs to move from personal and emotional to factual. Where is the common ground? Will someone bring in the sides, the players together and see if there is any? If sides are drawn and each side seeks only to win, outnumber the other and prevail, it seems to me we all lose. We will all lose because good points on both sides will not be respected, investigated and resolved.

I congratulate Cameco for its recent improvements in the implementation of community forums to engage the public. I congratulate our municipal council which has done well with its peer review team led by Mark Stevenson. I would also like to thank F.A.R.E. for asking good questions. Let's answer them all and get on with it, with confidence. A constructive debate is necessary in

Port Hope and the time is now. Thank you.

THE CHAIRPERSON: Thank you.

Would Cameco like to comment on this intervenor's discussion about cost benefits and economic development?

MR. STEANE: Bob Steane, for the record.

I think, Madam Chair, that whole matter will likely come out through the EA process for Vision 2010, and I think that would be something that we would be looking at and bringing forward in that whole process. So it may be a little premature today to engage in that discussion.

THE CHAIRPERSON: Are there questions? Dr. Barnes.

MEMBER BARNES: Well I think it may go a little broader than that, and particularly because I imagine when we meet to look at Zircatec, I think we see similar suggestions of the location of these two properties relative to the immediacy of the town itself.

I mean this is an historical issue and the fact is brought up time and time again. Waterfront locations have an increasing value, and I think it's certainly fair to ask the question given the public concern that we are seeing repeatedly through here, which are driven essentially by the proximity and the lack of a

buffer zone. Repeatedly through these documents and on every licensing, it comes up.

I think it’s a fair question to ask, maybe a little bit more specific, has Cameco looked at the social economic benefits of moving its location? And I don’t mind if you add Zircatec, in that you own it, to a different location, presumably nearby. Has that been done over the last five years and is it seriously planned to look at that over the next five years?

That’s a different question, I think, than we might consider in the EA process for Vision 2010. I’m asking is Cameco really taking this seriously, even in a theoretical basis to do the necessary studies to see if it would be worthwhile for the company, or companies in the case of Zircatec, to respond to a lot of concerns that we’re hearing in these sorts of hearings?

MR. ROGERS: Terry Rogers, for the record.

Dr. Barnes, we understand the situation here at Port Hope where our facility sits on the waterfront. I know that’s certainly some real estate that others are interested in. Cameco is committed to the facilities here in Port Hope, both Zircatec and at the conversion facility.

At the present time we have considered the options. We haven’t, to this point, done detailed study

of a new site. We believe that our presence in Port Hope can be conducted, and has been conducted safely, and environmentally acceptable. I think the evaluations that have been done on our performance would support that, and I think that the recommendations of the staff now is that our performance has been acceptable, and that we would continue.

I would not rule out that possibility that we would investigate that. Whether it's here, you know, some place close to Port Hope, or elsewhere, would be part of that socio economic evaluation.

THE CHAIRPERSON: Are there any -- I'm sorry. I don't want to start this back and forth debate, but let the intervenor make a comment, if it is relevant, further to her quite long intervention. Do you have a specific comment?

MS. CLAYTON: My only comment would be that if the assets are currently depreciated, and there is going to be a significant investment, now's the time for the company, as a company, to make the decision, based on net economic benefits. And I would see the current location a set back to allow for a buffer. Wesleyville has three different options that allowed the benefit to still come to Port Hope.

THE CHAIRPERSON: Thank you very much.

We'll move on.

MR. LEBLANC: We'll move to the next submission, which is an oral presentation from Mr. George Clements, as outlined in CMD 06-H18.21. Mr. Clements, the floor is yours.

06-H18.21
Oral Presentation by
Mr. Clements

MR. CLEMENTS: Good afternoon. My name is George Clements. I live at 13 King Street in Port Hope, right in the buffer zone. I'm retired but was for over forty years a marketing research specialist.

I am pro nuclear. I am in favour of Cameco staying in the Port Hope municipality, but I am against its downtown location. I am also against the carte blanche extension of the Cameco licence for another five years. This is what Cameco has asked for, and this what the CNSC staff supports because it believes that Cameco meets the industry focus issues that their approval is based on.

My intervention is not industry based, but community based. It is my contention that not enough attention has been paid to local residents' concerns over

the years by either Cameco or CNSC staff and as a result, both organizations have become lax in applying regulatory standards to Port Hope's nuclear facility even though its immediate adjacency to a substantial population is unique in the world and demands special care and attention by Cameco and CNSC staff.

As just illustrated, you are all very well aware of the problems with the site but they are worth repeating once more for the record.

It's right downtown in an historic tourist dependent community right on the shoreline of Lake Ontario, in a position difficult to defend from terrorist, on a flat plain adjacent to Canada's major rail link and without a buffer zone.

The location of the existing Cameco plant relates to a previous time when very few understood the potential dangers of radiation exposure.

Knowledge and therefore attitudes have changed so much in recent years that as far as I can determine, the Cameco site is the only nuclear conversion facility in the western world that is not surrounded by an uninhabited buffer zone, and there quite simply lies the problem.

As I understand it, because the CNSC's mandate is limited to minimizing risk at that particular

site and it is not allowed to recommend alternative sites, the possibility exists that a site which is totally unacceptable given current standards of citizen protection may in fact be grandfathered in perpetuity.

Cameco must either move to a buffer-zoned location within the municipality or fix the problem that comes with operating downtown without a buffer zone. And the CNSC must insist on it even if it means changing its mandate.

I would like to make two points today. One, significant public concern exists in Port Hope about the location of Cameco's downtown nuclear facility. In fact, 63 per cent, nearly two thirds of Port Hope households will prefer that it be moved to the Wesleyville site owned by Cameco, a location within the municipality, thus ensuring job protection but with considerably less potential damaging consequences.

Point two, approximately the same percentage, 66 per cent are concerned with the environmental impact of Cameco's conversion facility. Sixty (60) per cent are concerned with health in the community, 59 per cent about the safety of the community. And these high numbers are despite the fact that 82 per cent of Port Hope residents believe that Cameco does everything possible to ensure public safety.

Let me repeat that. Eight in 10 Port Hopers believe Cameco is doing everything possible, but six in 10 are still concerned about their health and safety. Everything possible is clearly not enough for most Port Hopers.

Similarly, six in 10 do not strongly agree that the regulatory processes adequately ensure the safety and security of Port Hope residents. In other words, they question whether they trust the CNSC.

The first number relating to Wesleyville is from a random study among Port Hope households that I organized in preparation for the SEU hearings a years ago, and you have a copy of it. The other numbers are from the latest Port Hope Opinion Poll conducted by Cameco in June of this year. There is a consistency in all the numbers, as you will recognize.

Why are these high over-arching concerns? Incidentally, the phrase is not mine; it was used by a Cameco consultant. It comes down to two basic issues: emissions and the lack of health studies.

First, health studies. One, cancer is known to develop slowly over time, yet never in the history of the nuclear industry in Port Hope has there been a program of measurement to determine the uptake, retention and fate of inhaled uranium by Port Hope

residents over time. I ask you why?

As we were told earlier, there were a number of statistical health studies conducted in Port Hope by Health Canada from ’76 to ‘01 and I found the explanations somewhat reassuring.

But at the recent health forum hosted by Cameco, I asked the panel of experts how adequate these studies were in reassessing Port Hopers that they had nothing to fear from radiation exposure. Of the eight panellists, six did not answer.

But Dr. Tracy, and I’m pleased he’s here today, from Health Canada said, and I quote:

> “They were very adequate as far as they went, but what kinds of studies would be best for Port Hope? It’s best to have knowledge of actual exposures.”

The implication is that there is more that can be done. Yet, as far as I know, there are no plans to do such studies. Why?

At the same forum, Dr. Hallowathy, senior Consultant to Cancer Care Ontario, and again I quote:

> “In this day and age, I think we can do considerably better. We have better tools now that we can fit to

our community. Bottom line, I think that we can do better and I really believe that."

I ask you, why doesn't Cameco or the CNSC initiate such studies and put the issue for rest once and for all now the experts tell us the tools are here?

Three, Cameco, which has recently spent upwards of a million dollars in community relations, has not, to my knowledge, spent one penny on studies to measure the effects of local residents' exposure to uranium. I ask you why?

If they are so sure that their location and practices are safe, why not spend the money to prove it?

Four, even worse, the CNSC with some 600 staff whose mandate, as I understand it, is the health and safety of Canadians, doesn't have a health department nor relevant experts on staff to call on.

It says it is not in the health studies business. I ask you why not?

The implication to me is that while the CNSC regulates the nuclear industry, it is not interested in the health of the people affected by the industry it regulates. No wonder two thirds of the population of Port Hope are concerned about their health and safety and 60 per cent don't totally trust the CNSC.

Turning to emissions, Cameco has publicly stated that it is committed to reducing emissions, but it raises more questions than answers.

As we have heard, uranium measures have just recently been limited to smoke stack emissions, but within the past few weeks, Cameco has published secondary emissions from general leakage. It caused them future defamations, a nice sounding word to cover the fact that uranium is blowing out of their doorways ---

THE CHAIRPERSON: One minute, sir. One minute.

MR. CLEMENTS: --- window vents and everywhere else.

I have several points on the emission but since they've been covered, I'll skip to the conclusion.

In conclusion, Cameco is asking for a five-year extension of their licence, during which time they will be totally rebuilding their waterfront facility and moving from using regular uranium to enriched uranium. They have made no definite commitment to specified reduction levels in emissions, nor to timelines, nor to increased measurements of neutron radiation beyond the fenced line; nor have they committed to health studies in Port Hope.

At best, investigate a move to Weselyville

or some other safe location within the municipality before the rebuilding of the downtown site starts. At worst, grant no more than a two-year licence extension with strict regulations on emission controls and the requirement to initiate health studies. Due date should be set and rigorously enforced

Finally, I think the CNSC should add a community component as a condition of re-licensing, a Committee made up of the CNSC, Cameco and representatives from watchdog community groups, which meets monthly and reports quarterly on Cameco's process. Only then will Port Hope residents feel more at ease.

Thank you.

THE CHAIRPERSON: Thank you very much, sir.

Mr. Harvey, do you have a question?

MEMBER HARVEY: On page 3 of Mr. Clements submission, the second and third paragraph right above the page, can read, but in Port Hope the radiation limits are six times higher than in Pickering.

I would ask the staff, is that the case?

My second question would be, does the immediate environment have something to do when you establish the regulation limits for a facility?

MR. HOWDEN: Barclay Howden speaking.

In terms of radiation limits, I look at

that as dose limits and the dose limits are from the Radiation Protection Regulations under 1 milliSievert for all nuclear facilities, to the public.

THE CHAIRPERSON: So all nuclear facilities have the same requirements. Is that correct?

MR. O'BRIEN: The dose to public limit that has been put on this facility is .3 milliSievert. The regulation that specifies a limit of 1 milliSievert per year to the members of the public, it comes out of our regulation. For this particular facility, for the past several licences we're regulating to a lower standard of .3 milliSievert to members of the public.

THE CHAIRPERSON: And to complete that, what is actually the measured levels here at this facility? For Cameco and then to be confirmed by the staff.

MR. VETOR: Currently our dose to the -- Kirk Vetor for the record.

Currently the dose to the maximally exposed member of the public and known as the critical receptor, the annual dose was 0.03 milliSieverts per year.

THE CHAIRPERSON: Can staff confirm that?

MR. O'BRIEN: Marty O'Brien for the record.

Are we talking about the current licence period or today, the rates being -- because as I

mentioned, our CMD 06-H.18, we gave the public dose over the licensing period and the highest value was .069 milliSieverts per year, effective dose rate to the critical receptor.

MR. HOWDEN: Cameco might want to clarify their number they quoted.

THE CHAIRPERSON: Thank you.

Sir, you talked about health studies and the Commission has gone to some length in Day One which is noted in the transcripts and today as well, to have both Ms. Lane and Dr. Tracy comment on the health studies.

Does this information provide any clarity to you in terms of the health studies or does your comments about your confidence in the health study still stand?

MR. CLEMENTS: It reassures me somewhat, but as far as I can make out there have been no actual studies on exposure. Dr. Tracy and Dr. Holowaty in the forum said that there was work that could be done and my interpretation of that is that it should be done.

Existing studies are helpful but they don’t solve the concerns totally.

THE CHAIRPERSON: Thank you.

I’d like to ask the CNSC staff to comment.

I’d also like them to comment on the issue

of other health studies. The Commission regularly visits facilities around the country; this is a practice that the Commission does quite often. We were in another facility just a couple of weeks ago, a number of us, Mr. Harvey and I were among them, and there was studies done in that area which was around the Bécancour Trois-Rivieres area and that was done by the Province of Quebec. So I think we're still in an area where there's very clearly -- there's a responsibility, provincially for health studies. Not saying that there should or should not be health studies here, that's not my goal but I think there has been a number of studies already completed that involved the CNSC, it's predecessor and Health Canada.

Ms. Ward, would you like to comment on the intervenors comments about new techniques to do health studies?

Ms. Ward, would you like to comment?

Sorry, Ms. Lane, I'm losing it; getting too tired. Sorry, Rachel Lane.

Thank you.

MS. LANE: Rachel Lane for the record.

First of all I think Dr. Holowaty will have to respond to the various techniques that he is referring to. I cannot speak on behalf of Dr. Holowaty.

With respect to exposures, there have been

several studies that have looked at various exposures in the Port Hope community and I believe Dr. Tracy discussed two of them today.

Also, the OME, Ontario Ministry of the Environment has conducted two studies that I'm aware of; one in 1991 and one in 1997, that I have in front of me here; that have looked at various metals within the community and they are not of sufficient magnitude to expect any adverse health effects.

With respect to monitoring, health monitoring, we have about 3,000 employees at Port Hope, from 1930 onward who had individual monitoring of their radiation exposures and these men -- all of that information goes into a national database called the National Dose Registry.

I believe there is various -- it's not just doses -- I believe that there's monitoring of urine and blood on site but I think Cameco would be better to talk to that than I am.

Anyway, all of these exposures were taken on these men and the outcome of that is what we found in the Eldorado study, 50 years of mortality and 30 years of cancer incidents.

So, their exposures were linked to their mortality and their cancer incidents and we were able to

look at the cause or relationship between those exposures and those outcomes and what we found was that there was no relationship between -- well, the Eldorado study looked at miners, uranium miners. The only link with lung cancer was radon, okay.

For all other causes of death radon was not associated with any other causes of death or any other cancer sites.

We also looked at gamma exposure. Gamma exposure was not linked to any cause of death or any cancer sites.

So we did have the detailed information on occupational exposures and detailed information on outcome and when we linked the two together and we did not see a relationship.

THE CHAIRPERSON: Thank you.

You're talking about exposure of workers and your comment earlier was that workers are the ones that are, of course, closest to the sources of radiation and therefore would be most exposed rather than members of the public.

A question for the intervenor: You said that the senior consultant, Cancer Care Ontario, said we could do better. Is Cancer Care Ontario intending to do studies here or did he suggest that that would be a

recommendation from him to his organization?

MR. CLEMENTS: No, he didn't. But there was an article in the *Globe* in October that said the Cancer Society of Ontario was going to look into the relationship of smokestack emissions and cancer.

Again, I feel that the -- my question is how adequate are all the existing studies in reassuring the 60 per cent of Port Hope who are scared that they have nothing to fear? And I don't feel reassured that doctors here today are saying you can spread the word; they have nothing to fear. I would like to hear the doctors tell me that and I will go home a happy man.

THE CHAIRPERSON: I think, sir, and I say this because we work in an area where there clearly -- I am a scientist. I would say to you that scientists don't say that there is no risk at anything that we do. There is always -- for that declarative sense of what is possible to say, that is not possible. Your doctor wouldn't say that. Your pharmacist wouldn't say that and I think most scientists believe that, so I will not ask the epidemiologists or the doctor to say that because I think health is one of the areas where all scientists feel that there is more work to do just like the environment, just like many other things.

There's always more work to do to provide

more knowledge. I think that's a fair assessment and I say that as a scientist.

Are there any ---

MR. CLEMENT: I understand what you're saying but as a ---

THE CHAIRPERSON: Well, I think that the epidemiologists did give you a sense of the correlations which is to do with that, but I will now move on.

Are there any questions?

Yes, Dr. Barnes.

MEMBER BARNES: Two comments.

I'd like to ask Cameco, over the lifetime of the proposed licence the next five years, do you anticipate requesting any increase of annual production limits to the CNSC?

MR. STEANE: For the record, Bob Steane.

No.

MEMBER BARNES: And the secondary question, and I touched on this earlier, but I'd like to ask staff.

We look at many licences in trying to address issues like ALARA and to see if a company is trying to reduce, in this case emissions; that's the one being addressed by this intervenor as part of the intervention. One looks not only at the past record but also the next licence period and, I think, despite

voluminous materials that we have gone through, I think it's hard to find a graph or histogram or whatever what actually looks forward over the next five years in anticipated, say, emissions or whatever of an environmental nature.

So in the preparation of these documents, aren't you in a sense -- to staff -- do you have an expectation or have an opportunity to give guidance to the licensee that what we expect is some prediction of their efficiency or effectiveness at meeting your expectations in lowering emissions, particularly in a situation like this that is causing considerable public concern about their emissions and so forth; to have a licence looking forward for five years and not have any targets even for which -- when we -- if a licence is given five years from now, to look back at their practice. How can we judge that, in a sense, if they're given no expectation of the benchmarks or targets?

MR. HOWDEN: Barclay Howden speaking.

I'll ask Chris Taylor, Director of Geosciences and Environmental Compliance Division to comment.

MR. TAYLOR: Yes, it's Chris Taylor.

We require Cameco to have in place an Environmental Management System which -- in accordance

with our standards and guides that are largely based on the ISO 14001 standards.

An Environmental Management System properly executed requires that the licensee establish objectives and targets for various environmental aspects of their operations and it's based on a structure of policies and programs and procedures that enable the licensee to continually re-examine its environmental performance in a context of a system that is based on a QA/QC principles for continuous improvement.

We have conducted a detailed audit of their EMS in 2006, and we believe that Cameco has the structure of policies, programs and procedures to pursue those continuous improvement objectives in their environmental performance.

THE CHAIRPERSON: Thank you very much, sir, for your thought-provoking submission.

MR. LEBLANC: We will now move to the next submission which is an oral presentation from Mr. Louis Levtov, as outlined in CMD 06-H18.22.

Mr. Levtov, the floor is yours.

06-H18.22

Oral presentation by

Louis Levtov

MR. LEVTOV: Good evening, Madam Chair, Commissioners and staff.

My name is Louis Levtov. Thank you for coming to Port Hope to hear me.

I'm a retiree. I was for many years a project manager of a large land development company; hence, not too versed in nuclear sciences. I'm also a concerned citizen of Port Hope.

During the past few years, I've been given information and assurances of safety by experts employed by Cameco and CNSC. I've also read many letters to the editor, press releases and editorials in the local newspapers by columnists and reporters; some of the above claiming to be experts in all matters relating to nuclear physics or chemistry. I'm here to ask a few questions and maybe learn something.

I'm sure most of the consultant's decision-making employees of the applicant and staff at the various government regulatory agencies are truly well meaning and honourable. But they may obliged to work with regulations set by ill-advised or lax lawmakers; also, with the complacent state-of-the-art technology that is or may be imminently outdated.

All through history we have been told by

someone who is selling a product how wonderful it is or safe it is; how beneficial it is. In some cases, the manufacturer might not or could not have known the horrific ramifications of misguided or incorrectly-calculated assumptions. My point is that these manufacturers and their purveyors didn't know then and some don't know now, just like some of us and me.

I've been told we need a full panel review. I've been told it wasn't necessary. All I know, there are more experts out there versed in all the new disciplines and maybe with experience, more experience than any one company could possibly amass. A full panel review with some of these independent experts would dispel my concerns, especially given that there is no buffer zone in our town. My questions:

1: Why has CNSC been asked to renew the licensing of the present Cameco conversion facility for a five-year period despite Cameco's proposing major changes on their site within that period?

2: Initially, Cameco proposed additional shielding to deal with the SEU production. The finished product will now be imported into the facilities. What shielding is proposed now?

3(a): If any changes are contemplated for the present site in order to facilitate the condition of

licensing approval, what provisions have been made regarding construction, noise, traffic load noise, escape of additional hazardous emissions, fire safety and evacuation procedures?

3(b): If no changes are contemplated for the present site in order to facilitate a condition of licensing approval, what provisions have been made regarding escape of additional hazardous emissions, fire safety and evacuation procedures?

4: What physical monitoring or measuring devices, as opposed to possibly floored modelling methods will be installed in locations to give true radioactive readings rather than, say, particulate readings?

And I'm adding an extra question, if I may.

No. 5: Should it not be a condition of licensing renewal that at least some modern and fully functional radioactive emission monitoring devices be installed outside the plant and in locations accessible to independent authorities?

And No. 6: What timetable would be proposed for downloading results and for maintenance of these measuring devices?

And finally, No. 7, possibly a rhetorical question: What conditions would be applied by CNSC to a nuclear facility seeking a long term extension of all its

licence if during the term of this renewal new construction and demolition work could compromise its operations?

I would ask that relevant points be considered applicable to Zircatec.

In the past, I have been inundated with phrases such as “not likely to cause”, “there will be no long term significant adverse effects”, “no residual adverse effects were predicted”, “immeasurable but not significant environmental effect” and my favourite, “below regulatory limits”, et cetera. This terminology does not inspire confidence.

Previously, CNSC staff felt that many of the questions asked were outside the scope of the hearings. Well, who else is going to give us the answers? Considering that many questions are unanswered or unanswerable, maybe a full panel review might know these answers and take the trouble to find out.

CNSC were also concerned about the justification of the additional costs and duplication of efforts in the reports CMD 05-H30. I am too. Even though the extra costs are not specified, I assume they are maybe measurable and may even be significant, but are these factors within the scope of the CNSC?

Thank you.

THE CHAIRPERSON: Thank you, sir, for your intervention.

Are there questions? Dr. Barnes.

MEMBER BARNES: Madam Chair, I'm not sure if it's appropriate to ask this at this stage.

But I just want to get a better handle on the period of licence that you're requesting here which is here in fall of 2006 a five-year licence. So it would come up for renewal again in the fall of 2011 if it was approved.

And you have given us some information, again, on Day One and for Vision 2010 which elsewhere in this document refers to it starting in 2009 and earlier on sustained in your presentation, you talked about an EA process would be triggered through this process, a number of buildings being taken down, et cetera.

I think it's fair to say, and correct me if I'm wrong, that at least the Commission has not received much in the way of documentation about what Vision 2010 means from a technical viewpoint and how potentially it might affect the licence that we're granting today; the conditions of the licence.

So presumably, as I would see Vision 2010, is that there are going to be substantial changes over a period of years. I am guessing, let's say, between

somewhere like 2009 and over that three to five-year period. But in considering the length of this licence and the steps that the Commission will need to take for any kind of EA process which might impact the tail end of this licence, could you just -- if it's appropriate at this stage, Madam Chair, to ask?

Could you give us some more specific dates; again, benchmark just in brief how you would see major Cameco steps taking place over -- if it starts at 2009, 2010, 2011, when certain -- when you expect certain phases of Vision 2010 to occur. I am asking this only in the context of the duration of the licence which is one of the things that we have to look at in this hearing.

THE CHAIRPERSON: Dr. Barnes, if I could add to that, that I think the staff should reiterate why they have also recommended this licence term in light of the guidelines that they use for licence length.

So starting with Cameco, please.

MR. STEANE: Bob Steane for the record.

Where we are with Vision 2010 we have filed our project proposal. We have done some work and we have got a more detailed project proposal. We have filed that project proposal with CNSC to start the regulatory process.

We have been advised that a comprehensive

environmental assessment study would need to be done. We are awaiting the CNSC producing the guidelines for conducting such a study.

From when we look over the timelines, typically, we see the timelines of that environmental assessment process of being typically two to three years, depending upon how the study unfolds. So that takes us to 2009-2010 and then we would have to go through a licensing process.

So we would see probably it's going to be toward -- if everything moves along, it will be towards the end of this licensing period. At that time, we would be seeing what the impacts were, looking for a change to the licences or getting a construction licence and seeing how it unfolds, and then we'll hopefully be starting the construction activities in that 2010 and moving through 2013.

MR. HOWDEN: Barclay Howden speaking.

In terms of the five-year licence period, in our CMD 06-H18 on page 30, we list our criteria and our position. We maintain that position.

With regard to Vision 2010, as Mr. Steane has said, an environmental assessment is required and they have submitted the project description. So as part of that process, the Commission will soon be becoming

involved with that particular process in terms of the track that that one will have to follow.

Now, in terms of this one it's basically remediation/decommissioning type focus, but it's ongoing. The operational side of the facilities are going to continue to operate and normally what we do is we align the licence periods with distinct stages of the facility construction operation shutdown and decommissioning. This isn't the exact case with this one where it's going to be ongoing operations with remediation.

What we have done with other licences and, actually, with Cameco in Rabbit Lake as an example, where they did continue production while they were reclaiming and remediating the site in other parts that were not being used anymore, so it's a similar-type thing.

One thing that the staff said on Day One was that we offered a mid-term report to the Commission if the Commission should issue a licence to this facility or renew the licence for a five-year period, and I would expect that Vision 2010 will be an important part of that because we always give a future outlook and at that point that should be better known.

Also, as I say, the Commission will be involved on the EA portion of Vision 2010.

THE CHAIRPERSON: Are there questions,

comments?

Thank you very much, sir.

MR. LEVTOV: Thank you.

MR. LEBLANC: We will move to the next submission which is an oral presentation from Mr. Rodney J. Anderson as outlined in CMD 06-H18.23.

Mr. Anderson, the floor is yours.

06-h18.23

Oral presentation by

Rodney J. Anderson

MR. ANDERSON: Thank you, Madam Chair.

My name is Rod Anderson and I'm the Canadian President of Environmentalists for Nuclear Energy, or EFN.

Now, globally, EFN is an international organization with over 8,000 members in 56 countries, but in Canada we're new, just incorporated this February. Our honourary Canadian Chair is Greenpeace founder, Patrick Moore, and an honourary member is the British scientist and environmentalist, James Lovelock, creator of the Gaia theory, that the earth should be viewed as a living thing.

But I'm making this submission not formally as EFN Canada, though I have had input from our directors,

but rather as an individual because I live just down the road in Cobourg. I went to school in Port Hope a half a century ago, just up the hill, and I have many friends and a relative living in Port Hope today.

I want to say at the outset that I honour citizens such as those involved with FARE who are seeking to ensure safety with respect to radioactive materials and radiation exposure. These are of paramount importance, as I know this Commission agrees.

But it’s also important that the actual risks involved are not exaggerated, as I believe they often are. Sometimes indeed listening to people talk, they better not take an airplane flight because they get much more radiation on that flight.

I have read the 250 pages of transcripts of the Day One proceedings for the Cameco and Zircatec applications, which I address both, and the main concerns that FARE has listed on its website. In my written submission, I address those detailed issues briefly, although much more could be said. But the main point I want to make, and my sole focus in these oral remarks is the following:

Our planet and civilization are in serious danger from the threat of abrupt climate change and the threat of oil exhaustion and the cure for these threats

necessarily involves a significantly increased use of clean nuclear energy around the world, a cure in which Canada, Canadian uranium and the CANDU reactor can play major roles.

We must, for the sake of our children and grandchildren, intelligently balance (a) the intolerable risks of doing nothing against (b) the manageable risks of handling nuclear materials.

I am not saying that safety standards should be lax; far from it. But on the other hand, I believe that zero emissions as a target is unreasonable.

And when applying the “as low as reasonably achievable”, the ALARA principle, it is necessary that the term “reasonably” be judged in context. These contextual issues are not well known. If they were, then my remarks would be irrelevant.

I know you said earlier you don’t deal with economic aspects, but these contextual issues are not economic but, rather, safety; indeed, survival.

First, let me refer to climate change. The vast majority of scientists accept global warming as a fact. I would refer also to the Stern Review in the U.K., headed by a former chief economist of the World Bank, which has just been issued and which underlines the urgency of immediate action.

We are presently experiencing the most rapid warming a planet has seen in 10,000 years. In November 2004 an eight-arctic nation report found global warming was causing the polar ice caps to melt at such an unprecedented rate that they could all be gone by century's end or even by 2070. But I am not worrying primarily about the gradualist Kyoto-style model of global warming that you're all tired of hearing about. I'm talking about abrupt climate change, an issue seriously underreported in the media and not addressed at all in the federal government's recent proposed legislation.

This is the risk that melting polar ice could sometime in the next half-century shutdown the Gulf Stream abruptly over a three-year period once started, and if that were to happen, Europe's agriculture could sustain only 10 per cent of its population. It would be the end of Western civilization as we know it.

The main evidence is outlined in the 2002 National Research Council report to Congress, "Abrupt Climate Change: Inevitable Surprises". The NRC Committee which authored the book was chaired by Dr. Richard Alley, who pointed out that the Gulf Stream shutdown would parallel an event that happened over a three-year timeframe 11,000 years ago. I have communicated with Dr. Alley several times by email and he supports our work in

trying to reduce greenhouse gas emissions through increased nuclear generation.

And it’s not just about keeping the lights on in Ontario under status quo conditions. We should be replacing the fossil fuels that go into transportation. We need to electrify our railways, invest more massively in electrified urban transit. We need to move to e-hybrid cards and perhaps eventually the hydrogen economy.

Where is the massive amount of electricity going to come from that can permit that to happen? The only answer is nuclear generation. We need to start planning, not just one or two but many, many nuclear generating stations and we need to start doing that now, and we’re going to need Cameco and Zircatec to do that. That’s my main concern personally.

I feel it’s as if we’re coasting along on the Lake Erie waters above Niagara Falls and some of us are shouting “Turn the boat around, turn the boat around! We’re going to go over the falls!” while others are saying, “Well, we’re not sure how safe it is to turn this particular boat around. Perhaps we should do a three-year environmental assessment first.”

As to the second danger, running out of oil, while there’s been a little talk of this, in the main we’re in denial because it’s never happened before. But

according to James Howard Kunstler's 2005 book, "The Long Emergency" we probably passed the world oil production peak last year. We've used up one trillion of the two trillion barrels of oil the earth once had, the current rate of world usage 27 millions barrels a year and allowing for the exploding consumption in China and India, we're likely to run out of oil around 2035.

THE CHAIRPERSON: Sir, I'm sorry. I'm just worried about time.

MR. ANDERSON: Yes.

THE CHAIRPERSON: And I know your presentation has some specifics on Cameco, so if you could use your last four minutes to highlight those, and we'll certainly read your whole written presentation as well, sir.

MR. ANDERSON: Right.

Well, as I -- as Kunstler argues that we are entering an era of titanic, international military strife and concludes this is a much darker time than 1938.

And what can be done about it? The main thing that could buy us a little time would be, Kunstler says, "To ramp up a project Apollo-style program of nuclear power plant construction."

And I refer briefly, and in my written comments I do, to Matthew Simmons' 2005 book "Twilight in

the Desert" which confirms the same sort of projections, "Piercing the Saudi veil of secrecy."

We're going to have to do a lot more CANDU reactors than those that AECL has successfully built in Qinshan near Shanghai, on budget and ahead of schedule. As one of our EFN Canada directors, David Scott, has written:

> "The ACR, the advanced CANDU reactor, is the highest in high technology. The benefits are extraordinary. It's economical and good for the environment. It will be a leading advanced technology designed and built in Canada which can really help save planet earth."

We've got to get on with this. It would be ironic to encounter both of the disasters I have pointed out, and that is to provoke a climate disaster by being unwilling to wean ourselves off oil and then we run out of it anyway.

In my written submission, I make reference to wind power, solar power, geothermal and conservation. We can and must do all of these things, but when you work out the numbers they simply won't be enough. Realistically, we still need a massively-available and

reliable energy source to replace carbon fuels and that's going to have to be nuclear and we're going to need Cameco and Zircatec to make that happen.

In my written submission, I also briefly address the 14 issues raised by FARE on its website, and I make a brief reference to the fallacies embedded in the linear, no threshold hypothesis and the collective dose principle which underlie most radiation protection assumptions, and a brief reference also to studies over the last decade or so on radiation Prometheus, the benefits of low dose radiation, like vaccinations in stimulating beneficial adaptive responses. I won't go into these in this oral presentation.

My overarching concern is context; that is, that when you're making safety decisions you have to do it within the context, but the importance to the community and, indeed, the worldwide community and future generations of increasing but always in a safe manner, clean nuclear generation in order to replace our dangerous reliance on greenhouse gas-emitting fossil fuels which we're running out of, in any case.

We need the contributions that Cameco and Zircatec can make, but we need them to do it safely.

Thank you.

THE CHAIRPERSON: Thank you, sir.

Are there any questions from Commission Members?

I'd like to thank you for coming.

MR. LEBLANC: We will do one last intervention today. The intervention that had been scheduled was from the Alderville First Nation, CMD 06-H18.24, who have indicated that they would like to start tomorrow morning.

But we have with us the next submission which is an oral presentation from Dr. Stan Blecher, as outlined in CMD 06-H18.25.

Sir, the floor is yours.

06-H18.25
Oral presentation by
Stan R. Blecher

DR. BLECHER: Thank you.

Madam Chair, Commissioners, ladies and gentlemen, my name is Stan Blecher. My intervention is concerned with the health effects and, specifically, the genetic effects of radiation on the community.

I am a medical doctor and a specialist in medical genetics. I am also a grandfather of young people living in Port Hope.

Cameco and Zircatec serve an important function in the country's energy production and their activities should be supported. But their placement on the waterfront of downtown Port Hope and in the heart of the town is bizarre. Their licences to operate in the town should not be renewed but instead should be temporarily extended under the following two conditions:

First, plans be immediately instituted for the relocation of both plants to a safe distance from the town, separated by a substantial barrier. This relocation should occur by a specific deadline, that deadline to be the shortest time possible if such a move can be physically achieved and the deadline to be decided in negotiations in which FARE and other interested parties are involved.

And second, all traces of radioactive materials and waste be removed from the town and its environment by that same deadline.

Radiation damages the genes and damaged genes cause diseases including cancer, birth defects and thousands of other deadly or disabling genetic disorders. Even minute amounts of radiation produce damage, called mutation, to genes. There is no quantity of radiation that is so small that it does not cause mutation. There is no safe dose of radiation.

The above facts have been known for nearly 100 years and have been very well studied scientifically. These facts should therefore guide all public decision making in matters concerning uranium plants such as Cameco and Zircatec that produce and emit genetically-harmful radiation.

Scientific research shows that a certain proportion of people exposed to the harmful effect will be hit. Thus, although tests are available that can identify genetic damage it is not always possible in a specific individual case to determine if any particular person has incurred such damage before it is too late. There are three main reasons for this.

First, which individuals will get hit before others is a matter of chance as in a lottery.

Second, a major and most sensitive target of radiation is the reproductive cells, especially of children and youth.

Third, most mutations are of the type called recessive, that only show up after several generations.

Because of these last two facts, the number of hits on individual Port Hope residents that may be occurring as we speak may not become apparent until the children now living in Port Hope grow up and have their

own children and grandchildren and the damaged genes would be passed on repeatedly in future generations.

Only carefully planned, systematic, medical genetic research on a large number of people will be able to accurately assess the issue. But such a study would be difficult. It would take many years and would ultimately underestimate the risk. Irrespective of the outcome of such a study, we know enough without further study to say with certainty that uranium plants in a town pose a genetic hazard.

Therefore, to press for more study before taking action as the tobacco industry has done for nearly 70 years, is irresponsible. The uranium plants should be moved.

When I emphasize that there is no safe dose of radiation, I sometimes get the response that the amounts people are being exposed to are at acceptable levels. This implies that there is an acceptable number of children affected by mutations. How many is acceptable; 10 deformed babies, five children with leukemia? As a medical geneticist, I believe the acceptable amount of genetic damage and genetic disease from exposure that otherwise could be avoided, is zero.

There is a basic level of radiation which all communities are exposed to, called the “basic

background radiation". Some of this comes from natural sources such as cosmic rays, soils and rocks, air and water, and some comes form human-made sources such as medical usage of radiation and nuclear fallout. The background level of radiation in Canada is probably about 1 to 2 milliSieverts per person per year.

There is also a naturally-occurring rate of mutation in humans caused by such things as this background radiation and chemical agents such as tobacco smoke and other pollutants. The basic mutation rate varies for different genes from about 1 in 10 to the sixth, to about one and 10 to the fourth of reproductive cells. If we take as a moot point 1 in 10 to the fifth, which would be a normal human mutation rate, this would translate to about 600 out of every 1,000 newborn babies acquiring new mutations.

We do not know what proportion of these naturally-occurring mutations is caused by the background radiation, but it is unquestionable that it is a substantial proportion and that additional avoidable radiation causes additional mutation at least at the same substantial rates.

Using the above-mentioned estimate for background dose, Cameco's own figures of what the company calls "the effective public dose rate" show that the

pollution from the company increased exposure of Port Hope's citizens from the above-mentioned already high background to between 5 and 10 per cent more in 2001 and to about 1 to 2 per cent more in 2005.

From this last figure we can learn two things; first, that by 2005 pollution had been lower but only to about the order of size of what nuclear fallout contributes to the background. Second, we can estimate the number of new mutations this exposure of the public to Cameco's radiation might cause.

I mentioned a moment ago that the background might produce about 600 mutations in every 1,000 babies. Now, to give the benefit of any doubt, if we even lower this from, say, 600 to 200 mutations in 1,000 babies and estimated only half of these; that is, 100, are caused by radiation and consider only a 1 per cent increase in radiation caused by Cameco's dose to the public, although it was more, this would still mean one more mutated baby in every 1,000 newborns and that, in my opinion, would be one too many.

One more point of interest from Cameco's own figures. The average effective dose to NEW personnel in the plant for 2005 is given by Cameco's having been 77 times greater than the dose to the public of Port Hope and the maximum effective dose to NEW personnel was 443 times

greater than that of the public; more than 10 times the background level and more than 10 times the maximum exposure recommended for the public by the International Commission on Radiological Protection as far back as 1990.

I will leave it to the personnel themselves to draw their own conclusions from this.

An important component of the background exposure is from the medical use of radiation in diagnosis and treatment that I mentioned a moment ago, but this exposure of the public differs from that caused by the uranium plants in that it is neither unnecessary nor involuntary. If there is a good medical reason for the exposure, then this is truly an acceptable risk since it is being done to benefit the patient with his or her informed consent and with the lowest possible exposure.

It is the avoidable exposure that must be avoided. We should not be adding avoidable radiation to the unavoidable.

Finally, the existence of a major source of harmful radiation in the community has not only a physical effect on people’s health but also psychological effects. There is concern and anxiety in the community because of this issue. This in itself is a reason for action.

In summary, radiation as produced by the uranium plants in Port Hope causes gene damage no matter

how low the level of radiation exposure becomes. This gene damage causes genetic diseases such as leukemia and birth defects. Detection of these diseases is not always possible before it is too late. The existence of major sources of radiation pollution in downtown Port Hope with the resulting genetic hazards this produces is unacceptable in this day and age.

The licences of the uranium plants should not be renewed. Any temporary extension of their licences should be conditional on immediate and urgent steps being instituted to move these plants from the town.

Thank you very much.

THE CHAIRPERSON: Excuse me. I guess you're taking advantage of the fact that this is the last of the day to interrupt the proceedings of an administrative tribunal. I'm saying this because respect for the ministry of tribunal and respect for you is a two-way street in this proceeding.

So I would prefer, and I would ask you that you restrain yourselves from doing this. I will not have this happen in my Tribunal.

Is that clear? I hope that's clear because it would be very disadvantageous for us as a Tribunal to have to have proceedings interrupted over the next number of days.

So the floor is now open for questions. Dr. Dosman.

MEMBER DOSMAN: Thank you, Madam Chair.

I'd like to ask CNSC staff if the health studies carried out in Port Hope included the diagnosis of leukemia amongst the cancer sites that were investigated.

MR. HOWDEN: Barclay Howden speaking.

I'm going to ask Miss Rachel Lane to reply.

MS. LANE: Rachel Lane for the record.

Yes, they included leukemia.

I'd first like to make a bit of a statement, and that is that in 2004 the International Atomic Energy Agency, the IAEA, produced a document called "Radiation, People and the Environment". They concluded:

> "There has been no conclusive evidence in human offspring for the hereditary defects attributed to exposure from natural or artificial radiation."

And this was based on extensive studies of the offspring of survivors of the atomic bombs in particular. These have failed to show increases of statistical significance in hereditary defects. This statement is supported by other international bodies such as the United Nations Scientific Committee on the Effects of Atomic Radiation and the International Commission on

Radiological Protection.

Thank you.

MEMBER DOSMAN: And Madam Chair, may I inquire, did the Port Hope studies include the diagnosis of -- one of the cancer sites that was evaluated?

MS. LANE: Yes, the Cancer instant study did. Well, the cancer and general mortality study did as well as the Eldorado update did.

MEMBER DOSMAN: Thank you.

THE CHAIRPERSON: Further questions, Dr. McDill.

MEMBER McDILL: Thank you.

I wonder if the intervenor could clarify what he meant by “NEW personnel”. Did you mean n-e-w, nuclear energy workers, or new as in just starting?

DR. BLECHER: I’m quoting it as given in Cameco’s document. It’s whatever they meant.

MEMBER McDILL: Perhaps Cameco could clarify that for the intervenor.

MR. VETOR: Kirk Vetor for the record.

Yes, the N-E-W refers to nuclear energy workers.

MEMBER McDILL: Thank you.

Now, could you comment on the intervenor’s comments on dose, I believe, or exposure?

MR. VETOR: Kirk Vetor for the record.

The numbers referenced are not in the written interventions so I'd need to hear those again.

THE CHAIRPERSON: Yes, for the intervenor, this is very, very difficult when your oral intervention doesn't match your written intervention in terms of the Members. So this is very difficult for people to react to a series of numbers.

In light of the hour, I'm going to ask if you could -- what figure exactly would you like repeated?

DR. BLECHEL: I've simply taken this out of the Cameco document given for "Effective Public Dose Rates and Average Effective Dose to NEW Personnel and Maximum Effective Dose to NEW Personnel." I coded them into my calculator and did a division, showing that the one figure was 77 times larger than the other and the third figure, 443 times larger than the first. These are the Cameco figures, simply.

MR. VETOR: Kirk Vetor for the record.

Perhaps I could speak to this in a more general sense, and that would be that it's expected and acknowledged that a worker in a given facility will be exposed to a higher level of contaminant whether it's radiation or chemical agents, and that's reflected in the limits. The public dose limit is 1 milliSievert per year

for the public, whereas the dose limit to nuclear energy worker is 50 milliSieverts per year.

So it stands to reason that, yes, if you divide the two out you're going to get a very, very large number.

MEMBER McDILL: Thank you.

THE CHAIRPERSON: Further questions?

DR. BLECHER: Madam Chair, may I quickly respond to a comment that was made from the floor about the ---

THE CHAIRPERSON: This is not a debating society. I appreciate your intervention and I appreciate the involvement, and the Commission will take all that evidence that we have and go forward.

Thank you.

That's all for today. Do you want to make some comments about tomorrow morning?

MR. LEBLANC: Yes.

We will start tomorrow morning at 8:30 with the submission from the Alderville First Nation and then continue in the chronological order of receipt of submissions. We will go until approximately 1700 hours, after which we will be taking a dinner break and resume with some submissions in the evening, and then we'll assess at this juncture whether we will need to adjourn to

a date to be determined later.

So good evening all, and thank you for your patience, and see you tomorrow morning.

Merci.

--- Upon adjourning at 6:13 p.m.