Canadian Nuclear Safety Commission

Commission canadienne de sûreté nucléaire

Public hearing

Audience publique

Cameco Corporation:
Application by Cameco Corporation for the Renewal of Class IB Nuclear Fuel Facility Operating Licence for Port Hope Conversion Facility in Ontario

Cameco Corporation :
Demande de Cameco Corporation pour le renouvellement de son permis d'exploitation de son installation de conversion du combustible nucléaire de catégorie IB à Port Hope en Ontario

November 3rd, 2011

Le 3 novembre 2011

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

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

Commission Members present

Commissaires présents

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

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

Secretary:

Secrétaire:

Mr. Marc Leblanc

M. Marc Leblanc

General Counsel :

Conseillère générale:

Ms. Lisa Thiele

Mme Lisa Thiele

--- Upon resuming

THE CHAIRMAN: It's still good morning. The next item on the agenda is hearing day one on the matter of the application by Cameco Corporation for the renewal of Class 1B nuclear fuel facility operating licence for Port Hope conversion facility in Port Hope, Ontario.

Marc.

Cameco Corporation:
Application by Cameco Corporation for the Renewal of Class IB Nuclear Fuel Facility Operating Licence for Port Hope Conversion Facility in Ontario

THE REGISTRAR: So the notice of public hearing 2011 H08 was published on August 24th, 2011. Submissions were received from Cameco and CNSC staff by the deadline, including the supplementary information which were the slide decks representations that were filed last week.

Commission member document 11-H16A is confidential and will not be discussed in closed session

as the Commission has determined that it was not necessary.

Day two of the public hearing is scheduled for January 18th and 19, 2012 and will be held at the Town Park Recreation Center in Port Hope. The public is invited to participate either by oral presentation or written submission at the day two hearing. The deadline for the public to file a request is December 19th.

In a notice published on August 16th the CNSC announced that it is allotting funds under a its present funding program; October 14 was the deadline to file a request. And the Commission received two requests for funding regarding the Port Hope conversion facility.

Just for your information we will conduct the hearing until 12:30 where we're going to break for a one hour lunch and resume this hearing after lunch.

Thank you.

THE CHAIRMAN: Thank you, Marc. So I'd like to start by calling on the presentation from Cameco Corporation as outlined in CMD 11-H16.1 and 16.1A. Mr. Thorne, the floor is yours.

11-H16.1 / 16.1A

Cameco Corporation

Oral Presentation

MR. THORNE: Yeah. Andy Thorne for the record. Thank you, President Binder, Members of the Commission.

It's my pleasure to be able to introduce this morning to my left Mr. Dale Clark, he's the General Manager of our Port Hope conversion facility. And to his left is Ms. Rebecca Peters, who is the superintendent of compliance and licensing at the facility. And Mr. Clark is going to walk us through a presentation.

So thank you, Dale.

MR. CLARK: Thank you. For the record I'm Dale Clark, general manager of the conversion facility. And I'll be making today's presentation on behalf of the conversion facility.

So the Port Hope conversion facility currently has a five-year operating licence from the CNSC which expires at the end of February, 2012. Cameco is also licensed for storage facilities at a second site situated at Dorset Street East in the municipality of Port Hope. And as you'll note from our application we are not requesting any changes be made to our current operating licence.

At Cameco we are committed to safe, clean and reliable operation of our facilities. We maintain

programs, plans and procedures to continually improve our environmental performance and ensure the safety of both our employees and our neighbours.

Our operating performance demonstrates the strength of our commitment. The radiation exposures within our operations fall well below dose limits. Our environmental emissions are only a fraction of the regulatory limits. And public radiation exposures are well below established limits. These metrics demonstrates that we are qualified to carry out future activities.

The application we've submitted reaffirms Cameco's commitment to the safe, clean and reliable operation of the Port Hope conversion facility. During this presentation I will highlight some main points under each of the safety and control areas as described in the application.

As part of Cameco's commitment to the safe, clean, reliable operation of our facility we develop objectives, budgets and strategic plans based on our four key measures of success. The first of these measures of success is a safe, healthy and rewarding workplace.

I'm pleased to inform the Commission that during this licence period our employees' safe work habits helped the facility achieve more than one million hours worked without a lost time incident.

Under the clean environment measure of success the conversion facility, which was the first site in Cameco to be registered to the ISO 14001 environmental management system was reregistered earlier this year. This is a significant undertaking and commitment.

For supportive communities Cameco also works to build and sustain the trust of the local communities in which we operate. A public opinion survey conducted in 2011 found that in the community 87 percent support or strongly support Cameco's continued operations. We work hard for this community engagement and are very proud of the result.

Under outstanding financial performance and to ensure the long-term sustainability of our operation the conversion facility is implementing a multi-year operational reliability initiative that will improve our maintenance processes, operational oversight and support services.

The conversion facility continues to strengthen our management systems during this licence period, which is the first of the safety and control areas I will speak to.

As you heard from Mr. Thorne during his presentation Cameco created a fuel services division central management structure during the current licence

period in order to improve the oversight of Cameco's Ontario operations.

We also implemented several corporate-wide processes at the conversion facility. The facility adopted the corrective action process, or CAP process, to improve the quality of internal accident and incident investigations.

The Cameco incident reporting system, or CIRS, was also implemented and it provides a company-wide central database to document events and provides a mechanism for tracking corrective actions. This tool gives greater access for all employees and allows us to access information from other sites within Cameco and share learnings as well.

As noted earlier, we were re-registered to the ISO 14001 environmental management system standard which is an internationally recognized standard for environmental management and drives continual improvement in our processes.

Cameco has also joined the CANDU Owners Group, or COG, and is working through other national and international nuclear organizations to share experiences and learn from others.

During the licence period, the facility has had a strong focus on leadership development. We've used

a wide range of training programs to develop more effective and strategic organizational leaders and reinforce succession planning.

At the conversion facility, we have a number of programs that combine to create the framework for a safe environment and foster a sustainable safety culture.

We have implemented a systematic approach to training, or SAT, that covers initial employee training and routine requalification training. This new approach to training was implemented very successfully in the UF6 plant in 2010 and is on target with our commitment to implement in the U02 plant and all in-scope positions by the end of 2011.

The conversion facility continues to strongly emphasize effective communication with employees at all levels of the operation. Enhanced communications have been used for several initiatives including safety stand downs, general manager town hall meetings, shift crossover meetings, management-shop floor presence, daily management 24-hour review meetings and event notifications.

Cameco also encourages employees to build and maintain a questioning attitude with respect to health, safety, radiation protection and environmental

management at the site. This has been a significant effort and success in recent years.

To proactively address workforce requirements, a workforce and succession planning process was initiated in 2010. This planning identifies and reviews critical and key workforce positions with mitigation or transition plans developed for them. This process allows for effective knowledge transfer within the operations.

In terms of past operating performance, the Port Hope Conversion Facility demonstrated the strength of our safety culture and commitment to the safe operations of our facility with the achievement of more than one year and over one million hours worked without a lost-time incident.

The conversion facility has not exceeded any CNSC regulatory limits during the current licence period.

Also, during this period, we have reduced uranium emissions through the installation of HEPA filters in both production plants and safely managed waste materials, including the removal of historic depleted uranium metal, contaminated concrete and soil and carbon anodes.

We also made a significant capital

investment into industry-leading liquid management practices as part of applying the lessons learned from the sub-surface contamination beneath the UF6 plant in 2007.

In addition, our fluoride emissions have also been reduced through modifications and improvements to the scrubber system in the UF6 plant.

As mentioned earlier, the continued implementation of the conversion facility's operational reliability process will be a significant site focus during the upcoming licence period. This will improve the facility's fitness for service and overall reliability of equipment and processes. This operational reliability program is being implemented through a new change management process to ensure that this shift in operating approach is effective and sustainable.

Safety analysis is a systematic evaluation of the potential hazards associated with an activity and considers the effectiveness of preventive measures and strategies in reducing the effects of such hazards. Examples of this include the safety report and fire hazard analysis, or FHA, used at the conversion facility to ensure we continue to operate in a safe, clean and reliable manner.

The facility maintains an FHA that meets the requirements of the National Fire Protection

Association or NFPA 801 Standard for fire protection which was achieved during the current licence period. The FHA has been accepted by CNSC and is consistent with industry standards.

Many other specific assessments have been conducted to ensure the safety of our operations. This includes a site-wide risk assessment that focused on soil and groundwater contamination on site and concluded that it presents no significant risk to the public or the environment.

Other assessments include a harbour wall study to assess its overall stability. A probable maximum flood and probable maximum precipitation study, both of which found that neither will significantly impact the facility.

Screening level risk assessments were also done by third-party experts for UF6 an anhydrous hydrogen fluoride service to assess the risk and summarize opportunities to further enhance the safety of those systems, all of which have been addressed.

Also in this section, Cameco has retained third-party experts to help review and apply lessons learned from the events at the Fukushima Daiichi Nuclear Power Plant earlier this year. Our initial assessment which is supported by the CNSC staff review concluded that

the facility is safe with respect to the public, workers and the environment and is capable of mitigating both natural and man-made risks.

Cameco has committed to conducting additional modelling of worst case or beyond design basis events by the end of this year and incorporating these into our pre-incident plans early in 2012.

Substantial changes were made during the current licence period to ensure that the physical design of the site is maintained. Cameco invested approximately $80 million into industry-leading liquid management infrastructure in both the UF6 and UO2 plants. This is a major commitment by Cameco into the facility and the continued safe, clean and reliable operations well into the future.

As well, Cameco replaced the main stack on the UF6 plant and installed HEPA filters on building ventilation in both the UF6 and the UO2 plants.

During the current licensing period, Cameco also made improvements to the fire protection systems within both operating plants, installing fire water retention tanks and upgrading the sprinkler systems.

Fitness for service covers the activities that impact on the physical condition of the system’s components and structures to ensure that they remain

effective over time. In this area and over the licence period, the facility has enhanced its preventive maintenance, or PM program, and integrated PMs into the work notification system in SAP. SAP is Cameco's chosen application software used for asset management, maintenance management, accounting and purchasing functions.

The conversion facility entered into an agreement with the Provincial Technical Standards and Safety Authority, or TSSA, in 2010 to ensure that oversight of pressure retaining components and systems continues to be carried out by a third-party expert. As part of this process, Cameco continues to utilize non-destructive examination techniques to assess the integrity of pressure vessels and related systems.

Cameco also conducted both in-house and third-party testing for fire protection systems in the licensing period.

With respect to radiation protection, the Port Hope Conversion Facility has not exceeded any CNSC limits during the current licence period. While the radiation protection program has been effective, Cameco has also made significant improvements as part of its continual improvement program. This has been accomplished by such things as obtaining a dosimetry licence in 2008

for urine analysis and lung counting programs and the upgrading of analytical equipment used in the dosimetry program.

We have also implemented an automated dose assignment system that assigns doses to all routine dosimetry, urinalysis samples above the minimum detection level and provides a more accurate assessment of employee dose.

Other improvements in this area of radiation protection include the installation of new whole-body monitors in 2010. This allows us to increase whole-body screening frequency to every time an employee, contractor, or visitor leaves the main entrance of the facility.

We also commissioned alpha-in-air monitors throughout both the UO2 and UF6 plants that provide real-time local alarm of elevated uranium -- ambient uranium concentration.

In 2010, we also developed performance based action levels for all fence line gamma monitoring locations. Overall the employee and public exposure results over the licensing period clearly show that the radiation protection program is highly effective at controlling the dose to employees and the public.

Going forward, Cameco will continue to look

for ways to reduce employee exposure and in-plant uranium-in-air levels.

In terms of conventional health and safety, as previously mentioned, the facility achieved over one million hours lost-time injury free in September 2010.

This is tremendous accomplishment and one that all employees are extremely proud of and also look forward to exceeding and setting new records in the next licensing period.

I would like to point out one discrepancy on page 29, Table 7 of our CMD. The 2007 figure for lost-time injuries should be two instead of one, as it reads in the staff CMD.

Also as a brief update, we did experience a minor lost-time injury in September of this year due to heat stress related conditions bringing our 2011 total to three LTIs.

Recognizing the importance of occupational health and safety, additional full-time positions have been developed and filled in this area during the licensing period. These include a dedicated superintendent for this department, an additional occupational health and safety officer and a permanent safety representative position from the Union. These additional resources enhance oversight with respect to

safety at the facility and demonstrate Cameco's commitment to the safety of our people and protection of the community in which we operate.

Other significant achievements include the implementation of an arc flash program, a staged start-up approach for the UF6 plant that has been very successful at reducing incidents during plant start-ups, and the implementation of a formal contractor-management program to improve our focus on the safe work within this group on site.

For environmental protection, the Port Hope Conversion Facility experienced no exceedences of CNSC regulatory limits during the current licensing period. In this area, both federal and provincial regulatory authorities have legislated jurisdiction at the facility. To that end, Cameco monitors air and liquid effluent discharges to ensure that they meet applicable provincial and federal requirements.

Cameco has invested significant resources to gain a better understanding of subsurface conditions at the facility. This confirmed that the subsurface conditions posed no unreasonable risk to the public, our workers or the environment. Despite this fact, Cameco continued with the development and implementation of a site-wide environmental management plan which recently

expanded our groundwater collection system by more than 40 percent.

Also, to reduce the total uranium emissions from the facility, Cameco invested approximately $3 million dollars in HEPA filters for both UF6 and UO2 building ventilation sources in 2008 and 2009. We have made improvements to our scrubber system to reduce the HF emissions, and a comprehensive groundwater collection system was installed during this period. We also continue to maintain environmental management programs such as the Air Emissions Management Strategy, which ensures a systematic review and management of current and future emissions.

Finally, in this section I would also like to point out that although we ceased discharging our liquid process effluent in 2007, we have significantly added to the demand on our treatment operations with the addition of a comprehensive groundwater collection system. As a result, we recognize that we are close to capacity of the current treatment system and may need to add additional capacity in the future. This could include a treated liquid process effluent discharge. Therefore, we are requesting a change to the draft licence before you so that we maintain the flexibility in our current licence to discharge treated liquid process effluent.

The safety of our employees and the public is Cameco's first priority. As such, we invest heavily to ensure we are well prepared for emergency management and fire protection. This area has improved dramatically over the licence period. Emergency response is carried out through the facility's Emergency Response Plan, and we meet all regulatory requirements applicable to our facility. An emergency response and training agreement between Cameco and the municipality of Port Hope provides an additional layer to our emergency response capability. This ensures that the two response organizations have the opportunity to train together, to prepare for emergencies that could require a joint response.

Also as part of the agreement, Cameco provides the Port Hope Fire and Emergency Services with the necessary equipment and training to effectively respond in a support role to emergencies at the conversion facility. To continually provide a high level of response, a number of drills, exercises and courses are conducted, including anhydrous hydrogen fluoride responses, industrial firefighting and hazardous materials response.

At Cameco, protection of the environment is one of the foundations of our work, and we have strong programs in place to ensure we appropriately manage waste

streams. During the licensing period, the chemical bi-products generated by the processes were recycled for uranium recovery.

Cameco has initiated many pathways for waste management during the licence period. Some key accomplishments included the successful recycling of 360 tons of depleted uranium metal; the management of bulk wastes, both soil and concrete arising from the remediation of the UF6 and UO2 plants; and the safe management of approximately 300 tonnes of spent carbon anodes from flooring production at the UF6 plant at a hazardous waste landfill.

Existing waste management programs for the recycling of the chemical bi-products and contaminated wastes will be maintained. Cameco is also committed to the continuing management of wastes generated from operations as well as legacy materials.

The Conversion Facility Security Plan and Procedures meet CNSC regulatory requirements. The CNSC's Nuclear Security Division conducts routine inspections at the site. Overall, the security program is well managed and developed and we will continue to look for opportunities to enhance the existing program.

Cameco is required to comply with the Government of Canada International Atomic Energy Agency or

IAEA Safeguards Agreement, specifically as it relates to uranium inventory and material transfer records. During the current licensing period, we have successfully participated in the full range of required IAEA/CNSC inventory verifications as well as several short notice random inspections.

Cameco will be developing new software in the next licensing period that will allow for better tracking and reporting of uranium inventory at the site. The new software will also allow quicker generation of inventory data to facilitate the IAEA's and CNSC's inspection regime.

The safe packaging and transport of nuclear substances to and from the facility is an important part of Cameco's commitment to safe, clean and reliable operations. UO2 is produced, packaged in drums and transported by road from the conversion facility to Cameco fuel manufacturing in Port Hope and other domestic and international fuel manufacturing facilities. UF6 is produced and transported in approved cylinders by both road and marine shipment methods. Cameco's Emergency Response Assistance Plan is on file with Transport Canada and has been fully approved.

As well the Transportation Emergency Response Organization Team is a well-equipped team of

experienced hazardous materials responders who work routinely with Cameco products and can be quickly mobilized from the Port Hope Conversion Facility.

Other matters of regulatory interest include environmental assessments and Aboriginal consultations. Cameco's Vision 2010 Project is currently in the EA process. This project will see a significant portion of legacy, contamination and buildings removed from the site. It is anticipated that licensing will begin for this project as a separate process in 2012.

At Cameco, we have been consulting Aboriginal communities about our operations through site tours, community visits, and public information sessions. We continue to include the Chiefs of the five nearest First Nations on a mailing list to ensure that the First Nations are aware of all community forums and other community events. In addition, Cameco has met with the Métis Nation of Ontario.

Regarding cost recovery, Cameco has stayed current with all regulatory cost recovery fees and there are no additional or other matters at this time. For financial guarantees, Cameco submitted an updated Preliminary Decommissioning Plan or PDP in 2010, which was accepted in 2011. Cameco will update the letter of credit for the full amount of the revised decommissioning costs

and provide a copy of the letter to the CNSC.

During the licensing period, the Port Hope Conversion Facility applied for and received required operational approvals from the MOE, and Cameco currently has an application for a new comprehensive certificate of approval being reviewed by the MOE. This new comprehensive certificate of approval will replace the current one.

One of Cameco's key measures of success is support of communities. We strive to give residents a clear idea of what’s happening in our facilities and to answer questions through a range of activities that make up our public information program.

During the licence period, 18 community forums were held with approximately 1,800 participants attending. More than 126,000 newsletters were sent to Port Hope homes. Cameco also unveiled the redesigned website for Fuel Services Division that provides information about all three operations that comprise the division. The new site is easier to navigate and includes new sections that include quarterly and annual compliance reports and outline any reportable environmental incidents at each facility.

Our community relationships are very important to us. In the second quarter of 2011 a survey

was conducted that showed 87 percent of residents are supportive of the continuation of Cameco's operations in Port Hope. The complete results of this public opinion research are posted on Cameco's website and confirm that Cameco's public information program is seen as effective and appropriate by the vast majority of Port Hope residents.

Cameco does maintain the required nuclear liability insurance for the Port Hope Conversion Facility and at this time there are no additional or other matters to discuss that Cameco is requesting not already covered in this Application.

In conclusion, Cameco has robust programs and processes that ensure the safe, clean and reliable operation of our site today and into the future. I believe we have clearly demonstrated that we are qualified to receive a new five-year operating licence with no changes from the current licence conditions as we are requesting.

That concludes my presentation and I will look forward to answering questions.

THE CHAIRMAN: Thank you.

I'd like to now hear from a presentation by CNSC and as outlined in CMD H-16.

Peter Elder, please proceed.

11-H16

Oral presentation by

CNSC staff

MR. ELDER: Thank you.

My name is Peter Elder; Director General of the Directorate of Nuclear Cycle and Facilities Regulation. With me for this presentation is Mr. B.R. Ravishankar, Director of the Processing and Research Facilities Division, and we have other members of our CNSC licensing compliance team. I would like to note that our project officer for this file actually his wife had a baby last week so he's not available today, which is why Mr. Ravishankar will be doing most of the presentation.

We are here to present the Commission Member Document 11-H16 regarding the licence renewal of the Cameco Port Hope Conversion Facility.

As per -- as with other presentations we've divided into seven parts with the introduction and then going on to our review of the licence application, compliance verification and our assessment of the licensee's performance. Then we go into what are the matters -- other matters of regulatory interest focused on this facility before presenting our conclusions and

recommendations.

So I will now turn the presentation over to Mr. Ravishankar for the next portion.

Thank you.

MR. RAVISHANKAR: Good morning, Mr. President and Members of the Commission. For the record, my name is B.R. Ravishankar.

Cameco Corporation, hereinafter referred to as Cameco, owns and operates a Class 1B nuclear fuel conversion facility under a nuclear fuel facility operating licence.

The Port Hope Conversion Facility is located within the municipality of Port Hope, Ontario, situated on the north shore of Lake Ontario approximately 100 kilometres east of Toronto.

Cameco employs approximately 400 workers at their Port Hope Conversion Facility where uranium conversion processing commenced in the 1950s.

This slide provides an aerial view of Cameco’s Port Hope Conversion Facility. The water body along the left border of the photograph is Lake Ontario. A harbour turning basin is located adjacent to the conversion facility. The land between the turning basin and the mouth of the Ganaraska River is referred to as the centre pier property, which can be seen towards the bottom

right corner of the slide. Commercial and residential areas are located north of the property.

I would like to now draw your attention to the following buildings at the Port Hope Conversion Facility. The uranium hexafluoride processing plant is located at the top centre of the photo and labelled as UF6 plant. The uranium dioxide processing plant is located at the bottom centre of the photo and is labelled as UO2 plant. The metals plant is located near the uranium dioxide processing plant.

The centre pier property consists of a storage building, a laydown area for shipping cylinders, and an outdoor temporary storage facility for excavated soil from the recently built municipal water treatment plant located on the west side of the Port Hope Conversion Facility.

The Port Hope Conversion Facility maintains a second site with two buildings that are used primarily for storage. This site is situated in the area of Nelson Street and Dorset Street East in the Municipality of Port Hope. A picture of that site is not shown in this slide, but can be found on page 7 of the CMD.

At the Port Hope Conversion Facility Cameco primarily converts uranium trioxide powder, which was produced at Cameco’s Blind River Refinery, to two

different products, namely uranium hexafluoride and uranium dioxide.

Uranium dioxide produced here is used as a feed material in the manufacture of CANDU reactor fuel, and the uranium hexafluoride produced here is exported for further processing into fuel for light water reactors.

In addition, the Port Hope Conversion Facility operates a specialty metals plant involving uranium metal reduction and casting operations. The site also includes analytical and research laboratories and waste storage.

I will continue with our presentation this morning by speaking to Cameco's current operating licence.

The Port Hope Conversion Facility is currently licensed as a Class 1B facility with a five-year operating licence which will expire in February 2012. The licence is in good standing. The facility is licensed to produce up to 2,800 tonnes of uranium dioxide, 12,500 tonnes of uranium hexafluoride and 2,000 tonnes of uranium castings from its specialty metals plant.

The last public hearings associated with this facility were during licence renewal held in 2006 and a mid-term performance review in 2009.

The following slide will cover the extended outage of the uranium hexafluoride processing plant.

There was one major event during the current licence period in mid-2007. Cameco's uranium hexafluoride processing plant, which is shown as the UF6 plant in the picture on Slide 4, was shut down following the discovery of contaminated soil in that location during excavation activities to replace a cooling water tank. Subsequent investigation determined that the contamination had reached the groundwater table underneath the building thereby prompting the shutdown of uranium hexafluoride processing plant.

As part of the increased regulatory oversight due to this incident, CNSC staff required Cameco to conduct a comprehensive review of the whole site as well as address immediate environmental impacts. In response, Cameco installed a groundwater capture and treatment system referred to as a pump and treat system in order to prevent the groundwater contamination from flowing into the turning basin. This pump and treat system has been in operation since early 2008 with new groundwater wells being installed thereafter. The results from the groundwater monitoring wells are showing decreasing trends in the concentrations of contaminants.

Cameco was also required to conduct a human health and ecological risk assessment. This report concluded that no immediate adverse effects are expected

from the residual subsurface contamination, historic contamination in the turning basin, as well as shore off Lake Ontario.

The uranium hexafluoride processing plant was later returned to service in 2009 following extensive inspections by CNSC staff. CNSC staff reported this information to the Commission in 2009 during the mid-term performance report and through early notification reporting.

As part of the required investigations into the event Cameco identified several gaps in aging management of the facility and they have made several improvements to address the gaps along with other improvement initiatives. These will be presented in the following slides.

Cameco has improved the building components, especially below ground level, as well as the liquid effluent collection systems for both the uranium dioxide and uranium hexafluoride processing plants.

They installed additional fire protection systems in accordance with the requirement of the National Fire Protection Association, NFPA 801, and have undertaken a major revision to the Port Hope Conversion Facility’s quality management program manual including improvements to their design change control procedure.

The next two slides will cover CNSC staff's assessment of Cameco's licence renewal application including CNSC staff's proposed changes to the licence.

In April, 2011, Cameco submitted its licence renewal application for the Port Hope Conversion Facility. Cameco's application did not request any specific changes to the current licence terms and conditions. Cameco has requested a five-year licence term.

CNSC staff reviewed Cameco's licence renewal application against the CNSC's regulatory requirements. Based on this review, CNSC staff concluded that Cameco's application was complete and it met the regulatory requirements.

Next, we will present CNSC staff's proposed changes to the new operating licence.

As part of this licence renewal, CNSC has also proposed some changes to the licence.

During the last several years, CNSC staff has updated and reorganized its safety and control areas into 14 defined safety and control areas. CNSC staff has also updated its licence format and introduced a licence conditions handbook. While the licensee remains responsible for safe operation of the facility, CNSC staff will continue regulatory oversight of licensee's

compliance based on the requirements specified in the licence conditions handbook.

These changes are part of the revised CNSC licensing framework that allows for better clarity to the licensee on CNSC compliance verification criteria and provides an effective change control process. The changes were done as part of CNSC's efforts to harmonize its licensing and compliance framework, as well as to align its processes with global policies. These changes have been incorporated in the proposed new licence and licence conditions handbook for Cameco and CNSC staff recommend that the Commission approve them as part of the proposed new licence.

This slide provides a brief description of CNSC staff's compliance verification plan during the licence period for the Port Hope Conversion Facility.

Compliance activities are governed in accordance with the compliance activity plan for any given licensed facility that is based on the relative risks for various safety and control areas. The risk ranking for these facilities is reviewed periodically, most recently about a year ago.

For the Port Hope Conversion Facility, the compliance verification plan consists of multiple inspections of Cameco's safety-related systems and

programs, desktop reviews of Cameco's submissions including quarterly and annual compliance report, third-party reviews of facility modifications, event reports and licence program documents, reactive inspections following events, assessment of Cameco's proposed corrective action plans to address deficiencies found during compliance inspections; as well, verification of Cameco's effective and timely compliance -- completion of corrective actions. Deficiencies raised during inspections and desktop reviews have been addressed by Cameco through corrective actions.

Overall, CNSC staff's compliance plan for the Port Hope Conversion Facility is consistent with the CNSC's risk-informed regulatory approach.

In the next slide, we will present CNSC staff's overall assessment of the Port Hope Conversion Facility's performance.

Cameco's Port Hope Conversion Facility continues to maintain comprehensive and mature core programs; among them, radiation protection, environmental protection and conventional health and safety.

From their assessment, CNSC staff conclude that Cameco's Port Hope Conversion Facilities have been operated in a manner that is safe and in compliance with CNSC regulatory requirements.

Certain areas of improvement were

identified during on-site inspections and desktop reviews particularly in the management system and quality assurance areas. Cameco has put in place initiatives and improvements that are taking hold.

CNSC staff have increased their focus and oversight for the safety and control area. For example, CNSC staff continue to see improvements in Cameco's implementation of its incident reporting system. CNSC staff's complete review of the performance of the Port Hope Conversion Facility, during the licence period, is described in CMD 11-H16.

Overall, Cameco has operated the facility safely and its performance in all safety and control areas is satisfactory.

Slides 14 and 15 summarize CNSC staff's assessment of Cameco's performance in the 14 safety and control areas. These ratings represent performance of the overall site and not specific to either the uranium hexafluoride or uranium dioxide processing plants.

The Port Hope Conversion Facility achieved satisfactory performance ratings in all safety and control areas. These include areas shown in the slide management systems, human performance management, operating performance, safety analysis, physical design, fitness for service and radiation protection. No safety and control

area has been assigned a downward trend in performance.

As a result of CNSC staff's increased regulatory oversight and request, Cameco developed an internal qualification procedure for the operators and supervisors of the uranium hexafluoride processing plant. CNSC staff also verified that the qualification procedures were implemented satisfactorily by Cameco. For this reason, CNSC staff assigned an improving trend for the human performance management area.

This slide shows that Cameco achieved satisfactory performance ratings for conventional health and safety, environmental protection, emergency management and fire protection, waste management, security, safeguards and packaging and transport for the Port Hope Conversion Facility.

Information pertaining to the safety and control area of security is protected and is submitted separately in CMD 11-H16.A.

The following slides will provide additional information on Cameco's performance at the Port Hope Conversion Facility for the key performance indicators; radiation protection, environmental protection and conventional health and safety.

Radiation protection; Through various compliance verification activities described earlier, CNSC

staff conclude that Cameco’s Port Hope Conversion Facility has a comprehensive radiation protection program. The airborne radiological emissions from the Port Hope Conversion Facility remain a fraction of the regulatory limit. The regulatory limit relayed the emissions of radioactive material to the calculated dose to the most exposed member of the public.

For the Port Hope Conversion Facility, the calculated dose to the most exposed member of the public is less than one-tenth of the annual regulatory dose limit of 1 millisievert per year. In fact, the licence limit for a public dose for a conversion facility is 0.3 millisieverts per year.

The radiological exposures associated with the operation of the Port Hope Conversion Facility are due to alpha, beta and gamma radiation. The Port Hope Conversion Facility’s radiation protection program is robust in controlling and monitoring of radiation doses to workers as low as reasonably achievable.

The following slide shows the average and maximum doze to Port Hope Conversion Facility workers over the licence period.

This slide presents the annual effective radiation dose, which is an indication of radiation exposure to a nuclear energy worker. The data is taken

from Cameco's annual compliance reports for the years 2006 through 2010.

Cameco has monthly and quarterly action levels for internal and external dose to workers. The average effective dose to workers at the Port Hope Conversion Facility during the current licence period is low; approximately 1.7 millisieverts per year or 3.4 percent of the annual regulatory dose limit.

CNSC staff would like to correct an error on page 30 of staff's CMD. In section 3.7.2, under "Worker Radiation Exposures and Public Dose," the maximum annual, individual, whole-body dose to a worker at the Port Hope Conversion Facility is 26 millisieverts for a 5-year dosimetry period 2006 through to 2010, which represents 26 percent of the regulatory limit of 100 millisieverts over a 5-year period. Radiation doses to workers at the Port Hope Conversion Facility are well below the regulatory limits.

Environmental protection; Cameco's Port Hope Conversion Facility's environmental protection program is intended to identify, control and monitor all releases of radioactive and hazardous materials and its impact on the environment from facilities are as a result of licensed activities. Port Hope conversion facility maintains a comprehensive environmental monitoring program

through which air emissions, fluorides and vegetation, surface water, ground water and soil monitoring are conducted.

Currently the Port Hope conversion facility evaporates on site liquid effluent and there are no liquid effluent releases to surface water. The only interaction with surface water pertains to cooling water used at the uranium dioxide processing plant, which is regulated under the Ministry of Environment permitting process.

Cameco installed a ground water pump and treat system which includes extraction wells adjacent to the south and east sides of the uranium hexafluoride processing plant. The operation of the pump and treat system has resulted in the capture of contaminant plumes originating under the footprint of the uranium hexafluoride processing plant, thus reducing the loadings to the turning basin.

Overall, CNSC staff conclude that Cameco environmental protection program is satisfactory.

In order to provide some examples of releases to the environment in this slide we show the annual average uranium emissions to air at the uranium hexafluoride processing plant.

You will note that the 2008 data shows lower than expected emissions because the extended --

because of the extended outage of the uranium hexafluoride processing plant at that time. The 2011 data is current as of June 30th of this year.

The license limit for uranium emission currently in place for the Port Hope conversion facility will remain the same as per the proposed licence. This limit is based on the calculated dose of -- to the public of 0.05 millisievert per year, which is 20 times more stringent than the regulatory limit of one millisievert per year dose to the public.

In addition, CNSC staff requested Cameco to review their action levels to reflect its current operational performance of the facility. The main purpose of these action levels is to give early warning for the process (inaudible) poor performance of emission control systems.

As requested Cameco completed the review of action levels and proposed more stringent action levels as part of its continuous improvement objective. CNSC staff have reviewed and accepted the proposed reduced action levels.

The new action levels are specified in the licence conditions handbook given in part two of the CMD. Overall there were no action level or release limit exceedances from the uranium hexafluoride processing plant

over the licensed period.

Slide 20 shows the annual average emissions from the uranium dioxide processing plant. Lower than expected emissions occurred in 2008 due to the extended outage of the uranium hexafluoride processing plant. The data from 2011 is as of June 30th, 2011.

The uranium action level for the uranium dioxide processing plant was exceeded three times in 2009 and once in 2010. These exceedance, which were slightly above the action level but well below the licence limit were the result of either calculation discrepancies or the maintenance of stack sampling equipment.

To address these issues Cameco developed corrective action plans to CNSC staff's satisfaction. Cameco has applied a correction factor for the uranium emission calculations to prevent future discrepancies in their data. And they have improved their maintenance procedures for their stack sampling equipment.

CNSC staff will continue to monitor Cameco's performance on these matters at the Port Hope conversion facility.

Slide 21 summarizes the changes to the proposed licence limits and action levels for the Port Hope conversion facility. The current uranium release limits are based on the criteria of 0.05 millisievert dose

to a member of the public and CNSC staff is not proposing any changes to this limit.

Action levels have been devised for uranium fluorides and ammonia releases from Port Hope conversion facility. The action level for uranium releases from the uranium dioxide processing plant remains unchanged.

With respect to the new uranium in air standard proposed by the Ministry of the Environment in Ontario, Cameco has stated that the Port Hope conversion facility will be in compliance with these new limits when the standard is implemented in 2016.

The table in slide 22 illustrates the number of recordable lost time injuries reported by Cameco in their annual compliance report over the licence period. The data from 2011 is as of June 30th of this year. A recordable lost time injury is defined as a work-related injury requiring professional or medical assessment and treatment where the employee is not able to return to work for the next scheduled shift.

Cameco has recently informed CNSC staff that there was a minor heat stress related injury that was reclassified as a lost time injury during the third quarter of this year. Overall, CNSC staff are satisfied with Cameco's even detection reporting and investigation processes.

The following slides will detail other matters of regulatory interest. CNSC staff has determined that an environmental assessment under the Canadian Environmental Assessment Act is not required for licence renewal of Port Hope conversion facility. Cameco has a mature public information program, which includes communicating to the public through a dedicated website, as well as community forums and a public communication plan for site emergencies.

Periodic reports are made available to the Port Hope municipality on environmental monitoring results for the Port Hope conversion facility site.

In terms of cost recovery the Port Hope conversion facility is in good standing. Cameco's revised preliminary decommissioning for the Port Hope conversion facility has been recently reviewed and accepted by CNSC staff. The current financial guarantee by Cameco is maintained in the form of an irrevocable letter of credit. Based on the revisions to the preliminary decommissioning plan Cameco's financial guarantee amount would be revised from $96,000,000 to $101.7 million. CNSC staff have recommended that the commission accept the revised financial guarantee.

As part of this relicensing process CNSC staff identified and sent letters of notification to 12

aboriginal groups and organizations. The letters included a copy of two license applications and provided information on the public hearings and the availability of participant funding. Follow up phone calls were made to confirm receipt and answer questions. To date no concerns have been raised about the licence renewals. However, aboriginal groups still have the opportunity to intervene in the day two hearing.

As the commission secretary mentioned, CNSC has also made participant funding available for this licence renewal process to aid and encourage interveners.

Port Hope Vision 2010 is Cameco's plan to cleanup, modernize and improve the Port Hope conversion facility. Vision 2010 activities will be carried out in conjunction with the Port Hope area initiative in collaboration with the municipality of Port Hope, the "Grand B" project as well as the Government of Canada.

Cameco has submitted its Vision 2010 environmental impact statement to the CNSC which is currently under review. A draft comprehensive study report was written by CNSC staff based on Cameco's draft environmental impact statement, which was then made available to the public for comment.

The public comment period on the draft comprehensive study report ended on October 22nd. The

public comments will be taken into consideration and where appropriate the comprehensive study report will be amended and then delivered to the Commission for acceptance. The Vision 2010 project is not a part of Cameco's current licence renewal hearings.

A new licence, or a licence amendment will be issued for Vision 2010 only if the Ministry of the Environment decides that the project will not likely result in the significant environmental effects after mitigation measures are put in place.

In March, 2011 the CNSC staff issued a request for actions pursuant to Subsection 12-2 of the general nuclear safety and control regulations requiring Cameco to review (inaudible) and to re-examine the safety cases and vulnerabilities for facilities at the Port Hope conversion facility. With focus on external hazards such as seismic, flooding and fire events.

Cameco submitted their final evaluation report to CNSC staff in August of this year. And concluded that Port Hope conversion facility is safe with respect to the public, workers and the environment. And is capable of mitigating both natural and man-made risks.

The report identified one gap related to the beyond design basis extreme scenario modelling for the Port Hope Conversion Facility. CNSC staff’s preliminary

review supports Cameco's conclusions.

As part of their final evaluation, Cameco developed an action plan to detail the corrective actions needed to address the gap, and committed to finalize this by March of 2012. CNSC staff has requested that Cameco provide periodic progress updates during that time.

Mr. Peter Elder will now provide CNSC staff conclusions and recommendations to the Commission.

MR. ELDER: Thank you.

CNSC staff conclude that Cameco's application for licence renewal for the Port Hope conversion facility meets the requirements of the *Nuclear Safety and Control Act* and its regulations.

Cameco has operated the Port Hope facility in compliance with the CNSC's regulatory requirements and Cameco is qualified to carry on the activities as per the proposed licence for the proposed five-year licence term.

The last few slides presented staff's review and conclusions on Cameco's application for licence renewal, and their performance during the licence period.

CNCN staff recommend that the Commission accept CMD 11-H16 and renew Cameco's five-year nuclear fuel facility operating licence for the Port Hope Conversion Facility. We also recommend that the Commission accept the revised financial guarantee.

This concludes CNSC staff presentation, and we are now available to answer any questions.

THE CHAIRMAN: I guess questions will have to wait until after lunch. As promised, we're going to break for one hour -- maybe 1:30, let's reconvene at 1:30. Thank you.

--- Upon recessing at 12:36 p.m. /
L'audience est suspendue à 12h36
--- Upon resuming at 1:32 p.m. /
L'audience est reprise à 13h32

THE CHAIRMAN: Okay, we are back, and we're going to start to open up the floor for questions from Commissioners, and the first one is Dr. Barriault.

MEMBER BARRIAULT: Thank you, Mr. Chairman.

My first question is to Cameco. You thought it necessary to restructure, reorganize your Occupational Health Department. Do you want to explain to me how you've gone about doing that; the type of individuals that you have involved are they industrial hygienists or are they occupational nurses, occupational physicians? Just briefly an overview.

MR. CLARK: Sure. Dale Clark, for the record.

The changes that I spoke to with regard to occupational health and safety, there were essentially three new positions, full-time positions, added during the current licensing period.

The first is a dedicated superintendent role. That's a person to provide the overall oversight and leadership for that specific group of the occupational health and safety.

The second was a second and additional health and safety officer. That's somebody who spends the vast majority of the time in the plant, in the field, observing and assisting in terms of health and safety issues in the plant.

And then the third, and the most recent position that was added and filled during this period, was a full-time union representative, safety representative position. And that was something that we've worked on collectively to get to, over a number of years. That just helps add the focus and the sense of co-operation and collaboration in this common goal of safe work and, clearly, a significant demonstration of our commitment to health and safety.

MEMBER BARRIAULT: The level of training of these individuals, do you have a specific minimum requirement that you ask? For example, are they trained

and industrial hygiene certified? The same thing with your nurses; or if you have nurses, I don't know.

MR. CLARK: Yes. Dale Clark again, for the record.

We do have trained nursing staff that's on-site at all times there during the daytime in that position. For some of the new positions and the health and safety officers, those are trained and certified in the field of safety. Those are certified and qualified people that we filled in those roles.

MEMBER BARRIAULT: And they answer to whom in the organization?

MR. CLARK: Well, first off, I would say ultimately, you know, as general manager, I -- you know, I am accountable and responsible ---

MEMBER BARRIAULT: Okay.

MR. CLARK: --- for the overall safety and driving the safety culture of the site.

All of those positions, and the superintendent reporting of the occupational health and safety, report to our technical manager. So the technical manager position includes a little bit more than just occupational health and safety, but also the radiation and environment and compliance in licensing. That technical manager position reports to me as general manager.

MEMBER BARRIAULT: But that obviously falls under occupational health and safety also; radiation protection falls ---

MR. CLARK: Yes.

MEMBER BARRIAULT: Yes.

MR. CLARK: That's right.

MEMBER BARRIAULT: My next question, really, is to CNSC. You rated the occupational health program as being satisfactory. There's been some improvements, so obviously Cameco didn't find that it was satisfactory. Would you change your approach to this at this time or are you just relying o somebody else's data?

MR. RAVISHANKAR: Ravishankar, for the record.

During each compliance verification inspection that CNSC staff conduct, one aspect is also about Cameco practices that are in place to prevent injuries. So when any findings are identified, Cameco responds in a timely manner, and that is the main reason why we have rated this safety and control area as satisfactory. However, continuous improvement of course is always welcome.

MEMBER BARRIAULT: I agree. So the arrow should be going up instead of going straight on your assessment. I'm sorry, ---

MR. ELDER: Not to ---

MEMBER BARRIAULT: Yes.

MR. ELDER: --- again we try to make sure that was based on our observations ---

MEMBER BARRIAULT: Sure.

MR. ELDER: --- of the performance and what we know, and not -- you know, we recognize that Cameco is doing some improvements, but we try to go to the factual observations we see during our compliance activities.

MEMBER BARRIAULT: All right, thank you.

To Cameco; you had three lost-time accidents, not two. I think the last -- of those three, are they all back at work now and is there any permanent disability to any of them?

MR. CLARK: Dale Clark, for the record.

Yes, all three of those individuals are back to work, had very minimal time away from work. So in terms of lost time severity, days away from work, very minimal; one to two days maximum.

MEMBER BARRIAULT: Okay.

MR. CLARK: So all are back, and no residual health effects from any of those injuries.

MEMBER BARRIAULT: Thank you.

During our site visit last year, I noticed at that time, in the HF plant, that your showers did not

have an alarm to the control room at the time. Has that been -- is it still the some problem or is it still existing that way? So if somebody triggers a shower, there was nobody alerted to the fact that you had some kind of exposure?

MR. CLARK: Dale Clark, for the record.

We have looked at that and I do recall the discussion. We have certain areas of the plant that do have safety showers that alarm, that give an indication of alarm. Those are primarily in areas where people may be working alone.

Not all safety showers in the plant are like that, but I would point out that we do have a number of means of communication. So those employees carry radios with them at all times during those operations. There is also a dedicated internal phone system with multiple locations along the way in the paths to those critical safety systems.

So you know, in our assessment of it, we believe we have adequate communication means in the event ---

MEMBER BARRIAULT: That's fine.

MR. CLARK: --- of an emergency like that.

MEMBER BARRIAULT: Thank you. That's all for now, Mr. Chairman.

THE CHAIRMAN: Thank you. Monsieur Harvey?

MEMBER HARVEY: Merci, monsieur le président.

On page 8 of Cameco's document, the third paragraph,

> "Actions arising from the 2011 inspection are currently being addressed and Cameco expects to complete all remaining open actions by the end of 2011."

What's the status of the -- is it always your goal in -- what's the progress?

MR. CLARK: Dale Clark, for the record.

Just to clarify, are you asking the CNSC Type 2 inspection that was conducted ---

MEMBER HARVEY: Yes.

MR. CLARK: --- in 2011?

MEMBER HARVEY: Yes, yes.

MR. CLARK: And there was status of the remaining actions.

I'll ask my colleague, Ms. Peters, to respond.

MEMBER HARVEY: What was the nature of the actions and what is the current status?

MS. PETERS: Rebecca Peters, for the

record.

The nature of the actions pertained to our new corrective action process, or the CAP process, that was referred to in our presentation and the corresponding CIRS or Chemical Incident Reporting System. There was a backlog in some of the actions and the events that were progressing through that system, and that was the nature of the findings in that inspection.

Cameco has responded to all of the inspection findings from CNSC staff and are working through their action plan to address that backlog.

THE CHAIRMAN: So 2011 is almost finished, so you guys are going to meet this target date and we are going to hear about this in Day Two?

MS. PETERS: Rebecca Peters, for the record.

We have made significant progress on the backlog of events. We have reduced the backlog by over 20 percent since the time of the inspection.

We are continuing to work through those issues with the focus being on the significant events or the events that have either higher significance or a potential for a higher significance, making sure that those are addressed first and in a timely manner to eliminate any other significant problems.

Just for clarification, the majority of the events -- I'd say in the high 90, 95 to 98 percent range of the events that are put into the CIRS system are Level One or Level Two, so very minor, low significant events that I know were discussed in the Blind River discussion this morning. So those would be ones that are in for trending purposes or to identify that this is an area that we may need to improve in the future.

THE CHAIRMAN: I don't think I heard a "yes" and I'm just quoting your own sentences "expect to complete all remaining open-action by end of 2011". It's your text.

MS. PETERS: Rebecca Peters, for the record.

Yes, the action plan will be complete by -- the actions that we committed to will be complete by the end of this year.

THE CHAIRMAN: Thank you. Mr. Harvey?

MEMBER HARVEY: Do you have a comment on that, Peter?

MR. ELDER: Peter Elder.

No, that's consistent with our understanding. If you look at the paragraph in our CMD at the top of page 20, it will give you a little more flavour on what we're talking about as well as the backlog.

We are also looking at some minor issues around the documentation and to make sure they are maintaining their documentation associated with that program.

MEMBER HARVEY: Okay, thank you.

Page 15 of the same document -- 15 of 50, the last paragraph, the third line:

> "The FHA has been completed by a third-party expert and is reviewed at a minimum of five years."

What does that mean, "minimum"? Should it be maximum of five years?

MS. PETERS: Rebecca Peters, for the record.

The entire FHA is reviewed at a minimum of a five-year process. However, every time that a modification is made on site to any of the plant structures, it undergoes a third-party review for impact for fire protection, and that information is incorporated into the FHAs on an ongoing basis. So the FHA is a live document that we maintain, but there is an overall review on a five-year frequency.

MEMBER HARVEY: When you say a minimum of 5 years, that could be 6, 7, 10 years?

MS. PETERS: Rebecca Peters, for the

record.

There are -- we are continually submitting third-party reviews to staff so that there would not be a -- there would not be a gap such as that. All of our capital projects are subject to the scrutiny of the third-party review for fire protection.

MEMBER HARVEY: I was a little bit afraid by "minimum of five years" because it kept it open to ---

MR. CLARK: Dale Clark, for the record.

Just to add to that. I believe the intent of that wording is that we conduct those at least every five years.

MEMBER HARVEY: Okay, so it's a maximum then, not minimum?

MR. CLARK: Yeah, a minimum of a five-year frequency, maximum five years, yes.

MEMBER HARVEY: It was like I thought.

Just checking not to ask the same question that I asked previously. Okay, I'll come back.

THE CHAIRMAN: Dr. McDill?

MEMBER McDILL: Thank you.

On page 29 of Cameco's report, there's a reference to the UF6 operator who was injured and the dose would be assessed by -- I believe, if I remember correctly, this fall. Is that proceeding?

MR. CLARK: Dale Clark, for the record.

We have submitted a status report and an update on that and we continue to work with Health Canada and some other experts on that to finalize the calculation of that.

MEMBER McDILL: So this is one of those ones that's in Health Canada right now; staff?

No, it's a different one, okay, so it's just going through the system?

MR. ELDER: This is going -- we'll get you some detail for Day Two because this was actually the dose assessment not a reading of instrumentation. One of these things where you probably had to recreate the event to model it.

MEMBER McDILL: So we'll see something on that on Day Two?

MR. ELDER: Yeah.

MEMBER McDILL: Also in Cameco's document, you refer to the SAP database. This is the SAP, not your version of it? It's the international standard SAP program?

MR. CLARK: That's correct, yes.

MEMBER McDILL: Okay. And is it company-wide or just with the three facilities we're looking at today?

MR. CLARK: SAP is used company-wide, yes.

MEMBER McDILL: Thank you.

For I guess both Cameco and staff, there's a reference in staff's document on page 51 about the inspection of the drums.

Will there be an update on that in Day Two? It was a May 2011 inspection concerning looking at drums. Cameco got an answer coming now?

MR. CLARK: Could you clarify the page number you were referring to there?

MEMBER McDILL: It's page 51 in staff's document:

> "Although waste inventories are being maintained due to the storage arrangement of drums inside the warehouse, it's not possible to easily verify inventory or inspect the integrity of the containers."

Staff is waving.

MR. RAVISHANKAR: Ravishankar for the record.

CNSC staff can confirm that Cameco submitted a corrective action plan on August 4th, and this is currently under review.

It includes conducting internal visual

inspections, inventory lists, segregation, et cetera. And Cameco has also committed to -- because this is an ongoing thing -- they have committed to give an update to us by the end of this year.

MEMBER McDILL: So we should have something in Day Two then?

MR. RAVISHANKAR: We will have a further update on this.

MEMBER McDILL: On page 44 of staff's document, there's a comment on soil concentrations in the waterworks parking lot. There's a tantalising statement "Soil concentrations do not appear to increase in the top soil horizon." It's kind of weasely worded.

MR. RAVISHANKAR: I'll ask Mr. Mike Rinker to address this.

MR. RINKER: Mike Rinker, for the record.

We have about five years of data on soil -- measuring very small or incremental loadings of uranium to the soil may take a long -- longer period of time, so we're still looking at it. But, certainly, in the first five or six years of data, there is no increase, no observable increase.

MEMBER McDILL: For Day Two, since the public and the community will be present, is that something that could be expanded upon a little bit for Day

Two?

MR. ELDER: Peter Elder. Just to clarify what you would want on this one.

I guess -- because we did provide the actual data on it, it's Table 9 on page 45. So you want some -- just to clarify what we're going to commit to do, is just more information?

MEMBER McDILL: I think I can read a table.

MR. ELDER: Yeah -- no, I understand. Interpretation of the table ---

MEMBER McDILL: For the public.

MR. ELDER: --- and why we say ---

MEMBER McDILL: I don't know whether a bar chart, a graphic with green and red and yellow showing the soil strata; something like that. That would be easier I think.

MR. ELDER: But just to clarify, it's the same to explain ---

MEMBER McDILL: Yes.

MR. ELDER: --- why we don't think this is a concern at this time.

MEMBER McDILL: Exactly, yes.

MR. ELDER: Thank you, yes.

MEMBER McDILL: Because as you recall from some of the previous ones, there's been quite a bit of

interest in that particular site. I'm not sure if Cameco has a different way of presenting it. Maybe they even have it on their website. I don't know, if they do, then ---

MS. PETERS: Rebecca Peters for the record. We've actually done some additional follow-up work looking at our air emissions in the soil deposition. And we've had a third party prepare that report and we will be providing that to staff shortly so they will have additional information for day two.

MEMBER McDILL: Thank you. I think ---

THE CHAIRMAN: Since we are on the same page the section before the site-wide environmental management plan. As you know there's lots of history behind that kind of issue. And there's another interesting little -- you put in some new wells and they're successfully installed and are scheduled to commence operation in fall 2011.

You know it will be really useful, we were talking about the plume, existing plume, is there a plume, where's it going? Is it going into the lake, et cetera? Maybe a nice update as to where it is and what's the current measurement on that? That's a longstanding angst in the community, and been discussed in this forum now for a long, long time. So maybe an update on that.

Staff, anything you want to say about it now, or do you want to wait for day two.

MR. RAVISHANKAR: Ravishankar for the record.

I just want to agree we will get something ready for day two in a more pictorial way and be able to explain that to the general public.

I just want to say that the current levels of contamination that is there, according to the site-wide human health and ecological risk assessment conclusions we have found that there is no adverse effect on the environment or people at the current levels. So this is just something that I wanted to put on the record.

THE CHAIRMAN: Yeah. But I think the people in Port Hope now are a little bit more sophisticated than that. So I would like to see the migration of the plume, so-to-speak, if there are any. So ---

MR. RAVISHANKAR: Yes, we will have that information in further details.

THE CHAIRMAN: Okay, thank you. Dr. McDill.

MEMBER McDILL: Thanks, Mr. Chair, that's all. I would like to thank both Cameco and staff. The graphs are nice and clear and the pictures are nice and

clear. It's been very nice to read.

THE CHAIRMAN: You just got a compliment. I think you should say thank you. That's a very --

MR. CLARK: Thank you very much.

THE CHAIRMAN: -- rare event. Mr. Tolgyesi.

MEMBER TOLGYESI: Merci, Monsieur President.

Just go back a little bit to these frequencies. My understanding is that medical treatment frequency includes also lost time injury frequency; or it is not?

MR. CLARK: We typically look at lost time injuries separately from medical treatment injuries.

MEMBER TOLGYESI: Yeah. But lost time, when it is a lost time injury it's a medical also, whereas a medical should not necessarily be lost time. So that's why I'm saying that probably I'm questioning, it's included or it should be added?

MR. CLARK: Dale Clark for the record. So we have a number of different ways of tracking and reporting that. So I'm not sure which metric exactly you're referring to, but we do track and look at the lost time injury frequency, the medical treatment injury frequency separately, and then we also have a metric that

combines any recordable injury as you mention, a medical treatment or a lost time injury. Both considered as recordable injuries, and the frequency rate of those as well.

MEMBER TOLGYESI: Does these numbers include contractors? Do you have any contractors on the site?

MR. CLARK: Yes. Dale Clark for the record.

We do and contractors are included on that. So all employees and contractors that are working on site are included in those statistics.

MEMBER TOLGYESI: Okay. And the next page we were talking a little bit about audits. It's done by Cameco or is it kind of third party audit, or if it's within Cameco is there some participation of labour representatives and an audit committee?

MR. CLARK: Dale Clark for the record.

We do, as part of our quality assurance and different programs we do conduct regular auditing of all of those programs on a regular frequency. Some of those are conducted internally and by in-house Cameco subject matter experts. In other cases we bring in third party experts and we use consultants and contractors to conduct those audits for us as well.

In terms of labour representation we do that as often as we can, and as where it's applicable. So that doesn't necessarily include every audit or inspection that's conducted, other than people that are directly involved in that area or topic.

MEMBER TOLGYESI: You were saying that you were putting in place this health and safety -- joint health and safety committee with labour representatives. Does it mean that they will be involved also in these audits, or you are not there yet?

MR. CLARK: Yeah. Dale Clark for the record.

I would be confident in saying we have very good cooperation in terms of our common goal of a safe work environment and protecting the safety of our workers and the public. We have very good cooperation and we have active involvement.

So in audits that are conducted in that area there is consistent representation. And not only through those audits, but of course we also have an active Workplace Health Safety Committee with representation from the labour union and staff representatives as well.

MEMBER TOLGYESI: You were saying that there is some increase number of injuries of hands. The frequency increase over past years. And you, I think you

had some serious accident now; laceration of fingers, which is hands also.

So what kind of specific action plan did you put in place to prevent, because this was in 2009/2010, and this laceration happened recently. So what was the implemented action plan and how it works?

MR. CLARK: Yes, Dale Clark for the record.

We have, you know, through the trending and the analysis that we've done in over recent years and especially with use of our Cameco incident reporting system tool, we have identified, you know, those trends and hand injuries is and has been one of our more significant challenges with respect to conventional health and safety.

And we recognize that we're not alone in that, that's a common challenge in the manufacturing environment as with others. We have conducted certainly for any of the individual events that we've had, we conducted an investigation and corrective actions from those.

In terms of recognizing the trend we have raised awareness across the site. In particular in 2011 around that trend of hand injuries that's become a dedicated focus of safety meetings across the site in 2011.

We've also conducted PPE assessments, or personal protective equipment assessments of all that we've identified as high risk activities in the operating plants, and make sure that we're, you know, we're giving a more thorough assessment to the right type of gloves that are used for those tasks and have made a number of changes.

And the recent example that you mentioned that occurred this year as a lost time accident with respect to a hand injury is another example where we've assessed and we've changed and improved the type of glove that is used for that task.

MEMBER TOLGYESI: On page 46 of your submission you are saying that the majority of residents, 65 percent, do not have any specific concerns, which means there's one-third at least they have some. What kind of concerns we are talking about?

MR. THORNE: Andy Thorne for the record.

It's actually the same issue that we have at Blind River. So if I could ask that -- we had some discussion during the break, if I could ask that we could come back to you at day two with some further clarification on that area, if that's okay?

MEMBER TOLGYESI: Are all facility employees resident of Port Hope, or are they coming from

surrounding communities also?

MR. CLARK: Dale Clark for the record.

We do have employees from surrounding areas and communities as well. We certainly, you know, we have a large percentage of employees that live and work in Port Hope, but certainly not all, not a hundred percent.

MEMBER TOLGYESI: Because on page 47, you are talking about forums; meetings with Port Hope Municipality and there are forums and my question was, are these forums and communications limited to Port Hope or they are designated also to reach surrounding areas, surrounding other municipalities?

MR. THORNE: Andy Thorne, for the record.

The forums that we hold are community forums and -- but they’re open to anybody to attend actually. The invitations for those are typically posted in local newspapers primarily in Port Hope, but we have a -- Port Hope sits in Northumberland County which is a much larger area that includes Cobourg and some of the surrounding areas to Port Hope. The invitations to those community forums are actually provided in that broader newspaper that goes out further than the Port Hope region.

MEMBER TOLGYESI: And do you have a knowledge if those municipalities are coming -- participating or not necessarily?

MR. THORNE: We do -- we do try and keep track of the people that do attend those forums. I would say primarily, the interest is within Port Hope. We do -- we do have a smaller percentage of people that do come from outside the specific Port Hope area. But primarily, they're Port Hope residents because the facilities are in Port Hope and the community of Port Hope are interested in our operations.

MEMBER TOLGYESI: Because what you're saying that community forum newsletters is published and mailed to each mailing address in the Municipality of Port Hope. That's why I'm asking. What's your outreach to other communities?

MR. THORNE: That's correct. With the mailing shot that we do following a community forum does focus on Port Hope residents. What I will say is we have a very comprehensive Fuel Services Divisional website now that we're actively using to present information to specific local community and others that are interested in our operations.

The presentations that we provide at those community forums typically are posted on our website following those events so that they're available for anybody, actually, anywhere in the world to view if they choose.

MEMBER TOLGYESI: On the little bit more technical side, you are saying that PACF is a unique within the industry having a well-established and effective scrap metal recycling program. Do you process also scrap metal which is coming from outside of your facility, or outside of Cameco?

MR. CLARK: Dale Clark, for the record.

We do have a cleanup program that cleans and is able to recycle scrap metal. That's exclusively for onsite material that's generated; no material from outside the material.

MEMBER TOLGYESI: And my last -- it's -- when you are talking about, you know, you are using lots of hazardous chemicals in your production what I'm talking about; acids, sulphuric and nitric acid et cetera and these products are -- once integrated in a process generate some waste which is not necessarily radioactive.

What you do with -- because what you are saying that existing waste management program for recycling chemical by-products and contaminated waste will be maintained, which means that you are recycling them.

And then on the following page you are saying that:

> "Recycling of these products is expected to begin 2012."

Which means that it will begin next year, so could you be more precise on this?

MR. CLARK: Yes, Dale Clark, for the record.

And I might ask to clarify that question or the specific point in just a minute. But also, first, to clarify in my previous answer and to correct; we do -- with that recycling program and the cleanup program, we do and have processed scrap metal from other Cameco facilities within the division, specifically, Cameco Fuel Manufacturing and Blind River facility; not from outside of Cameco. So my apologies for that correction.

In terms of your last questions, can you point to that specific section again?

MEMBER TOLGYESI: On page 41 of your presentation, in the last paragraph. We are talking existing waste management programs for recycling of the chemical by-products and contaminated waste will be maintained, which in my mind was that probably you recycle. If it’s maintained, it means it’s recycled now and it will continue.

Whereas in the next page, in the first paragraph you are saying that:

> “The EA was not required for recycling of some chemical by-products;

therefore, recycling of these products is expected to begin in 2012."

There's a kind of discrepancy between these two statements.

MR. CLARK: Yes, Dale Clark, for the record.

We do -- we have a by-product that's generated from the UF6 process. Currently and for many years, that by-product has been recycled through a facility in the United States and that is an available outlet that we have and we plan to continue to utilize. The following from that is that we are looking at opportunities to recycle that product to the Key Lake facility in Saskatchewan and that's the -- that's the reference in the following page.

MEMBER TOLGYESI: My last is that means you should store sometimes these products on the site, okay? Do we have some licensing limits to what extent and what type of waste you could store?

MR. CLARK: Dale Clark, for the record.

We do -- so we do have outlets established for that recycled product and we utilize those outlets regularly. So there is no significant or bulk storage of that material from our current process and there are no limits, specifically, on that storage of the by-product

material.

THE CHAIRMAN: Thank you.

Monsieur Harvey.

MEMBER HARVEY: Monsieur le presidente.

Page 18 of your document -- Cameco's document, under 351 relevance and management, we're talking about changes to the physical design of equipment, processes and facility with the potential to impact safety evaluated from project planning through completion. And the last sentence aside:

> "Design control procedure is in place to ensure any equipment changes or modifications will not have an adverse effect on the environment..."

Et cetera. Well, I think there is an obligation anyway to report to the staff if you're changing something. I tried to link that with the -- maybe the end book, page 20, where can read:

> "Changes that are outside the licence conditions are not permitted without the prior written approval of the CNSC."

How does it work? I think it's okay, like I read it here. You've got the committee and you will look at, but you've got at a certain moment to come back

to the staff, I suppose. That's on page 18.

MR. CLARK: So Dale Clark.

I'll ask my colleague, Ms. Peters, to elaborate on that change control and when that triggers notification with the CNSC.

MS. PETERS: Rebecca Peters, for the record.

The change control procedure is used to assess all changes that occur within the facility. Within that, there is a mini risk assessment to determine the significance of that change and higher significant changes would then have to go through our internal change control committee and gain their approval.

Those changes can be reviewed by CNSC staff when they are onsite. Changes of larger significance such as the relocation of our depleted uranium dissolution circuit which we talk about in our CMD; those types of changes would be the ones that we would go to staff for their further input prior to implementing those changes.

MEMBER TOLGYESI: But who decides to go to the staff? I mean,

are you talking with the staff on a regular basis when you're doing that or you decide by yourself that you don't have to go to the staff?

MS. PETERS: Rebecca Peters, for the

record.

There is criteria for the significance of a change or a system within our process. There is also a list of systems that we term to be “safety significant” and as the single point of contact with staff, I’m in routine dialogue with staff about that.

I’m also a member of that change control committee, so there is that link between myself and staff, and we are talking about these ongoing changes through our routine correspondence.

MEMBER HARVEY: Can you comment on that?

MR. ELDER: Peter Elder, for record.

I mean, what we’re going through is how a change control process should work. What we require the licensee to have is a formal process that is documented so that we can go in and audit it. So we don’t -- rather than them asking on a daily basis do you need to see it or not? We said, you have a process, you follow it, we’ll audit it, and if you make a change that should have been approved that wasn’t you’re in non-compliance with the licence and we’ll deal with the non-compliance. You know, it’s their responsibility to have a process to identify those things that have a different nature than is in their documented safety case.

So we expect them for each design change --

there to be a comparison; that comparison to the safety case to be documented so that we can review it, and if it is determined to be a significant change they need to have our approval.

MEMBER HARVEY: Thank you. You have a question related to that or -- no, okay. Got it all.

Page 35 of staff CMDs, Application of ALARA. There is quite a few paragraphs there talking about ALARA and my question is -- make it as short as possible -- is it possible to express one way or another the results of an ALARA application?

Because we are quite often talking of ALARA here and there and it's something vague and, okay, we're working on that. But is that possible -- is it possible to identify very specific things that came from ALARA?

I'm asking the question to the staff or to ---

MR. JAFERI: Jafir Jaferi, for the record.

I'll give one example and then I'll ask staff to fill in, in case something is additional there.

One example ---

MEMBER HARVEY: I'm just underlining the last sentence of those paragraphs:

"The CNSC staff is satisfied with the licensee's efforts in keeping the dose of the worker and the public as

ALARA."

MR. JAFERI: We have asked licensees to give us some criteria in terms of keeping the doses to workers minimum as ALARA, and they set objective every year. If they don't meet that objective that means they are not ALARA.

So in the case of Port Hope Conversion Facility, they have set objective, for example 10 milliSieverts per year, and they have met that.

MEMBER HARVEY: Okay, you want ---

MR. ELDER: I think I'll ask to see if Caroline Purvis wants to add some other concrete examples of what -- looking at ---

MS. PURVIS: Caroline Purvis, for the record.

It's a good question. ALARA is essentially looking at all parts of your radiation protection program that may impact workers and trying to incorporate improvements. Not only just those that will decrease dose, but perhaps contamination levels within your facility; designing and engineering controls to reduce dose so that you don't have to use administrative controls.

So certainly, yes, we do report dose and dose is one parameter on which we will look for continual

improvement until such time as you are ALARA. But there are other parameters that we would look at, and holistically we want to see that the licensee is striving for continuous improvement.

MEMBER HARVEY: Thank you.

Page 40 in the staff CMD. Staff conducted a Type 1 EMS inspection in 2010:

"Although CNSC staff noted the inspection as satisfactory there were a few weaknesses found in the program. These were related to environment planning, implementation, monitoring, and measuring. However, these weaknesses were minor in nature and Cameco is in the progress of addressing these issues."

Could you give us some examples of "minor in nature"? What could that be because if you mention it here it has a certain importance, but what importance?

MR. ELDER: Just bear with us a second, we're trying to find the actual --- on this one. What we're -- so I think I'll ask Mr. Avijit Ray to answer.

So I think Cameco may want to respond first though.

MS. PETERS: Rebecca Peters, for the record.

Most of the findings were with respect to some minor improvements that could be made to the

documents, the procedures and the plan, and how we actually use those procedures and plans in actually implementing that environmental management program. So some -- just tightening up the wording in how we link to the requirements of the ISO 14001 standard.

However, as we indicated earlier, we were just recently re-registered to the ISO 14001 standard and these opportunities that staff pointed out are truly opportunities for us to further improve our already robust system.

MEMBER HARVEY: So most of the time it is related to documents, more related to documents than to physical equipment, something like that?

MR. RINKER: Mike Rinker, for the record.

That’s correct. They’re so minor in nature it took us a few minutes to remember what they were.

But they were related to document control and not to problems with releases or monitoring and so on.

THE CHAIRMAN: It would be useful if you could characterize them as such, as document in nature, and even more interesting is if you actually put a completed date. When you leave those things in the process of addressing them we have no idea what completion date will look like. It could be many, many years from now. So ---

MEMBER HARVEY: That's why they've got such a question.

THE CHAIRMAN: Right.

MEMBER HARVEY: Last one.

On page 45 on the groundwater and surface water monitoring, "Should the pumping continue...", and we've got that on the table there showing the what has been removed and -- but do you -- maybe it has been done and I don't recall.

Have you got an idea of the quantity of the elements that are in the -- because we -- you say this is what we took out from the ground, but you have an idea of the volumes or the amount of each element in the -- because you say it's going down so maybe there is less contamination but, maybe not, we don't know.

Maybe it just -- it stays there and because -- and the pumping does not do what it should do. We had already experimented such thing in Quebec years ago. So could you just comment on that?

MS. PETERS: Sure, Rebecca Peters, for the record.

The intent of the pump and treat system is two-fold. It's, first, to reduce the flux of contaminant loadings in the groundwater to the Port Hope Harbour, and the second is to maintain a zone of capture of that

contamination that's locked up in the soil beneath the UF6 plant, primarily, and as well some further down beneath the U02 plant.

The pump and treat system as we put into place is working as intended and it is maintaining that zone of capture around those buildings. It's also significantly reducing the flux of contamination to the harbour on an annual basis.

Now, we monitor the effectiveness of that system through our groundwater monitoring program, which staff have described in their CMD, and we compile that information -- actually, we have a third party compile that information and provide an annual report to us which we then submit to not only CNSC staff but the Ministry of Environment as well. So they are reviewing that data on an annual basis. And the indication is that the pump and treat system has stabilized and is maintaining the objectives that it was set out to address.

MEMBER HARVEY: Without knowing exactly what the quantity of the amount of contaminant there. So you don't have an idea of when will stop that pumping, it could last for years? You don't know ---

MS. PETERS: Rebecca Peters, for the record.

The intent of that pump and treat system is

to continue to pump for the foreseeable future. There is no intention to eliminate that pump and treat system at this point in time.

We will continue to collect the data and analyze it on an annual basis, and as additional data comes in, at some point, in the far foreseeable future, we might make some modifications but we will do that in consultation with both CNSC and MOE staff.

THE CHAIRMAN: Go ahead somebody.

MR. RINKER: Mike Rinker, for the record.

Just to follow up, we do have a sense for how much contamination they're removing. And if I could give an example, in 2010 approximately 14 kilograms of uranium was captured in the dewatering system. And so it is being monitored.

And there are a number of sources of contamination to the groundwater. There are two buildings that showed some leakage in the subfloor. Those buildings have been remediated. But we would expect pump and treat to continue until, you know, such a time as those buildings would be eventually decommissioned -- facility decommissioning.

MEMBER HARVEY: My point is, I know that -- you know what you are -- what is pumped from there and the quantity. I agree there is a figure on that. But my

question was just what percentage are you taking out of there each year? So it could be .01, one or 10 percent. But that was the essence of my question.

MR. RINKER: Mike Rinker, for the record.

I guess if we look --

MEMBER HARVEY: These are sources reducing.

MR. RINKER: I guess if we looked at -- there are two ways to remediate this that Cameco has pursued; one is to remove the source, removing the soils that are contaminated. And if we used Building 24 -- we have a sense that they've removed almost 95 percent of the contamination by removing the soils, but the percent of uranium that is in groundwater is a bit harder to quantify because we're dealing -- you know, it's a much smaller percentage that is actually in the groundwater.

And the criteria that we would be looking at in terms of when is it good enough or safe enough, I think is a little bit too precise to say that we're getting five percent every year, or an example like that. We just want to monitor it and expect them to keep removing it until such a time that there isn't an unsafe release.

MEMBER HARVEY: Merci.

MEMBER BARRIAULT: Thank you, Mr. Chairman.

That same table, Table 10, I had problems

with that, and the problem I had was maybe it's based on assumptions but you are assuming that you are pumping this identical volume from year to year. I would have found the table much more meaningful to me if I would have a litres per hour or gallons per hour of what's being pumped. If you're pumping less, obviously, you'll have less coming up; if you pump more, you'll have more coming up.

I don't know, maybe it's been done, and maybe the volume is constant but I find that hard to believe that the volume is constant from all these pumps at all times.

MS. PETERS: Rebecca Peters, for the record.

The information provided in Table 10 is taken out of the annual reports that I referred to. In those annual reports it uses the actual pumping rates and the concentrations that are measured at those wells through our monitoring program to determine what the total removal of contaminants is. So that information is factored into this information.

MEMBER BARRIAULT: So the assumption is that the volume is constant?

MS. PETERS: No. The actual loadings that are calculated are based on the actual pumping rates which

we monitor. That's part of the requirement from the Ministry of the Environment is that were monitoring those pumping rates real time.

So that information -- the days that there's a higher pumping rate at that well and a lower pumping rate, that's all factored into those calculations.

MEMBER BARRIAULT: Okay, but it's not in this explanation?

MS. PETERS: No, it's not provided in the table but it's provided in the calculation that came to these numbers.

MEMBER BARRIAULT: Thank you.

Thank you, Mr. Chairman.

THE CHAIRMAN: Anybody else?

Okay, just to follow up on this again for Day Two, because there is so much interest in the loading and the remaining, you know, historical contamination, plume, and all that stuff it would be nice if we can actually put the date in a way that people can understand and relate to it.

I've got a couple of questions here. I'm not familiar -- I don't know too much about the ISO 14001. You seem to spend a lot of effort in trying to re-register. Is it required to re-register every, what, every five years?

MS. PETERS: Rebecca Peters, for the record.

It's every three years. So we have surveillance audits with the registrar every year in between that. So we are audited by them annually and the re-registration is every three years.

THE CHAIRMAN: So what do they do which is different than what MOE and us do?

MS. PETERS: Rebecca Peters, for the record.

They are looking at the actual ISO 14001 standard, there is a standard, and they're auditing our environmental management system against that standard. So it's an audit of the system.

MOE and CNSC staff evaluate not only our system -- our monitoring programs and our systems, but they also look at our actual environmental performance as well. So that would be our emissions.

THE CHAIRMAN: So my assumption, if you get a good report why wouldn't that be something you'd be readily willing to publish and show everybody?

I'm just trying to figure out why, and maybe CNSC can help me about what do you know about what's going on in this kind of an audit?

So first to Cameco.

MS. PETERS: Rebecca Peters, for the record.

THE CHAIRMAN: Is it confidential material in this report?

MS. PETERS: Rebecca Peters, for the record.

Some of the information that the ISO registrar reviews is information that we would consider sensitive either from a business perspective or from a security perspective. So we don’t -- they are not authorized to release the findings of their audits publicly. They either re-register an applicant or they do not re-register an applicant.

If I could go back to the discussion held with Blind River this morning about the aspects registry, which is a part of the requirements of ISO. The aspects registry is, essentially, it’s an additional risk assessment. It identifies some of the risks that are on site. Information in that aspects registry Cameco would also consider sensitive either from a business perspective or a security perspective or both. So that type of document we would not release openly to the public.

However, the safety report that Cameco is required to have does assess the impact of the facility on the environment. And we have provided to staff and can

provide to the public a public version that we would be willing to release to the public of that safety report which would involve some of that information.

THE CHAIRMAN: Well that's my question. Why wouldn't you do that?

And staff, is it a useful kind of yet another third party review of the system and procedures of the organization?

MR. RINKER: Maybe to answer that question -- Mike Rinker for the record.

The CNSC's S-296 has a requirement for environmental management program and ISO 14001 could be used to satisfy that. It's not necessary.

But we do have a requirement to have policy's procedures document control and a management structure that is put in place to respond to events if monitoring programs identify a risk. That's kind of in a nutshell, what that program would require.

We have that information as noted in some of those minor deficiencies that we identified. Those are about documents control.

So we present the information to the Commission and to the public that would also be in there. But we also presented more in terms of what are the releases and what are the risks to people I think is a

little more user friendly way to provide the information.

THE CHAIRMAN: Let me move on. I know that the licence allows for small quantities of enriched uranium. Do you have enriched uranium now on site, and what -- and if yes, what are you using it for?

MR. CLARK: Dale Clark, for the record.

We do currently handle and store some enriched uranium compounds that's used for some research and development purposes in small quantities that we use for research purposes. And then also for storage of historically contaminated materials that contain some in small quantities that we use for research purposes and then also for storage of historically contaminated materials that contain some enriched uranium, material that is stored in a -- located in a secured building. So we do that handling for -- small quantities for research and development purposes and then also to cover the storage of some of the historic materials.

THE CHAIRMAN: What kind of R&D are you engaged in?

MR. CLARK: Dale Clark, for the record.

So our research facility for Cameco is located in Port Hope at the Conversion Facility. They do research for all of Cameco and for all the Cameco facilities that happen to be located here on site.

I don't believe that there are current research efforts underway, but there have been, you know, over the course of time and there may be, in the future, other opportunities that the research development works on.

THE CHAIRMAN: I guess my simple question is if you really don't have a high use for it, why don't you get rid of it? I mean, why would you want to -- because I guess with enriched uranium goes some further obligations. So ---

MR. CLARK: Yes, Dale Clark, for the record.

It's -- the material -- the quantities used for research and development are very small quantities that are potentially around, and our intent and objective is to keep that material to an absolute minimum, and we continue to work on and investigate ways to safely manage and remove that material from site. So the vast majority of that is the storage -- the safe storage of historic materials.

THE CHAIRMAN: So you don't mind the additional scrutiny from the IAEA and other such friendly auditors?

MR. CLARK: Dale Clark for the record.

We work very cooperatively with the IAEA

and all the other regulators. They are aware of that material in inventory and certainly, you know, we will continue to work on finding avenues to remove that material as much as -- and as quickly as possible.

THE CHAIRMAN: How many visits from the IAEA a year do you normally get?

MR. CLARK: Dale Clark, for the record.

I don't have the exact number, but I would be comfortable in saying it's very similar to what we heard from Blind River facility this morning.

THE CHAIRMAN: Staff?

MR. RAVISHANKAR: During the licence period, there were 11 inspections by IAEA over five years.

THE CHAIRMAN: So it's again, roughly two per year. I'm just trying to tally all the activities of the IAEA here in Canada around facilities.

We mentioned a few times here the Ministry of Environment, and you mentioned the certificate of approval, and I'm trying to -- what's your assessment of ability to meet their, I guess, the new requirements for uranium in air, some of the effluent control, et cetera?

MR. CLARK: Dale Clark, for the record.

We are aware of the new guideline and standard on uranium in air from the Ministry of the Environment that comes into effect in 2016. We also

understand that there is some further guidelines that are being developed in terms of how to conduct the modeling and the assessment for that new standard. Although, based on our preliminary assessment, we are confident that we do and will meet that new requirement for uranium in air.

THE CHAIRMAN: Staff, you want to comment on this?

MR. RAVISHANKAR: Ravishankar, for the record.

Based on our review of the data, we know that their current operations will meet the new standard by Ontario Ministry of Environment.

THE CHAIRMAN: It was mentioned that a certificate of approval is due from them. Will we hear about this for Day Two? Presumably, we will invite MOE to attend and maybe they can comment on this.

MS. PETERS: Rebecca Peters, for the record.

We have had correspondence with the Ministry of the Environment on that C of A application. As my colleague, Mr. Clark, indicated, the MOE is currently developing their guidance for how to assess compliance with the new uranium in air standard, and we believe that that is their -- once that assessment and that guidance document is available, they will continue to

process our application for the renewal of our C of A.

We have received correspondence from the Ministry indicating that we are to proceed and to continue operating under our existing C of A until the new one is issued.

THE CHAIRMAN: Staff, we are not going to be surprised with a new one, right? I guess, you are not anticipating being surprised, let me put it that way?

MS. PETERS: Rebecca Peters, for the record.

The C of A application, it's basically a renewal of the existing conditions in the existing C of A for discharges to air that we have from the Ministry. So we are not expecting any changes as a result of that process.

THE CHAIRMAN: Okay. Last two questions here. I thought I heard that you requested an amendment to the licence to deal with an increasing discharge capability. Is that really a new request now or maybe I may have missed it in the documentation here?

MR. ELDER: Peter Elder. Maybe I'll start because I'll explain where we got to, in terms of our draft licence.

Cameco had mentioned that they are no longer having effluent releases, liquid effluent releases;

that currently they are evaporating all that -- the water that's trapped from the wells and other sources. So when we looked at this, and their application was actually silent on what they were planning to do in this area, so we assumed that they were no longer -- going to continue to not have any liquid effluent releases. So there's no need to put limits on what they were releasing, because they weren't releasing anything.

That said, I understand Cameco is interested -- may need to rethink their approach to effluent -- to treating the liquid effluent because of the volumes and certainly they may get increased volumes once they get into the decontamination work if Vision 2010 goes forward as well.

So we, in principle, have nothing against a licence condition that puts in effluent releases for liquids. We have two concerns at this time; one, is that if we just mention whatever they do has to -- whatever we propose in the licence, we would like to make sure it's aligned with the Ontario Ministry of Environment requirements. The old -- the limits in the current licence are aligned with what they are allowed to do by the Province. If they want to do anything else, they would need new approval from the Province.

And the second one is we would like a

little more information on what sort of technology they would be looking to treat this liquid effluent before we put in a licensed condition on it.

THE CHAIRMAN: So we will expect, I guess, a supplementary submission of some sort?

MR. ELDER: We -- I think if they make a supplemental submission in terms of what they were proposing that we could review -- currently, there is no releases and we would need to see more information on what sort of -- especially, what sort of treatment technology they would be using if they were going to restart releases.

THE CHAIRMAN: But are you to consider all of this for Day Two? Is that what I'm hearing or is it beyond?

MR. ELDER: If Cameco can give us the information in time, we can consider it for Day Two.

THE CHAIRMAN: Cameco?

MR. THORNE: Andy Thorne, for the record.

We intend to provide that information before Day Two.

THE CHAIRMAN: Okay, that's -- remember, this is a public process, and you've got to give some due time for everybody to be able to read it and assess it.

Okay, my -- you want to ---

MEMBER TOLGYESI: (Off microphone).

THE CHAIRMAN: Okay, go ahead.

MEMBER TOLGYESI: Merci, monsieur le président.

On page 40 and 41 of the Staff document, when you are looking at:

> "The UO2 plant uranium daily stack emissions were consistently higher from 2009, 2010, and 2011 than to previous years."

Okay. Now, on the next page, what you are saying that -- on the just before-last paragraph that,

> "The third party sampling was consistently higher than what Cameco was measuring."

And did you find what is the reasons for this consistently higher or lower measurement?

MR. CLARK: Yeah. Dale Clark for the record. I'll let my colleague Ms. Peters respond to that in more detail.

MS. PETERS: Rebecca Peters for the record.

As staff's CMD indicates, we conduct third party, we have a third party stack tester come in and verify our emission rates that we are measuring. Through some concurrent testing with the stack sampler we did

identify that the third party was measuring consistently higher emission rates coming out of that UO2 main stack.

So effective in 2009 we actually applied a sampling factor to the emissions, and that accounts for the increase that you see from 2009 and beyond. So it was the application of that sampling factor effective January 1st of 2009.

MEMBER TOLGYESI: But in the same paragraph what you are saying that when the correction factor was applied to 2009 resulting emission rates slightly surpassed the action level of seven grams per hour, which is not 1.4, but seven. So I feel that, you know, when you have 1.4, 1.3, 1.2 it's consistent. But you are saying in 2009 you were measuring and you find that the third party measurements were higher than yours, and it should be seven, not 1.4. I'm a lost a little bit in these figures.

MS. PETERS: Okay. Rebecca Peters for the record.

The data that's in that table is actually the annual average. So that is the average number, that 1.3, 1.4 ---

MEMBER TOLGYESI: M'hm.

MS. PETERS: --- numbers. Those are the averages over the course of the year. The three points that are referred to on the next page are actually

individual days. So those would be the maximums measured for that day so that the information is simply providing, that staff's provided, is the annual average which is not the same as the individual days.

MEMBER TOLGYESI: What it's telling me and proving me that your figures are not consistently lower when you were doing three -- one, or two, or three days of spot checks your measurements were lower. Could I say that it's consistently over a year like this?

MS. PETERS: Rebecca Peters for the record.

The three days that were identified after we -- and just for clarification, we retroactively applied that factor. So that factor was -- the source testing that was conducted was conducted in June of 2009. The factor was applied retroactively to the data as of January 1st. When we retroactively applied that factor we identified three days that had these elevated emissions.

Those days were days that we were actually doing maintenance work on emissions control equipment. So we were able to explain the higher emissions results for those particular days.

MR. CLARK: Dale Clark for the record.

Just one other point maybe to clarify that and to ensure and help to understand that. That sampling is conducted every day. So those yearly average results

are an average of every day sampling conducted. So the exceedances of seven that you mentioned were out of all of those individual daily averages, there were three individual days where it was above seven. When averaged with all the other 300 and some daily results it comes to the 1.3, 1.4 numbers.

MEMBER TOLGYESI: Which means that when you were comparing to third party measurements you were consistent with them for other than these three days?

MR. CLARK: Dale Clark for the record.

So the -- we applied a correction factor to ensure that all of our results are consistent with the third party measurements. So that initially indicated there was some discrepancy. We applied a correction factor to those results that ensured that all of our results would match and would be consistent with the third party testing and results.

After that correction factor was applied that resulted in three individual daily results above the level of seven.

MEMBER TOLGYESI: So do you have staff, some comments on this?

MR. ELDER: In terms of I think what has just been explained is correct. They do sampling, Cameco does sampling every day. Then periodically they have an

independent party do sampling at the same day as they -- you know, and in conjunction with them, one of those in 2009 there was a discrepancy between what the independent sampler and the Cameco one.

Cameco then said, well, if I'm reading ten percent low I'm going to go back and change all my past values and add ten percent to them. I'm using ten percent example. When they did that three of those past days went above their daily action level, which is seven grams per hour.

THE CHAIRMAN: Okay. I think we get it.

MR. ELDER: Yeah.

THE CHAIRMAN: Okay. Any other ---

MEMBER BARRIAULT: Just one brief question, Mr. Chairman. My understanding is that on your stack, your main stack you've installed a HEPA filter on it? You don't have a filtration system on your stack?

MR. CLARK: Dale Clark for the record. We did install -- we installed nine HEPA filters over the course of this licensing period.

MEMBER BARRIAULT: Right.

MR. CLARK: Those were not installed on the main stack, those were installed on building ventilation sources in both the UO6 and the UO2 plants.

MEMBER BARRIAULT: Okay, thank you.

MR. CLARK: Yeah.

MEMBER BARRIAULT: That's all, Mr. Chair.

THE CHAIRMAN: Okay. Last question. And I just want to make sure that we are clear on moving onto day two. Just from Cameco and from staff, I'd like you to talk little bit about is there any relationship between the Vision 2010, we maybe consider changing the name to Vision 2012 maybe, between the requirement to coming on a licence for that activity will have no impact on the operating licence you're seeking for five years right now.

So we should not mix apples and oranges here. Did I get it right, or is there going to be an impact, possible impact between Vision 2010 implementation licence and the operating licence that you're seeking right now?

MR. THORNE: So Andy Thorne for the record.

So just to clarify your comment on the name of Vision 2010. Interestingly we have chosen another name for Vision 2010. The project's name will be renamed to Vision in Motion. That renaming, we didn't want to complicate the environmental assessment process, so we needed to keep the Vision 2010 name through that process. But once we move into the, basically the detail design and the implementation phase of this project it will be renamed to Vision in Motion.

As far as we're concerned we believe the licensing process is separate, and we expect to start moving into, once the EA process is completed, we expect to move into the licensing process for Vision 2010 sometime in 2012.

THE CHAIRMAN: Staff, do we know when the EA going to be complete and the process after that?

MR. ELDER: So to give you update on the process we noticed that we had a public comment period that closed about two weeks ago on the draft comprehension study report. So we're in process now of looking at the comments that came in and seeing if anything has to be updated, where they're looking at presenting that.

In this process, the comprehension study, the final decision is made by the Ministry of Environment. So we're in the process of moving forward with -- we're looking at a potential decision by the Ministry of Environment in the first quarter of 2012.

After that and because they have to -- there are some options and one option coming out of the environmental assessment is Cameco then has to determine which option they will proceed with. They need to provide us some detailed information on how they're going to implement that option.

But it is a separate licence activity in

terms of it's a decommissioning activity versus this current licence that says it allows them to operate the current facilities and store material on the site. It does not allow them to decommission. So they would either have to amend this licence or to include the decommissioning requirements for those other buildings.

I'm just reminded, they need to give us some details on how they're going to do that decommissioning.

We have two issues that are of most concern to us: One is, how do you decommission old buildings while you're operating new buildings beside them? So how are they going to do the work control to make sure that the decommissioning does not affect the safe operation of the current facilities?

Our other main issue is, how are they going to address the harbour wall, and making sure that their activities have to be coordinated with what's going on with the Port Hope air initiative on the clean-up of the harbour. So our issue is to make to sure that they do whatever can be done to make sure that harbour is not recontaminated after all the clean-up activities.

THE CHAIRMAN: Okay, anything else? Any other questions? Okay, thank you very much. This I -- Marc, what do I have to ---

THE REGISTRAR: So this brings to a close the public portion of the hearing. The hearing is to be continued with day two on January 18th and 19th, 2012, at the Town Park Recreation Centre in Port Hope. The public is invited to participate, either by oral presentation or written submission on the hearing day two. As indicated earlier, persons who wish to intervene on that day must file submissions by December 19th, 2011.

So the hearing is now adjourned to January 18th. We will take a short break and start the hearing on the application for Cameco at what, 3:00? 3:05?

THE CHAIRMAN: 3:05.

THE REGISTRAR: Three o five (3:05), for the next hearing, thank you.

THE CHAIRMAN: Thank you.

--- Upon recessing at 3:14 p.m.

--- L'audience est suspendue à 15:14