Cameco Corporation : Application
by Cameco Corporation For Renewal of
Class IB Nuclear Fuel Facility Operating
Licence for its facility in Port Hope, Ontario

06-H18.1 / 06-H18.1A
Oral presentation by Cameco Corporation

MR. GRANDEY: Thank you, President Keen, and Members of the Commission and Staff.

My name is Jerry Grandey. I am the President and Chief Executive Officer of Cameco Corporation. And with me today is Bob Steane, immediately to my right, the Vice President responsible for our Fuel Services Division. Bob will be presenting today and tomorrow. Some of the managers of our Ontario facilities are behind me and they'll be introduced to you all later. And also with us is John Jarrell, Vice President, Safety Health & Environment for the corporation.

It's a great pleasure to be back before the Commission which is now in support of Licence Renewal Applications for Port Hope, for the Port Hope Conversion Facility, our Blind River Refinery and our Zircatec Manufacturing Facility.

And these facilities are a key link in the

world's nuclear fuel supply chain. They are big contributors to the communities where they operate and we are extraordinarily proud of all of them.

In 2001, the CNSC changed its approach and extended the duration of our licences for these facilities to five years and from two.

Five years goes by very quickly but throughout the licence period we have responded effectively to issues that emerged, both operationally and through the regulatory process. Our commitment to protecting the health and safety of people and the environment is constant, but our business landscape has changed dramatically over the licenced period.

There is very little question now that the nuclear renaissance is underway, underway throughout the world and Canada is well positioned to take a lead in that development.

It is now clear that the demand for our products from all of our fuel services operation will increase in the years ahead. And the growing optimism of that nuclear energy is creating for us, and in many orders in this business, new opportunities. But to take full advantage of these opportunities we need to bring new projects on in a timely and predictable manner.

Inability to do this has already cost

Cameco an opportunity to process the new fuel required by the Bruce “B” reactors, otherwise, known as “SEU”.

There is no question that we could have plunged into slightly enriched uranium or SEU simply while protecting the environment at the Port Hope conversion facility.

However, in our enthusiasm, we did not adequately engage the Port Hope residents to ensure an informed discussion. The SEU experience, with some prodding from the CNSC, I might add, demonstrated to us that we could do a better job of fostering community understanding of our operations. And through that we have responded.

We have made a concerted effort to engage the people of Port Hope in a meaningful dialogue on issues related to our operations. Through an ongoing series of public forums the people in the community have defined for us the issues they want more information on.

We received a lot of positive feedback on this process and the level of negative rhetoric has declined. In polling conducted in June, we found that 80 per cent of Port Hope residents support continued operation of the conversion facility.

This is an improvement on the strong support we have enjoyed in Port Hope for many years.

Given this and the record of the SEU to date, support for Cameco did not draw below 66 per cent.

Sensitivity to community concern is also reflected in our operating performance. In consultation with the CNSC Staff, we have greatly enhanced our fire protection and emergency services at the conversion facility and we are committed to further improvements in the months ahead.

Security is another area where we have made and we will continue to make significant improvements as appropriate to each individual facility.

Cameco's operating philosophy is underpinned by a commitment to build a strong safety culture in each of our operations. And here we recognize and appreciate the leadership that CNSC has showed in this area in helping to promote the importance of a strong safety culture for ongoing excellence.

To conclude, I would like to note the importance of Cameco's fuel service operations. Our refinery in Blind River and the conversion and fuel manufacturing operations at Port Hope fuel 20 per cent of Canada's electricity generation, seven per cent of the U.S. electricity generation and three per cent of Europe's. Zircatec supplies about half the fuel bundles used in Canada's reactor fleet and has applied for

approval to produce low-void reactivity fuel to enhance the performance of the Bruce “B” reactors.

We also make a big contribution to Northumberland County. We provide 700 quality, industrial jobs, generate business opportunities for local firms and support cultural and charitable activities in the community.

Our economic impact study showed direct spending in Port Hope by Cameco totalling almost 63 million dollars in 2005, accounting for nine per cent of all economic activity in this municipality.

A lot of people are counting on us and that gives us a responsibility to maintain a safe and environmentally-sustainable operation and earn public trust.

I believe we are meeting that possibility and hope that the Commission will agree at the conclusion of these hearings.

Finally, I thank you for the time and attention you are devoting to this matter which is, of course, of great importance to Cameco and certainly to the communities in which we operate. And now I will ask Bob Steane to continue our presentation. Bob?

MR. STEANE: My name is Bob Steane and I'm Vice-President of Chemicals, Fuel Services Division.

Madame Chair, members of the Commission, Secretariat and members of the public, I am pleased to be here to present a review of the Cameco Port Hope Conversion Facility performance over the past licenced period in support of our application for a five year licence renewal.

With me sitting here are Hess Carisse, the Manager of Technical Services, Tim Kennedy, our Manager of Production, Kirk Vetor, Superintendent of Compliance and Licensing, Tyler Rouse, Emergency Services Coordinator, Paul Riopel of Emergency Response Management Consulting and our support Staff.

Many of the topics are outlined in the slides mid-term licence review and subsequently captured in the Commission's Record of Proceedings.

The Port Hope Conversion Facility is located over 100 kilometres east of Toronto on the shore of Lake Ontario. The facility is located in the municipality of Port Hope and currently has approximately 400 employees.

The two primary products produced at the facility are uranium dioxide or UO2, which is used in CANDU reactors and uranium hexafluroide or UF6 which is a feedstuck for the enrichment process and subsequently used in light-water reactors.

The facility plant has an annual production

limit of 12,500 tonnes of uranium of UF6 per year. It operates 24 hours a day, seven days a week with a one-month maintenance shut-down each year. The UO2 plant is licensed to produce 2800 tonnes per year as uranium dioxide and it operates 24 hours a day, five days a week.

The facility is also licensed to produce 2,000 tonnes of uranium metal per year, but there was no metal production over the licenced period. Cameco has removed the equipment to produce metal at the facility, but retains the ability to melt and cast uranium metal. Accordingly, CNSC Staff have amended the draft operating licence to reflect this change.

In the area of Occupational Health & Safety our site motto is "No job is so important that we cannot take the time to do it safely." And this philosophy is applied to everything that we do at the facility and it is reflected in our record of safe operation.

Our annual lost time accident frequency has decreased since 2003 from two lost time accidents per 200,000 hours worked to .5 lost time accidents per 200,000 person hours.

Now although the five year moving average for medical aids has remained relatively stable over the licenced period, our annual frequency of medical aid incidents has increased. This increase is due in part to

Cameco's aggressive physiotherapy program aimed at reducing lost time accidents due to early injuries.

Each time an employee receives physiotherapy it is counted as a medical aid. However we also attribute part of the decrease in annual lost time accident frequency to the success of this program. Our first aid incidents have remained stable through the licenced period.

The five year moving average for lost time accident frequency has been below one and relatively stable through the licenced period. However there was a slight increase in the years 2003, 2004, but that trend is again decreasing in 2005 and 2006.

The five year moving average for medical aid frequency has remained relatively stable to actually a slight declining trend over the licenced period.

Some of the initiatives undertaken during this licenced period include developing and implementing a formal Health and Safety Management Program, the creation of key performance indicators for the health and safety program and the implementation of an ergonomics program to address a significant cause of medical aid and lost time accidents.

In the radiation protection program our annual average whole body dose to employees was less than

half the public dose limit over the licenced period. The maximum annual whole body dose received by an employee was 8.0 mSv. The annual average skin dose ranged from .5 mSv per person to 1.3 mSv per person, with an annual maximum of 14.5 mSv.

The elevated level for whole body dose was exceeded twice during the licenced period. The chemicals ranged -- the safety officers thoroughly investigated these incidents but neither investigation identified a specific cause for the elevated results. Both employees received personal coaching from the radiation safety officers on the principles of time, distance and shielding to keep their personal doses as low as reasonably achievable.

One employee received a lung burden of 16 mSv while working on a U02 drumming station. Cameco forwarded an investigator's incident and corrective actions were developed and implemented. The full details of this incident were provided to the Commission at our mid-term hearing.

Cameco implemented an internal dosimetry program in April of 2003. The results of the first year's dose assignments were submitted to CNSC in June, 2004, and this resulted in a request from the CNSC for Cameco to apply for a dosimetry licence. An application for a

dosimetry licence for the urinalysis and lung counting programs were submitted to the CNSC in August, 2006.

Cameco is currently revising the calculation for assigning lung count doses to ensure the doses are assigned on a calendar-year basis.

Since the inception of the lung counting program only four employees at the facility have been assigned personal doses. All other employee doses were less than detectable and, accordingly, were assigned the group average dose.

The average annual lung counting dose was 1.5 mSv per person and a maximum assigned lung dose was 10.8 mSv.

The doses assigned through the urinalyses program are very small. The annual average dose assigned through urinalyses was only 0.1 mSv, where the maximum individual dose was only .9 mSv.

This is an area for future discussion with CNSC's radiation specialists as the existing urinalyses program consumes a disproportionate amount of resources relative to the risk.

Cameco has addressed all action notices and directives for the 2003 Radiation Protection Audit. Annual ALARA targets were set starting in 2004. The radiation protection program was expanded over the

licenced period. We added a health physicist, a second Radiation & Safety Officer an a technician to the group.

Now these additional resources allow us to better administer the radiation protection program at the facility and to focus on implementing our allotted targets to achieve continual improvements in this area.

Cameco is currently assessing its fenceline gamma monitoring procedure with a goal of setting action levels for all monitoring stations. Currently the action levels are applicable through the stations closest to the critical receptors at each of the two sites. That's the main site and the Dorset Street Warehouse.

Now this report of these new action levels proposed will be issued to CNSC in the fourth quarter of 2006.

Improvements were made to the Flame Reactors and they have significantly reduced the frequency of the ash can exchanges which his one of the significant sources of whole body dose at the facility. The number of ash can changes has dropped from 125 a month in 2002 to 15 per month in 2006.

Some highlights under Environmental performance over the licenced period are no licence limits were exceeded; fluoride emissions were reduced while other emissions remained stable and the public dose was reduced.

The facility's total annual uranium emissions reflected an increase over previously recorded results due to a refinement in the calculation of the effluent emissions. But through process optimization Cameco was able to reduce the fluoride emissions by 60 per cent during this licenced period. And the dose to the public as measured in the critical receptor for the main site has shown a decreasing trend over the licence period and it represents about 10 per cent of the licence limit.

The ambient air monitoring results and ground water monitoring results have remained stable over the licenced period. A few wells are showing elevated ammonia concentration due to localized reducing conditions. And it should be noted that these wells are located upstream of the ammonia storage tanks at the facilities.

Cameco has developed and implemented a long-term soil monitoring program to replace the soil test-plot study that was abandoned due to poor statistical reliability of the data.

Cameco had identified 25 locations with collection of soil samples over the long term. The results of the first samples collected will form a baseline for this study and they were submitted to the CNSC in late September, 2006.

The installation of a concrete wall in the warehouse at the main site has reduced the fenceline gamma at this location by about 60 per cent.

Cameco issued its Ecological Risk Assessment Report in October of 2004. At that time five data gaps were identified and programs recommended to address these gaps. Four of the five programs have been completed. The fifth program was originally dependent on the outcome of the third and fourth programs, however, CNSC Staff requested that Cameco complete a "site specific characterization of soil conditions" in the vicinity of the conversion facility, independent of the outcome of the third and fourth programs.

We submitted a draft scoping document for CNSC review and completed a sample collection in the summer of 2006. The analysis of these samples is nearly complete and we expect to issue a report in the 4th quarter of 2006.

In the areas of quality assurance and training, Cameco revised its quality assurance program which has been accepted by CNSC and was issued in March of 2006.

A type 1 inspection was conducted in our facility in June, 2006 in the areas of quality assurance, environment and training.

The quality control manual for pressure retaining components is a provincial requirement, and that program was formally accepted by the TSSA, the "Technical Standards & Safety Authority." A certification of authorization was issued February 28th, 2005 and it's valid until December 17th, 2007.

Cameco has revised its design control processes and that documentation has been submitted and accepted by the CNSC. Cameco is actively implementing a "Systematic approach to training".

In the area of Fire and Building Codes, assessments were completed in 2000, 2004 and 2005 and good progress has been made in addressing the actions from these assessments.

CNSC Staff have proposed a number of new licenced conditions, specifically with respect to fire protection. An example of this is the NFPA-801 standard. Although we endorse this as an objective, we have been held to different standards in the current licence.

We want to be sure that the time the new licence becomes effective, we have inadvertently placed into a state of non-compliance because perhaps a transition period was necessary but had not been provided. Therefore we are asking for a period to first determine what the new licence conditions will require and then for

a phase-in period to achieve compliance.

Cameco believes it is appropriate in this situation to engage in further dialogue with CNSC Staff with a view to obtaining clarification on some of the proposed licenced conditions in advance of the Day-2 hearings.

Emergency Response was an area of intense focus over the last half of our licence period. Cameco dedicated a great deal of resources to this initiative and is pleased that we now meet the regulatory requirements in this area.

Nevertheless we recognize that our emergency response organization is still young and many opportunities for improvement remain.

Cameco looks forward to continuing to work with the Port Hope Fire Department in the area of joint training to further strengthen our working relationship. Cameco conducted an emergency response exercise in May of this year in cooperation with the Port Hope Fire Department. Cameco considered the exercise to be a success as the opportunities for improvements identified were consistent with the expectations of a newly formed organization. This exercise was witnessed by CNSC Staff.

These pictures show the emergency response team in training and in the emergency response exercise.

Cameco has committed and has conducted a significant amount of training over the past two years, some of which was done jointly with the Port Hope Fire Department. Here you can see our emergency response team training on a live fire at Lambton College. They also participated in joint fire training with the Port Hope Fire Department at Ontario Power Generations' Westleyville Training facility.

CNSC Staff identified four areas of concern related to fire protection. And this program was assigned a "C" grade, which is the only "C" received by Cameco's Fuel Services Division, but Staff also recognized that our performance is improving.

Cameco expects to have these four concerns fully addressed by the end of the first quarter of 2007. The first area is operating policies and procedures. Cameco submitted draft standard operating guidelines, or SOGs, to CNSC Staff to address this area of concern. However Cameco identified that these SOGs could be improved and set out to revise these documents. We have nearly completed the revision to the "SOGs" and will be submitting them to the CNSC by the end of the 4th quarter of 2006.

The second area of concern is the provision of an assessment to support the number of initial responses needed at the facility. Cameco will submit to

CNSC by November 15th a justification for the required numbers of responders to the facility so that this information is available for the Day-2 hearing. Cameco also believes the completion of the fire hazard assessments will provide further support for the level of fire response needed at the facility. Cameco submitted an action plan for the completion of the fire hazard assessments in September of this year.

The third concern related to the documentation of roles and responsibilities of both on-site and off-site responders. Cameco has addressed this concern and the pre-incident plans that were submitted to CNSC Staff in April of 2006.

Cameco identified areas for improvement in these documents and resubmitted the pre-incident plans for the UF6 and UO2 plans in September, 2006. The remainder the pre-incident plans are also being revised and will be submitted to the CNSC.

And the fourth concern identified by the CNSC pertains to the emergency planning documentation, including emergency action plans. This information has not been requested by the CNSC prior to the issuance of the Staff CMD for this re-licencing.

However, Cameco believes this information is available at our site and we'll work with CNSC Staff to

provide the necessary document to satisfy this request.

In the area of security, Cameco completed a third party risk assessment in 2002 that resulted in enhanced security provisions at the facility. The details of these enhancements cannot be discussed at this hearing.

Cameco also prepared a written security plan which contains no prescribed information in order to permit the public's distribution of this document. A copy of this plan was provided to the Municipality of Port Hope.

Now Cameco's refining and conversion facilities were the world's first bulk handling facility to come under IAEA safeguards. The bulk handling of uranium presented some of the unique challenges to the safeguarding process. The successful implementation of the added safeguards in these facilities allow the IAEA to draw a broader safeguard conclusion for Canada.

Cameco is continuing to improve its site documentation and accounting processes to better facilitate the safeguarding process in the future. There was only one significant event during the licence period. Now this incident involved a leaking plug in a 30B UF6 cylinder. The UF6 containment system, as shown in the picture, worked at and designed and prevented a release of UF6 beyond the cylinder filling area. The full details of

this incident were previously reported to the Commission in a Significant Development Report.

There were a number of other initiatives undertaken during the licence period, some of which arose in our mid-term review. Cameco's Vision 2010 project entails a comprehensive plan for the redevelopment of the facility and is currently in the schematic design and preliminary development stage. A project description was submitted to the CNSC in June, 2006.

Cameco's lease with the Central Pier was renegotiated with the municipality for a five year period, with an option for an additional two years.

The model in this photo shows buildings that will be removed through the Vision 2010 project in a dark color. The light coloured buildings would remain.

This photo shows the potential layout of the site after the completion of Vision 2010. Existing buildings are shown in a darker color and the new buildings are shown in a light color.

An issue raised during a mid-term hearing pertained to the stability of the harbour wall along the east side of the main site. Cameco retained a consultant to conduct an assessment of the impact to the main site structures from a potential harbour wall failure and submitted this assessment to the CNSC.

The report concluded that in the unlikely event of a harbour wall failure only the pipe rack would be affected. The risk associated with such an impact is considered acceptable due to the low hazardous material in the pipe rack and our ability to isolate the flow of these materials. Furthermore, the pipe rack will be relocated as part of the Vision 2010 project.

Another issue raised during the mid-term hearing pertained to the efficacy of a preliminary decommissioning plan. To address this issue Cameco revised its preliminary decommissioning plan. The revised plan resulted in an increase in the estimated decommissioning costs and the increase is primarily due to increased labour costs, estimated soil volumes, cost for disposal of clean materials and transportation. And Cameco will issue a financial guarantee upon acceptance of the preliminary decommissioning plan by the CNSC.

Cameco addressed the pounding of storm water on the west side of Building 5 by installing a larger sump with a 200 volume pumps. Storm water has not accumulated in this area since the new sump was installed.

The issue of flooding was originally raised in association with the former SEU project. Despite the withdrawal of the SU project Cameco has continued to work with its consultants and the Ganaraska Regional

Conservation Authority to complete the flood mapping reported for the Ganaraska River. Cameco submitted this report to the CNSC and has subsequently addressed the CNSC's comments on the report.

Cameco also completed a flood proofing assessment based upon the conclusions and the floodmapping report. All building floor levels are at least .2 meters above the regulatory flood level so little action is required in this regard.

The probable maximum flood event is predicted to impact on a small portion of the facility but the likelihood of this event is extremely low. Accordingly, Cameco plans to address this issue as part of the Vision 2010 project.

Cameco completed an updated facility safety report that included an assessment of risks associated with fire. The assessment determined there were no unacceptable or undesirable risks associated with fire.

In the area of community outreach, Cameco has significantly approved its approach to community outreach which has measurably increased public support.

The polling results have increased steadily from January, 2005. The Vision 2010 project was initiated with an extensive consultative process involving a broad cross-section of stakeholders. This led to the formation

of a "Stakeholder Liaison Committee" which will be active throughout the Vision 2010 project.

One of the outcomes for the Vision 2010 public consultation process was the creation of the community liaison process to bring a common understanding of Cameco's operation to all interested parties. These forums will improve Cameco's community outreach in five key areas.

These open meetings feature expert briefings on subject areas, question and answer sessions and workshops. Part of the community outreach includes a periodic newsletter providing details on Cameco's activities in the Port Hope community.

Further information is provided to the public on a community-specific website, "Camecoporthope.com"

Cameco has also continued to provide quarterly presentations to municipal council, host open house events and work with area schools. Cameco has also participated in numerous community events such as the West Northumberland Home & Trade Show and the Port hope Fall Fair.

At the 2006 Fall Fair about 4,000 people visited our exhibit and engaged in communication about our operations.

Cameco takes a leadership role in the community through involvement in the United Way Day of Caring and providing support for the Capitol Theatre, Port Hope Public Library, Northumberland Hills Hospital and numerous other community groups.

So in conclusion, Cameco continues to operate its facility safely in accordance with the licence and the **Nuclear Safety and Control Act** and it has demonstrated continual improvement and good reliable operation.

On the basis of that conclusion, Cameco requests a five-year licence renewal. Thank you.

THE CHAIRPERSON: Does that conclude your presentation?

MR. GRANDEY: That concludes our presentation.

THE CHAIRPERSON: Thank you very much.

Before opening the floor to questions, I would like to turn to the presentation by the CNSC Staff. This is outlined in CMD 06-H18, 06-H18-B and I'll turn now to Mr. Barclay Howden, Director General, Directorate of Nuclear Cycle and Facilities Regulations.

Mr. Howden, you may proceed, sir.

06-H18 / 06-H18.B

Oral Presentation by CNSC staff

MR. HOWDEN: Thank you. Good morning, Madame Chair, members of the Commission.

For the record, my name is Barclay Howden and I'm the Director-General of the Directorate of Nuclear Cycle and Facilities Regulations. With me today are Mr. Henry Rabski, Director and Mr. Marty O'Brien, Project Officer in the Processing and Research Facilities Division, as well as the rest of the members of our licensing team.

CNSC Staff has reviewed the operation of the facility and the licensee's application to renew its Class 1B Nuclear Fuel Facility's operating licence that will expire on February 28th, 2007. Based on this review, CNSC Staff has formed a position on the application which is documented in the two CMDs. The position includes a recommendation that the Commission renew the operating licence for another five year term.

I will now pass the presentation over to Mr. Rabski first and then to Mr. O'Brien who will provide you with CNSC Staff's recommendations for licence renewal.

MR. RABSKI: Good morning Madame Chair, Members of the Commission; for the record, my name is Henry Rabski.

Our presentation this morning has six parts. I will first provide an introduction followed by a

discussion of CNSC Staff's review of Cameco's licence renewal application.

Following that Mr. O'Brien will highlight the licensee's safety programs and performance in various safety areas along with updates on follow-up actions from the January 2002 licence renewal and the February 2005 Mid-Term performance review public hearings.

Following that, other relevant information to this licence renewal including the changes proposed to the current licence conditions will be discussed.

Finally, to end our presentation, Mr. O'Brien will present CNSC Staff's conclusions and recommendations for the licence renewal. Throughout our presentation this morning we will refer to the licensee, "Cameco Corporation" as "Cameco".

Cameco owns and operates a Class 1B Nuclear Facility in Port Hope Ontario under Licence "FF0L-3631.1/2007", which was issued on March 1, 2002 for a five year term and expires on February 28th, 2007.

Cameco produces two main products at the Port Hope facility: Uranium Dioxide powder for use in CANDU fuel and Uranium Hexafluroide for Light Water Reactor fuel production. Each product is produced at a separate plant at the facility. The feedstock for each plant is Uranium Trioxide produced at the Blind River

Refinery.

In addition, a Metals Plant is used to produce Specialty Uranium metal products, including casting uranium metal into shielding and counterweights for certain types of aircraft. The facility also includes a stand-by plant for UO2 production.

There are also a number of site support operations used to support the production facilities, including: materials handling operations which handles the feed material and product storage produced at the facility; a powerhouse for supplying site services; an analytical laboratory which has the capabilities for analyzing environmental and bioassay samples; and finally a waste management support services group.

The primary sources of risk that this facility present to persons and the environment are the following: exposure to nuclear substances, primarily natural uranium compounds; exposure to hazardous materials used in production, including Hydrogen Fluoride, Ammonia Hydroxide and Nitric Acid; and finally conventional hazards related to a chemical operation.

Risk control features in place at this facility include: built-in process features and systems, with a primary objective of containing and preventing dispersion of nuclear and hazardous substances, along with

administrative controls as specified in the facility's various safety programs.

Besides the Canadian Nuclear Safety Commission there are a number of other regulatory agencies with significant involvement at the facility, including Human Resources & Skills Development Canada, which monitors compliance with worker safety requirements under the **Canada Labor Code, Part II**; the Ontario Technical Standards & Safety Authority, which are designated by the CNSC as "Authorized Inspectors" for the purposes of inspecting compliance with CNSC regulatory requirements related to pressure boundary integrity; and the Ontario Ministry of Environment which have issued a "Certificate of Authorization" for the site and monitor compliance with provincial regulations related to air and water emissions.

The operating licence for the facility expires February 28, 2007 and Cameco has applied for the renewal of the licence for another five-year term.

The application did not include a request for authorization of any new activities that are not currently authorized under the licence.

The application was provided in a timely fashion and CNSC Staff's review of the application concludes that it meets the requirements and that an environment assessment under **the Canadian Environment**

Assessment Act is not required.

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

MR. O'BRIEN: Thank you, Mr. Rabski. Good morning, Madame Chair, members of the Commission. For the record my name is Marty O'Brien.

Staff's assessment of individual safety areas will be summarized in the next slides.

I will highlight Staff's assessment of the licensee's performance in key safety areas. I will update the Commission on any follow-up actions from the January 2002 licence renewal and February 2005 Mid-Term licence review hearings.

There are eight key safety areas of this facility namely: Radiation Protection, Environmental Protection, Quality Assurance, Emergency Management, Fire Protection, Operations, Safeguards and Security.

Since the security program contains prescribed information, a separate report was provided to the Commission as CMD 06-H18.A.

I will briefly describe the assessment of each safety area in the next slides.

I will begin with the area of Radiation Protection. At the time of the licence renewal hearing in

January of 2002 the implementation of a new regulatory requirement to determine internal doses to workers had been delayed in accordance with provisions of the CNSC's Regulatory Transition Plan.

For assigning internal dose to workers, the CNSC's Regulatory Transition Plan allowed uranium processing facilities to develop and implement a program to determine internal dose to workers by March 31, 2003. The licensee developed the new program and began implementation in April of 2003.

With respect to worker doses, CNSC Staff's review of worker dose data for the period 2002-2006 indicated that radiation doses are being adequately controlled. No Nuclear Energy Worker (NEW) at the facility received an effective dose in excess of the regulatory limits. And the average doses recorded were well below the regulatory limits.

In March of 2003, CNSC Staff conducted a Type 1 inspection to evaluate Cameco's implementation of the Radiation Protection Program. The inspection identified improvements to the program as well as deficiencies and Cameco has satisfactorily completed corrective actions to address the deficiencies identified. Continuing on with Radiation Protection.

Public dose exposure during the current

licence period has been well below regulatory limits. The calculated maximum radiation dose to the most exposed resident near the Port Hope facility boundary due to emissions was 0.069 mSv/year in 2002. The CNSC regulatory public dose limit is 1 mSv/year.

As a follow-up item from the 2005 Mid-Term hearing, Cameco and CNSC Staff have performed measurements to assess the risks of neutron radiation fields emitted from UF6 cylinders. The measurements have concluded that the levels are acceptably low, however further ongoing monitoring is required to ensure the fields remain acceptably low and as low as recently achievable or "ALARA."

CNSC Staff concludes that the radiological risk to workers and the public over the current licence term has been low and the overall performance of Cameco in this safety area meets requirements. A performance rating of "B" with little change was given in this area of safety.

Now I will cover the Safety Area of environmental protection.

Regarding environmental protection, the prime hazard to the environment from the CNSC licensed activities carried out at the facility is natural uranium. Release of fluorides is also a significant hazard.

Uranium and fluoride discharge rates to air and water during this licence period have been well below licence limits. Gamma emissions from the facility also remained well below licence limits.

Environmental monitoring is also being conducted around the Port Hope facility. This includes continuous ambient air monitoring for uranium and fluorides. The monitoring results show that uranium and fluoride concentrations around the facility during this licence period have been acceptably low. The monthly average uranium concentrations recorded from monitoring stations from January 1, 2002 to June 30, 2006 were in the range of .002 to .015 microgram U/m3 in suspended particulate. The Derived Air Concentration (DAC) for uranium based on a public dose limit of 1 mSv/y is .5 microgram U/m3.

I will now describe some specific issues related to follow-up from the 2002 licence renewal hearing or the 2005 Mid-Term hearing.

As a follow-up from the 2002 licence renewal hearing, Cameco has completed an Ecological Risk Assessment for the site. The results were used to develop recommendations for additional routine environmental monitoring and non-routine studies to address data gaps.

Cameco is in the process of implementing

these recommendations and has completed most of the required actions.

The main outstanding action relates to the study of site-specific soil parameters for the purposes of comprehensive soil characterization in order to determine whether or not uranium would accumulate in Port Hope soil to levels that could pose a health or environmental risk in the future. CNSC Staff have reviewed Cameco's proposed design for the study and found it to be acceptable.

At the 2005 Mid-Term Hearing conducted for the facility the issue was raised concerning the proximity of the facility to Lake Ontario and the Ganaraska River and the risk of flooding the property. At the time of the hearing, the flood lines in the facility were in the process of being re-mapped by the Ganaraska River Conservation Authority.

CNSC Staff have reviewed the report issued from this study and have requested that Cameco take the findings of the CNSC Staff review into account in their assessment of the need for additional site floodproofing measures.

The report Cameco has produced on proposed floodproofing measures have been received and is currently under review by the CNSC Staff.

Based on effluent and environmental

monitoring results CNSC Staff concludes that the operations at the facility are effectively controlled with the Environmental Protection Program and mitigation measures in place.

CNSC Staff conclude that the Environmental Protection Program and its implementation have met regulatory requirements.

Accordingly, a rating of "B" with little change was given in this area of safety.

Next, I will briefly talk about the Quality Assurance safety area.

The licensee has a well established Quality Assurance program in place to ensure that the licence activities are conducted in a controlled and safe manner. During the licensing period, the licensee updated this program and submitted it for CNSC Staff for review and acceptance.

The latest version of this document dated January 2006 was reviewed and accepted by CNSC Staff.

In February 2002, CNSC Staff conducted a Type 1 inspection in this safety area. The inspection identified deficiencies and Cameco has satisfactorily completed corrective actions to address these deficiencies.

A Type 1 inspection was also conducted in

June, 2006. In CMD 06-H18 it was indicated that the results of that inspection would be reported prior to the Day-2 hearing.

As an update to the Commission, the report for this inspection has recently been issued and no major items of non-compliance were identified which would impact Staff's overall assessment that the licensee meets requirements in this safety area.

Moving on to the safety area of Emergency Management. In September, 2002 Cameco submitted an updated copy of its Emergency Response Plan. This document was modified to align with the provisions of the CNSC Regulatory Guide G-225: "Emergency Planning at Class 1 Nuclear Facilities and Uranium Mines and Mills."

The program was reviewed by CNSC Staff and was found to be acceptable.

As reported to the Commission at the 2005 Mid-Term Hearing, an issue arose in October 2004 regarding the adequacy of the application of the Emergency Response Plan to a significant fire at the facility involving hazardous materials.

As reported to the Commission in a Significant Development Report at a CNSC meeting in February, 2006, Cameco has taken a number of actions to address this issue, including deploying a minimum number

of Cameco emergency response Staff on-site 24/7 to respond to fires and other incidents, and has implemented a paging system to call in other Cameco emergency response Staff that are not on-site when an incident occurs.

Cameco emergency response Staff have received additional training to respond to fires on-site that progress beyond the incipient level. Off-site emergency responders, including a number of volunteer fire fighters from the Port Hope Fire Department have been provided site awareness training as well as advanced hazardous materials training.

New equipment has been purchased to address a major fire event, including a fire truck which has been commissioned and is available on-site, 24/7.

CNSC Staff conducted an audit in May, 2006 of an exercise involving a significant fire scenario involving hazardous materials. During this exercise Cameco demonstrated its enhanced capability to respond to an on-site fire and to coordinate their fire teams with the Port Hope Fire Department who act as back up support to Cameco during the exercise.

Considering Cameco's timely completion of actions respect their on-site emergency response capabilities, and on-site verification of the combined emergency response capabilities with the Port Hope Fire

Department, CNSC Staff is satisfied that this issue has now been adequately resolved.

With regard to an emergency response to incidents that don't involve fire and chemicals, Cameco has also conducted a number of exercises in this area.

CNSC Staff concludes that Cameco's emergency management plans and their implementation meet regulatory requirements and is given a "B" rating. Due to recent significant improvements in the area of fire emergency response the safety area has been given an upward performance trend.

I will now cover the safety area of Fire Protection.

Assessment activities conducted during this licence period have included Fire Inspections conducted in January, 2004 and August, 2005, and review of licensee submissions, including fire program documentation, status reports on fire protection upgrades being implemented on-site, and the third party reviews as required by licence conditions.

During the current licence period significant improvements were noted in fire protection program provisions related to emergency response, however further improvement is required, primarily in documentation and supporting analysis for this activity.

Significant upgrades related to fire protection were also completed during the current licence period to achieve compliance with national building and fire codes as required by new licence conditions introduced at the last licence renewal in 2002.

An acceptable rate of progress has been made in performing physical upgrades to buildings and fire protection systems to achieve compliance. However, additional action is required to achieve full compliance with requirements raised to operational fire safety.

As a result of the CNSC's Staff's assessment, a rating of "C - Below Requirements" is assigned to this safety area. Due to improvements noted during the current licence period an upward performance trend has been assigned.

I will now talk about the Safety Area of Operations. The Safety Area of Operations covers a licensee's programs and procedures for facility operations, including reporting.

CNSC Staff conducted routine inspections of Cameco's facility 4-6 times per year during the current licence period to verify that the licensee's safety programs achieve compliance and CNSC regulatory requirements are being implemented effectively.

Items raised during inspections were

considered to be minor deviations from requirements or expectations, and have been addressed or are being addressed within a schedule acceptable to CNSC Staff. When additional information was required, Cameco responded in a sufficiently timely manner.

Quarterly Compliance Reports were regularly reviewed with Cameco Staff during routine inspections to review licensee's actions to address any adverse trends or action level exceedences in the facility monitoring data; for example, stack emissions.

CNSC Staff is satisfied that sufficiently prompt action was found to be taken to address any such occurrences.

During the review period three significant events were reported to the Commission by Significant Development Reports. These events included: a leak in a 30B UF6 cylinder that took place during filling in June, 2004; a labour interruption that took place in August/September 2004; and, finally, an incident that took place on March 17th, 2005 -- it actually involved two minor incidents, however, it was reported to the Commission because there was significant local media attention.

In each of these instances, Cameco took appropriate -- short term actions to minimize the risks

arising from the event. For the two significant events related to site incidents, long term was action taken to prevent re-occurrence of similar events which was also considered acceptable by CNSC Staff.

During the licence period CNSC Staff also reviewed the licensee’s response to other incidents which took place and considered the response to be acceptable.

CNSC Staff concludes that Cameco has operated its facility in accordance with regulatory requirements during the licensing period assessed. Accordingly, a rating of "B" with little change in the safety area was assigned.

In the area of Safeguards, during the current licensing period, safeguards at Cameco Port Hope's facility was extended to cover the entire plant due to a change in IAEA policy. In the past, safeguards at this facility had started with the production of U0-2, uranium dioxide and uranium hexafluoride. The initial physical inventory verification of the newly safeguarded material was successfully completed in the summer of 2005.

During the current licence period, the IAEA, with CNSC participation, conducted five physical inventory verifications, five design information verifications and ten interim inventory verifications.

Cameco was also subject to three

complementary access requests from the IAEA, which involved inspections conducted on a short-term notice.

Based on the review of these submissions and inspections conducted, CNSC Staff concludes that the licensee has met the safeguards requirements laid out in the licence conditions. Accordingly, a rating of "B" with little change was given in this area of safety.

Regarding the safety area of security, as indicated previously the assessment of this area is reported separately in CMD 06-18.A, since it contains prescribed information.

This concludes the Safety Area Review portion of the presentation. I will now present other information relevant to the CNSC's Staff's licence renewal recommendations.

Regarding the Public Information Program, since the last licence renewal Cameco submitted a revised Public Information Program to the CNSC Staff for review.

The program was reviewed in the spring of 2006 against the expectations set out in the Regulatory Guide G-217 issued in January, 2004.

The review was completed and the program was considered acceptable by CNSC Staff in April, 2006. However, it was strongly recommending that the program be enhanced to provide more information on how the licensee's

activities will affect the environment and the health and safety of workers and the community.

Cameco has taken further action to address this recommendation as detailed in supplementary CMD 06-H18.B.

Since the last licence renewal Cameco has maintained an acceptable Preliminary Decommissioning Plan or "PDP" and an acceptable financial guarantee. During the licence renewal process a proposed revised PDP was submitted in June, 2006 and is under review by CNSC Staff. The proposed revised PDP indicates a significant change in the cost estimates for decommissioning.

Once the CNSC Staff review is completed and the revised PDP is accepted, Cameco will be required to submit a revised financial guarantee accordingly. CNSC Staff will provide an update to the Commission on this matter prior to the Day-2 Hearing.

Regarding licence amendments during this current licence period, in May, 2003 the licence was amended to increase the UF6 production limit from 40 to 45 tonnes/day. This was approved by CNSC Staff after Cameco performed a safety assessment of this change.

Regarding cost recovery, Cameco is in good standing with the CNSC with respect to the payment of licensing fees for the facility.

With respect to application of the CEAA, CNSC Staff concludes that an environmental assessment under the CEAA is not required before the Commission may make its decision in respect of the application for the renewal of the licence.

Continuing on to the other relevant information, CNSC Staff recommends a number of changes to the current licence conditions, the most significant being the change to conditions related to fire protection.

Two changes are proposed to the current licence conditions regarding fire. First, **the National Building Code of Canada** and **National Fire Code of Canada** have recently been revised and Staff recommends the licence reference the current 2005 editions.

Secondly, consistent with other Class 1B fuel fabrication facilities, CNSC Staff recommends the inclusion of NFPA-801 (2003) edition, "Standard for Fire Protection for Facilities Handling Radioactive Materials."

With the inclusion of NFPA-801, the Fire Protection program will require revisions to address additional elements currently not mandated by the National Codes.

Regarding the licence period, Cameco has requested a period of five years. CNSC Staff also recommends a five-year period. In order to keep the

Commission informed of the licensee's performance, CNSC Staff is prepared to submit a mid-term performance report to the Commission.

In terms of the future outlook, one of the significant projects that has been proposed by Cameco is the Vision 2010 Project. This project description was submitted in June, 2006 and entails a comprehensive redevelopment of the facility.

The project involves the removal of a number of old or under-utilized buildings, the removal of contaminated soils, building materials and stored historical wastes and the construction of new replacement buildings at the facility.

In CMD 06-H18 it was reported that the project is currently undergoing a determination by CNSC Staff under the Canadian Environmental Assessment Act.

To update the Commission on this matter, this determination has now been completed and the Vision 2010 project will be required to undergo a Comprehensive Study assessment.

Next I will present the CNSC Staff's conclusion based on the findings from the compliance inspections, review of licensee's performance and assessment of licence's application for licence renewal.

CNSC Staff concludes that: Cameco is

qualified to carry on the activities that the proposed renewed licence will authorize; Cameco's application for licence renewal meets the requirements of the **Nuclear Safety and Control Act** and its regulations; Cameco has made and in CNSC's Staff's opinion, will continue to make adequate provision for the protection of the environment, the health and safety of persons, and the maintenance of security and measures required to implement international obligations to which Canada has agreed; the risks posed to the environment, to the health and safety of persons and to national security, given the measures and safety programs that are in place or will be in place by the licensee to control the hazards, are not unreasonable.

And, finally, an environmental assessment under the **Canadian Environmental Assessment Act** is not required.

And, finally, to end our presentation, I will present CNSC Staff's recommendations for the licence renewal.

CNSC Staff recommends that the Commission: accept Staff's conclusions made in CMD 06-H18; and approve the renewal of the proposed Nuclear Fuel Facility Operating licence FFOL-3631.0/2012, to Cameco Corporation, for a period of five years, valid to February 29, 2012.

This concludes Staff's presentation. I

will now turn it over to Mr. Howden.

MR. HOWDEN: Thank you, Barclay Howden speaking; Madame Chair, that concludes our presentation and Staff is prepared to respond to questions.

THE CHAIRPERSON: Thank you very much.

I would like to re-emphasize that the proceedings today are being webcast to the community in Port Hope, and we also understand that the local community television station has also picked up the webcasting so that people watching in Port Hope will have an opportunity to hear today's proceedings, but also to note that the transcripts of the hearings are available quite shortly after the hearings, and those will also be available to all.

And to note, that we will be in the community for Day-2 of this and the ZIRCATEC hearing as well with both the industry, the licensee and with the Staff.

I'd like to start before I open with my colleagues, for a question to Mr. Grandey.

As you mentioned, Mr. Grandey, you have an important purpose with the Nuclear industry in Canada, the nuclear cycle itself. And I'd just like to perhaps give you an opportunity to elaborate a little bit on your earlier comments, your introductory comments.

An interesting thing that the Canadian industry really is, if I can put it that way, the first line of defence in health and safety of that the industry is responsible for the health and safety of their establishment.

And, again, also that you're a private company with a Board as well, so you have a Board as well.

I wonder if you'd wish to elaborate a little bit for the Commission. You could focus on the Port Hope facility, but you could be broader as well if you wish, on the discussions that you have, and your management team, and with the Board, on the heath -- the matters of concern to us really, health and safety of the workers and of the communities, and a little bit about the vision for how this culture is part of your organization.

Perhaps if you wish to elaborate, sir.

MR. GRANDEY: Excuse me, Madame Chair, Jerry Grandey for the record.

It's a broad, broad topic and I would say -- and it is really one that from Cameco's perspective will never -- it's a continual journey, we'll never end up getting to the end.

Like most corporations it starts with a governance framework, and that governance framework -- and it applies to all of the facilities that we have that

would be of interest to the Commission of which there would be eight.

So the Board of Directors has a specially constituted committee that is Safety, Health & Environment, and they establish the overall policies, the overall tenure and tone, if you will, that Cameco must apply in all of its operations.

That, of course, then devolves down into the way management conducts our own business and our own operations. We have our own internal governance committees and organizations; we have a management committee that takes all of this extremely seriously. And I would say that at the start of every meeting that Cameco has, what we look at first and foremost, would be "Safety, Health & the Environment." And so it really doesn't make any difference what meeting it is, it starts out with attention to that particular activity.

We, of course, have our own -- as far as management is concerned, we have our own Safety, Health & Management sub-committee, and it meets regularly to look at how we're performing across the organization.

Over the years we have, I think, in response to consultation with the CNSC, in recognition of changing and evolving standards, tried to become much more systematic as to how we deal with these things and much

more uniform across the organization.

Five years ago or even before that most of these topics were site considerations. Sites were responsible – a different history, different background, different safety culture, and if we recognized anything over the last little while, it is that we really need to have a lot more consistency and uniformity across the organization. That means changing culture, not just safety culture, but the culture of the organization as to how we look at environmental protection, how we look at public safety in each one of the operations in changing that safety culture. And for the last five years over the licenced period we have been engaged heavily in a lot of change initiatives that have been directly related to trying to instill in each one of the sites on a more uniformed basis and much stronger safety culture and beginning to look at, as of about a year and a half ago, something I like to call "environmental leadership", which is how do we -- and as "Cameco", and as we described the advent of a nuclear renaissance, where we talk about nuclear as clean energy, how do we make sure in delivering fuel -- and that goes all the way from exploration through the manufacturing of fuel bundles, how do we make sure that what we do is equally clean and living up to public expectations?

So over the course of the licenced period, in all of those areas, I would say we have been undergoing fairly radical change. Not easy – no easy to change the safety culture and it still doesn't make it automatic, and it's not easy to do and become environmental leaders, but it's a journey that we're on, full support of the Board of Directors, full support of management, but as I indicated at the outset of my comments, it takes, I think as you all know, years to begin to change that culture and get beyond just having a system of documents.

THE CHAIRPERSON: Thank you very much, sir.

Now we'll start the questions. Dr. McDill?

MEMBER McDILL: Thank you.

My first question relates to CMD O6-H18 and the miscellaneous issues, particularly the flooding and a little bit on the geo-technical stability, but with respect to the floodplain calculations, I wonder if I could ask Staff and Cameco if it's satisfied that the modelling, the 1 and 2D modelling is -- represents current engineering practice?

The one thing that came to my notice was a user manual dated 1994, so I'd just like a comment on that, please from Staff and from Cameco.

THE CHAIRPERSON: Perhaps we'll have Cameco

first.

MEMBER McDILL: Thank you.

MR. STEANE: Bob Steane, for the record.

The work -- I suppose the short answer is "yes". I believe that that work is to today's standards. The consultant that was used did a very thorough study and then that work was independently pre-reviewed by another consultant who were hired by and commissioned by the Ganaraska Regional Conservation Authority who also reviewed the work. So there's been the consultant who did the work and pre-reviewed by another consulting firm and accepted by the Ganaraska Regional Conservation Authority who are all people expert in such matters.

MR. HOWDEN: Barclay Howden, for the record.

I am going to ask our specialist in this area, Dr. Son Nguyen to come up and comment on the quality and whether the work was done to current standards. Thank you.

MR. NGUYEN: For the record, my name is Son Nguyen; I'm a Technical Engineer with the Geoscience and Environmental Compliance Division.

My comment would be on the geo-technical issue, the harbour stability problem. We just received the report, the assessment report from Cameco on the

harbour stability where an analysis has been done to determine the extent of failure in case the wall completely fails. And this report concluded that even in the case of such a failure, the buildings won't be affected. The only thing which would be affected would be the pipe rack. And we found it to be acceptable, so this is my assessment of the harbour wall stability.

On the issue of flooding I would ask -- I think, Dr. Shizhong Lei is more appropriate to answer the question.

MR. LEI: For the record, my name is Shizhong Lei. I'm a Geoscience Specialist.

With regard to the codes that they were using to do the floodmapping, the model is kind of industry standard and it has been used very widely and there is not much change since. I consider this model proper for this purpose.

MS. McDILL: Thank you. And thank you also for the answer to my second question.

My other question on this is, will these reports, the response submitted by Cameco be available to the public by Day-2?

(SHORT PAUSE)

MS. McDILL: As it's been submitted to Staff. I think it would be Staff who would answer.

MR. HOWDEN: Barclay Howden speaking for the record.

Sorry, I reversed the answers there on you because the geo-technical was related to the flooding. But with regard to Cameco's responses on these, they're all available. They are public documents. They haven't been put out there, be whether Cameco wanted to put them out publicly or whether someone wanted to request from us and then we would make them available.

THE CHAIRPERSON: I think the question was, could they be made available to the Commission?

MR. HOWDEN: Barclay Howden speaking. Yes, they can.

THE CHAIRPERSON: Thank you.

MS. McDILL: Thank you, I'll stop there in Round 1.

THE CHAIRPERSON: I just wanted to make sure that Cameco felt that they had enough time to talk about the issue of the geo-technical, the pier stability issue; were you comfortable that you had enough time?

MR. STEANE: Bob Steane, for the record. Yes, I concur with the answer from CNSC Staff as well, that the report was adequate and competent and dealt with the matter that was before us.

THE CHAIRPERSON: Thank you. I'd like to

now turn it to Mr. Harvey.

MEMBER HARVEY: Merci, Madame la présidente. We find in the report a large variety of numbers and results of the performance of the facility. In order to facilitate an evaluation of those numbers by the Commission, as well by the public, it would be of great value to have a joint report, some maps, locations. I'm talking of maps regarding liquid, affluent or discharge or give us samplings of locations, some maps like this. So my question is, can you provide such maps for the next meeting, for the next hearings?

MR. STEANE: Bob Steane, for the record. Absolutely, yes, we have provided maps in the past; we do make maps available and would be pleased to provide them at the Day-2 hearings.

MEMBER HARVEY: It would be interesting. Thank you.

My second question would be about the stack sampling. I would like to know how exactly the air emission monitoring in the facility -- how many stacks you have, what type of instrumentation are you using and is the sampling conducted on really a continuous basis and what happens if a system is out of order?

And the last question, sub-question would be, how do we have in the report averages; and is there

any possibility of peaks that could be of interest for the Commission?

THE CHAIRPERSON: We'll start with the licensee and then move to the Staff.

MR. STEANE: Yes, Bob Steane. I didn't catch the last part of your question in terms of you said the average; are you asking ---

MEMBER HARVEY: Yes, how do we see in the report the averages; we've got averages, and we can see that is decreasing with years, something like that. But is there any possibility of peaks in your operation of higher numbers that could happen during the normal operation that is higher than an average or lower than an average? And I've raised it, just having numbers and then just tracing a line. It would be interesting to know I mean for the Commission if there is any possibility of peaks that are not appearing here but happened in the normal operation period?

MR. STEANE: Bob Steane. The short answer is yes, those are averages, but we are monitoring things and reporting them on a much more frequent basis daily and that information can be put into some graphical form, it's just over the five-year licence period there such a mass of data that we condensed it for the presentation into those averages.

What I would do as well on your earlier question about what monitoring do we do and how do we measure it and the whole program, I would ask Kirk Vetor, our Superintendent of Compliance and Licensing to give you some response in more detail on that.

THE CHAIRPERSON: If I could also ask, I think what we're talking about is ranges, if there is anything that you have available that would give us a sense of the range “grosomodo” that we have on those areas, that would be helpful. And I imagine that the Staff will talk about if there was any times of exceedance of levels, that would be helpful to us.

MR. VETOR: Thank you. Kirk Vetor for the record.

With respect to providing peeks and maximums as well as ranges, this information is provided to the CNSC Staff in the quarterly reports, quarterly compliance reports, and certainly that wouldn't be a problem to make that available for the Day-2 hearing.

As far as the question pertaining to how we monitor our stacks and which stacks are monitored, the main emission stacks from the two production facilities, the UF6 plant and the UO2 plant are monitored on a continuous basis. We use different technology for each of the stacks.

In the UF6 main stack, while monitoring particular emissions, primarily uranium, using a small iso-kinetic electrosotic precipitator, those samples are collected every day at approximately eight o'clock in the morning and brought to the lab. So there's a continuous monitoring there, but it's not necessarily a real-time monitoring.

In the UO2 plant we're using an impinger set-up which is similar to the type and quality that are compliant stack testers used -- our consultants use when they come in. And we're capturing all of the contaminates in a liquid matrix and then bring those samples back to the lab for analysis.

In the UF6 plant we do have real time monitoring of our flouride emissions, so there's three analyzers there and that information is fed directly into the control room so they have a real-time feedback of those emissions at any given time.

There are stacks that are monitored periodically through compliance stack testing and the less significant sources, as well as the fugitive emissions are calculated through engineering estimates and those numbers are included in our monthly calculation of our total emissions to the environment.

THE CHAIRPERSON: CNSC Staff?

MR. HOWDEN: Yes, Barclay Howden speaking for the record.

From a regulatory perspective, what exists are -- there's regulatory limits set on the stack emissions; there's also what we call "action levels" which are set just above sort of the operating noise level. The indication is that if an action is exceeded there's a possibility that there could be a loss of control such that it prompts the licensee to make an investigation, but also they must report to us.

From a numbers standpoint, in the licence, the proposed licence, in Appendix "C" and "D" the action levels are outlined there for radiological emissions and for hazardous chemical emissions, and they're both the same.

Also, Mr. O'Brien can comment on -- there was one exceedance, and I'll let him speak to that for a moment.

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

Yes, as Mr. Howden mentioned, on an going basis the day-to-day emissions are monitored through the use of action levels. An action level exceedence is also required to be reported to the CNSC Staff. Once reported we review those exceedances.

During the current licence review period there was one action level exceedence recorded and it was in the UO2 plant. We reviewed Cameco's response and they're investigation indicated and determined that it was a measurement error, it wasn't an actual loss of control in the process, it was an error in the measurement system.

And CNSC Staff are satisfied with the response to that occurrence. Thank you.

(SHORT PAUSE)

THE CHAIRPERSON: Do you have a further question, Mr. Harvey? Dr. Paquet?

MEMBER PAQUET: My first question is dealing with the governance issue.

You mentioned in page three that you have two committees that discuss monthly issues related to health and safety issues. I would like to know to whom those committees report? And, second, who is responsible for taking actions following recommendations from both those committees?

MR. STEANE: Bob Steane, for the record.

I believe the committees you're referring to are -- there are two workplace committees, one is a policy committee and one is the Workplace Health & Safety

Committee. They are joint committees of the workplace and they report to management the results. The committees are facilitated by our Occupational Health & Safety Officer as the facilitator/minute taker. The results of all the meetings' minutes are taken, minutes are posted so that all the work force sees the results of the what the Committee is working on, their recommendations that they make, reports and recommendations to management for action.

MEMBER PAQUET: I have the same question for the Stakeholder Liaison Committee.

MR. STEANE: Bob Steane.

The Stakeholder Liaison Committees were a -- have come out of our public consultation process for the Vision 2010 project and it's to engage the group in the ongoing design.

They, again, the Committee is facilitated by our Project Manager of the Vision 2010 Project, and that committee meets -- initially when it was formed it was meeting probably monthly and now its meeting maybe quarterly or as significant development steps in the ongoing developments on the Vision 2010 Project meets, and they will meet and report back through the Project Manager of that project.

The other one that perhaps I would add, is

there is what we would call -- that's the "Stakeholder Liaison Committee." There are the public liaison forums which are a separate process which we also have initiated. It's been a fallout that's come out of the public engagement process for the Vision 2010 project, and that is advertised in public -- all public are welcome to attend. And we're holding those -- we've had four so far. The intent is to hold those every two to three months and have a forum session on that. And that reports, that committee, through our communications group and then back through to Cameco management.

THE CHAIRPERSON: Dr. Barnes?

MEMBER BARNES: Thank you.

You've incorporated a lot of information in your presentation on the Vision 2010, and while I appreciate that it is mostly going to be in the licence beyond this next one, nevertheless you do address it in a way that the company is looking at it as a whole. But it wasn't clear to me how much of it was actually going to get converted into real action.

Could you give us some clarification about what Vision 2010 means in terms of the realities of 2010 and lead up to that? You do say that you've got funding or expect to have funding on a federal/provincial/municipal arrangements here and Cameco

would be contributing to that; could you give us a more tangible schedule for the removal of the buildings that you showed in one of your powerpoints, on page 18 of your powerpoints, and also the anticipated construction which, again, you showed on that same powerpoint?

MR. STEANE: Bob Steane, for the record.

The Vision 2010 project, we have filed the product description with the Commission to initiate the environmental assessment process. We have received some correspondence back that we'll be going through a comprehensive study. The timelines -- and we have been working in conjunction with the Port Hope Area Initiative and their timelines and we're anticipating 2009 as being the start of physical activity happening and 2012-2013 the completion.

And, again, there's a couple of the things driving the project schedule, but one of the big ones is, we need to be in sync with the Port Hope Initiative just because there needs to be a facility ready to receive the materials as we remove them from the site before we can start the work.

MEMBER BARNES: And I noted that you have some options for the Central Pier; what's your long term need for the Central Pier facility?

MR. STEANE: Bob Steane.

We don't use the Central Pier for day-to-day operations; we use it for storage of some materials. The main need of the Central Pier today is, it is a storage place for historical waste materials that are designated and destined for the Waste Management Facility that is going to be built and constructed by the Federal Government.

The property is part of the Port Hope Area Initiative. It's part of the agreement between the municipality and the Government of Canada to be cleaned up by the Port Hope Area Initiative.

We entered into this extension of the lease and the intent is, not that it necessarily runs the term, the intent was that we would carry on as the leaseholder until such time as the Port Hope Area Initiative receives its approval and licence to start their work, and then when they’re ready to do that, the Central Pier lease, the Central Pier would be turned over to them. So that within that five-year period, based on those time-lines, we anticipate that the lease actually -- this property would transfer the control to the Port Hope Area Initiative probably in 2008, 2009. The municipality and Cameco agreed, to be sure we've covered the bases, we would have the lease for five years, plus two possible years should there be delays in the Port Hope Area Initiative.

MEMBER BARNES: I'd like to return to an issue that Dr. McDill asked about, and that was the hydraulic assessment of floodplain mapping report that you've given us a substantial supplementary document. A couple of things on it.

I recognize that the threat appears to be readily minimal for most of your plant and that you've indicated that in Vision 2010, that you would be able to make certain kinds of adjustments. But I notice two things, one that although it was indicated that it had gone to a period of review and the period of review document was at the end.

Nevertheless the reviewer asked quite a number of questions and asked for clarification whether certain additional things were needed, and there was no, in a sense, response to the period of review. Is this the end of that comment or was there another document that responded to his many questions?

MR. STEANE: There is another document that is in the process with the Ganaraska Regional Conservational Authority. They haven't released that yet, and until such time as that comes through, that report is still in the works.

MEMBER BARNES: And if that report is received, I guess we'll have a copy of it in Day-2.

I was surprised that in the report which is really dealing with floods, and looking at historical issues and taking Hurricane Hazel in 1980 as a maximum level, that there's no reference in there to effect the climate change.

Last year in Ontario there was -- it was a hurricane year for East and North America and I was really surprised that the document or the consultants didn't consider some of the longer term projections that might affect lake levels in Lake Ontario or whether taking Hurricane Hazel was an appropriate benchmark.

So this is kind of an extreme thing, but there is a document here and I was surprised that it was not included, so maybe a comment from Cameco and Staff.

MR. STEANE: Bob Steane.

I'll preface this with I am not an expert in these matters, but in that report the consultants did look at the severe storm events. The initial work was started with doing a complete study of the watershed of the Ganaraska River and the run-off potential. It also looked at -- there was the event of the Peterborough storm which some see is not a fact of perhaps the climate change and compared the Peterborough storm relative to the flooding events that were predicted by the modelling of the watershed.

So I thought they had, and the consultants felt they had looked at all the possible scenarios within the scope of what's known today and how these models and work is conducted.

MEMBER BARNES: Well, it's been looked at in the past -- there have been a number of regional studies or advice on anticipated or expectation for impact of climate change.

Now since we're looking ahead here, some of that would have been incorporated, particularly since we're dealing with a fairly low tolerance of .02 meters under the regulatory flood level here. Does Staff have any comment?

MR. HOWDEN: Barclay Howden speaking for the record. Dr. Barnes, we're noting your comments as we go along. I'm going to ask Dr. Shizhong Lei to provide any -- if we have any further additional comments. Thank you.

MR. SHIZHONG LEI: For the record, my name is Shizhong Lei, and we looked at the flood line definition and it's actually guided by the Ministry of Natural Resources. They have defined regulatory floods which is used to define the flood lines. And the regulatory flood is defined as the maximum of the following three floods: one is Hurricane Hazel which

happened in 1954 with huge damages to lives and properties. And the second is the highest flood on record. And the third one is the calculated 100 year flood.

In this case Hurricane Hazel is the highest -- has the highest flood level and volume, so they adopted "Hurricane Hazel" as the regulatory flood to define the flood line.

With regard to climate change, they didn't specifically discuss about it, however, when they were applying for the SEU project we -- the CNSC Staff considered this and it could happen and included in their PMP or PMF calculations. PMP is the "probable maximum precipitation" and the flood results from PMF, is called "probable maximum flood."

Even though the SEU project is cancelled we, during our informal discussions with Cameco and their consultants, we asked them to provide flood proofing on their site based on the PMF. And in a way the PMP and PMF has -- there's no impact of the climate change on those numbers because PMP is based on the extreme conditions. For example, the air that can carry that amount of water, so it's already a physical extreme. So no matter how the climate changes, the property of the air won't change so the PMP and the PMF won't change.

And I'm very glad to see that Cameco has submitted right after we finished writing this, Cameco has submitted to us this flood proofing report, and I have quickly reviewed it but I have not completed my review.

In this report the consultant of Cameco is proposing -- actually they were adopting what we suggested to them. They are using the PMP and PMF as their design basis for the flood proofing.

MEMBER BARNES: Okay, I'll leave it at that.

THE CHAIRPERSON: I think though that this issue about changes that we see going forward, I just make this as kind of a general comment -- because the facilities that we're talking about regulating now and in the future have such long lives, we're really talking about facilities that will be in place for a long time.

I think, in general, I think the comment that -- the question Dr. Barnes made really will, I think, be coming back again and again in the minds of certainly citizens of Canada, and I think, as such, the Commission in terms of looking at how we design facilities and clearly the margins that we take in any of the facilities that we're looking at for the future, I think that this would be a reasonable area of inquiry, not specifically looking at this facility although you do have an ambitious

future for this project as well, but clearly there's a lot of facilities we have that are on the water and issues coming up in that area, so I think this is going to be an important area of inquiry for the future.

I would like to turn to Dr. Dosman please.

MEMBER DOSMAN: Thank you, Madame Chair.

I would like to ask Cameco and Mr. Steane, with regard to the lung count monitoring that you're undertaking in the area of radiation protection, I would like to ask how is the acceptability of the lung count monitoring amongst the employees and what is your level of confidence in lung count monitoring versus urine sampling, particularly as I think you intimated that perhaps you'd like, if I'm right, that you might like to reduce urine sampling in favor of lung count sampling.

MR. STEANE: Bob Steane, for the record.

I think, first of all, introductory remarks, the acceptance of lung counting by employees is very high. Lung counting has been carried out at the Port Hope facility and Blind River for many, many years. We have a new lung counting device that we've run on and commissioned in this licensing period, but there is no -- it is generally very well accepted by employees.

The other aspects, I don't think it's a question of urine analysis versus lung count, they're a

combined program, but for that -- for more information I think I would ask Kirk Vetor to provide more of the background on the urinalysis and either reducing that or looking at that versus the lung counting and how it fits together.

MR. VETOR: Kirk Vetor, for the record.

At the present time we're conducting approximately 50,000 plus urine samples per year. And what they've done at the end of the year and when we prepare our summary reports, we're looking at a dose, an average dose to our employees of .01 mSv/y. And when we look at where the maximum doses we're seeing on the site are occurring, they're happening in both the whole body and in the lung counting programs is where we're seeing the real need for us to focus our efforts on.

And at the current time we have one lone soul who is spending probably 70/80 per cent of his time just on urinalysis programs. So we're saying, it is not really a good use of resources. We could take that radiation safety officer's time and put it towards the programs where we're actually seeing the higher doses at the site. And that was what we're after in that particular comment.

And we've been in discussion with CNSC and the radiation specialist in this regard.

MEMBER DOSMAN: Madame Chair, may ask CNSC Staff if Staff has any comment on this issue.

MR. HOWDEN: Barclay Howden speaking.

I'm going to ask Project Officer Marty O'Brien to comment.

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

The urinalysis program actually has two purposes, just to clarify. One purpose is to determine the dose of the workers, primarily the fast moving uranium compounds that get into their system. But the other purpose is similar to the -- we talked about action levels. There's also the control element. They'll take and do these samples on a regular basis to monitor whether somebody gets an inordinant large intake so that the control element is another important aspect.

The proposal to -- I believe Cameco's proposal is to reduce the dose determination aspect. That hasn't been reviewed by CNSC Staff yet, but if a formal proposal is submitted, we will consider it for review.

MEMBER DOSMAN: Thank you.

May I ask Madame Chair, on page 8 of Cameco's submission you refer to some elevated neutron radiation levels and that you're currently conducting bubble tube samples with personal dosimeters and that

these results aren't available but that they would be available in the fourth quarter.

And I just would like to ask for more clarification on those levels and this evaluation and whether or not these results would be available by the Day-2 hearing.

MR. STEANE: Bob Steane, for the record.

I'll ask Hess Carisse, our Manager of Technical Services, to provide that information.

MR. CARISSE: For the record, my name is Hess Carisse.

The methodology that we're using to determine neutron doses to our employees is a recommended method, and we have in the past used these, and the levels that we're getting are very low. We're just in the process of getting more to substantiate that, and they are personal for each individual. So the data that we have will be available for the Day-2 hearings as well.

MEMBER DOSMAN: I wonder if I might ask if Staff have any comment on that issue?

MR. HOWDEN: Barclay Howden speaking.

I'm going to pass this Cherry Gunning, our Radiation Protection Specialist with the focus on how we're using these personal neutron dosimeters; it might provide us with further information.

MEMBER DOSMAN: Thank you.

MR. GUNNING: My name is Cherry Gunning, for the record.

I would just like to emphasize that any numbers we've seen on neutrons from Port Hope so far are low, they're not elevated. And we have seen area monitoring results where they've placed the monitors in an area left in there for a period of time. So now we've asked Cameco -- and we put a number in the CMD which would be if a worker stayed at the highest location for 2000 hours during the year, which is a gross over estimate.

So we have asked Cameco to give us some information on how -- what the time workers would be in those areas where they have measured neutron doses, and that's the information we're still waiting for.

We've seen some preliminary numbers from some additional monitoring and we wouldn't like to say anything based on that. If we did a gross calculation based on them, the number would be lower than what was in the CMD.

MEMBER DOSMAN: Thank you.

THE CHAIRPERSON: I think the issue of monitoring of radiation protection is very important. I think that there's been some specific questions around it, but because we will certainly, I imagine -- well, I

imagine we'll be coming back on Day-2 as well to this issue.

I think that as far as the specific questions that Dr. Dosman has raised, perhaps the Staff could, as Ms. Gunning has started to talk about, give us some sort of overall picture here as well as a picture, if you could, quite succinctly of how the monitoring is done. It's in the CMD, but just an overview of that, and the levels that you're seeing versus what one would expect or what one would predict by something say like -- such as ALARA, and explain ALARA.

So if you could -- just because I think that this is an issue that could be treated like this, but I'd like it treated in a more macro sense.

MS. GUNNING: My name is Cherry Gunning, for the record.

The workers' doses at Port Hope are calculated from -- based on three things: they do workers where what we feel they use thermal luminescent dosimeters, but they have just change to optically stimulated luminescent dosimeters. And that will give the workers' whole body dose from gamma and beta radiation. So every worker wears one of those badges. And it will also give a shallow dose to workers which we might refer to as skin dose.

The second component of the dose is from the inhalation of uranium dust, the inhalation or ingestion of uranium dust. And at Port Hope and Blind River you'll see some of these materials are fast clearing through the body and some are medium clearing and slow clearing. So the clearance -- the amount of time the uranium stays in the body is different and the dose will be different.

So the uranium and urine monitoring is to detect fast clearing uranium, but it will not detect slow or medium clearing uranium. And the lung counting is used to detect that.

So the urinalysis samples, the dosimetry samples, I think workers are giving a urine sample, some workers, I think, twice a month, or every two weeks, that kind of frequency.

The lung counting, that slow moving material is going to be in the body for a while and the lung counting is done for some workers once every six months, other workers, once every 12 months.

The levels compared to the dose limits are very low. No workers are exceeding the dose limits. Are the doses ALARA? Well, they're required to have a radiation protection program that ensures that doses are ALARA.

As Mr. Grandey says, it's a continual process. I'm not sure if we ever want to stand up and say that they are ALARA, but we are looking for indications that they always have processes in place to ensure the doses are ALARA.

And when we give a grade on the performance of the radiation protection program, I think that that's reflecting "Do we consider that they are working to make sure doses are ALARA"?

THE CHAIRPERSON: Thank you. Would Cameco like to make any comments on that overview?

MR. CARISSE: Madame Chair, it's Hess Carisse for the record. We do have some data with respect to some new neutron evaluations, and we could share that with the Committee this morning. Kirk Vetor has that, and he'll make some comments as well, if that's acceptable.

THE CHAIRPERSON: Thank you.

MR. VETOR: Madame, Kirk Vetor for the record.

The statistics are fresh in and the CNSC Staff have not had a chance to review this. It will be put into a formal report, I just have the raw data in front of me though.

We have taken the neutron bubble tubes and used them as we would our regular dosimeter. We have

given them to employees to wear throughout their shift. We've done three trials with 16 employees in each one, so a total of 48 samples. The highest result we've received is 0.2 mSv/hr. As for the single maximum, the majority of the results that came back were less than zero. If you pro-rate this value of 0.2 mSv per hour, which was for an employee working in the cylinder filling area, which is where that original dosimeter was placed, the stationary dosimeter, that pro-rated to about .4 mSv per year as the maximum. So, again, the results are very low.

THE CHAIRPERSON: Thank you. The nature of our questions was really to get a sense, I suppose, the envelope for protection of the workers which, I think, is an important interest to the Commission.

I would like to take a break now of ten minutes and we will come back with Mr. Graham and my questions on Round one, and then a further Round Two, so ten minutes, please. It is 10:31, that will be about 10:40, 10:42.

--- Upon recessing at 10:31 a.m.

--- Upon resuming at 10:44 a.m.

THE CHAIRPERSON: I would like to continue then with round one of questioning and Mr. Graham, please?

MEMBER GRAHAM: Thank you, Madame Chair.

Just as a follow-up question before I go to my original questions I was going ask to Dr. McDill and Dr. Barnes and then your comments, Madame Chair with regard to the flooding and the model of the worst case scenario of the hurricane of 1954 and the fact that the variance or the tolerances point, I believe, is .2 of a meter.

I wonder if on Day-2 if we could have relevant new data that takes into consideration that storm in 1954 caused a lot of damage, both to human and property damage, but there wasn't -- that was 52 years ago and that really didn't have an effect of what climate change has done in the ensuing years.

I wonder if there's any modelling or if we can find out if there's any data that might show us if with the climate change that has occurred, and compound that on top of a storm similar to 1954, if it could be worse.

Some are saying, and I believe one of the CNSC Staff said that the model that you used, the maximum

average wind that was falling at the time and so on, but I'm just wondering if there's -- if we could check and make sure that there is -- all the data is taken into consideration.

And I don't know if that's out of order, Madame Chair, but as a lay person I'm not confident yet that what we've incorporated from that-- that have all the information, because I think some of the information given to Dr. McDill was the manuals of 1994, even that has changed in 12 years. So I wonder if we could get that information for Day-2.

THE CHAIRPERSON: Or would you like to make some comments right now? First Cameco and then the Staff, please?

MR. STEANE: Bob Steane, for the record.

I think that what we'll do is for Day-2, is have the modelers, the people expert in that that we have used to be here to raise that question with them and we'll come to Day-2 in a position to have a more thorough discussion of those aspects and concerns.

THE CHAIRPERSON: Or it could possibly be some information in a CMD before then and we'll see if we need the questioning, if that's appropriate.

MR. STEANE: Yes, Bob Steane. Yes, Madame Chair, we'll do that.

THE CHAIRPERSON: Any comments from Staff?

MR. HOWDEN: Barclay Howden speaking.

We'll be prepared to comment on any additional information that's brought forward. In our assessments that were done we looked at a broad range of things and Dr. Lei just gave you a very small amount, but there is other information that the Commission is probably not aware of, so the information submitted by Cameco with us commenting from a regulatory perspective, we will be able to do that.

MEMBER GRAHAM: Thank you. The only other question that I ever had was with regard to fire protection and that was the only part that didn't meet the CNSC Standards in the grading system, and I followed back to the licensing hearing before and so on and to see what improvements have been made.

My question though is how many Staff of Cameco are on site at any given time, 24/7 that have that specific training for fire -- fighting fires or fire protection with regard to hazardous waste and so on? How many do you have at any -- on every shift, what is the minimum that you're allowing?

MR. STEANE: Bob Steane for the record. I will get Tyler Rouse who is our Emergency Services Coordinator and responsible for the Emergency Response

Organization to address that question.

MR. ROUSE: Tyler Rouse, for the record.

Currently our minimum Staffing is four E.R.T. but we schedule six. We've looked at our schedule for October, November and December and our average ends up being around seven. Our day crew or our personnel emergency shift is generally around nine and our night shift falls to around six or seven members. But our -- the amount that we set is four minimum with an incident. Commander and with sick schedules. And the purpose for the sick schedule is, if a guy calls in sick, you still have the minimum requirement there on site.

MEMBER GRAHAM: My next question to CNSC Staff is, is four minimum standard adequate to meet the requirements of in-house fire protection?

MR. HOWDEN: Barclay Howden speaking.

I'm going to ask our Project Officer, Marty O'Brien to respond to that.

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

Based on the current fire protection provisions available on site, equipment included, CNSC Staff’s position is that the minimum number is acceptable.

MEMBER GRAHAM: My next question is to Cameco again, with regard to off-site or -- you have a

pager system and so on; could you explain how many you require and how fast Staff with a pager system, how many that you can ensure that can get there and in what limit of time? And then I'll ask the other question right now too, it's with regard to the Volunteer Department. What arrangements are made with them?

MR. STEANE: Bob Steane for the record.

I think it might be appropriate that we give an overview of the functioning of our Emergency Response Team from how many we have, the qualifications they currently have and then how that whole department functions, and how it links with the Port Hope Fire Department.

I think since the last time we had this discussion there have been tremendous changes made, so I think it might be -- if it's acceptable to the Commission, I will ask Tyler Rouse, our Emergency Services Coordinator to give that overview.

THE CHAIRPERSON: That's acceptable, thanks.

MR. ROUSE: Tyler Rouse, for the record.

Currently we have 48 members who are Response Team members at Cameco; 48 of these members are NFPA-600 certified, 47 are NFPA-472 hazardous materials technicians-certified. The one that is not -- the one

member that is not technician-certified is an operations level hazardous materials technician.

As far as recall goes, as I said before, we'll have a minimum of four and an incident commander on site with a scheduling of six. You know, depending on the time of the day, like I say, we will have more on site.

Anytime we have a fire beyond the incipient stage, which is the beginning stages of a fire, it is in our procedures to do a recall of the E.R.T. and to call 9-1-1. So with the recall we currently have 40 response team members outfitted with telephone pagers. We use the community alert network system to call the members' pagers, as well as their home phones to tell them that there's an emergency at the facility.

From there they call back and let us know their expected time of arrival to the site. In addition to that, any ERT member that is within Cameco's radio range of the site has, what we call, a group 100 pager. It's a radio pager so that immediately when there's a fire alarm pulled and our security team dispatches the on-site team to the response, everyone else who has that radio pager away from the site hears that. If it's eleven o'clock at night and we have a fire alarm pulled, I hear it at home and so do these other 15 or 16 members that have the radio pagers, so those that are within radio

range are already alerted that there's an emergency going on, and are awaiting the phone call.

So response times can be anywhere from three minutes to, you know -- it could be anywhere from three minutes to 30 minutes, to an hour, but everyone does call back in and let us know when they plan to be there.

We have a four man minimum; we're not saying that if there's an incident we're going to fight the whole incident with a four man; we do plan on doing a recall any time there is a significant incident at the site.

So for a fire we call 9-1-1 and we call our E.R.T. For HAZMAT, for a significant hazardous materials incident, again the same thing. We would call our E.R.T. and we would call 9-1-1 to inform them of what is going on at the site.

In regards to using the Port Hope Fire Department, I've worked with Chief Haylow from the Port Hope Department and working on pre-incident plans and standard operating guidelines for response to emergencies at the site, and we've worked out, you know, what the responsibilities would be for a fire scenario at the site.

For a fire we would call them in and we would use them for manpower and equipment "as needed." It would be, you know, as a last resort that we asked their

firefighters to go into our buildings but just because our firefighters know the areas a lot better than their firefighters. But still we use the Port Hope Firefighters to fight a fire at the Cameco site it is written in at the request of the Port Hope Fire Chief that any time a Port Hope firefighter enters a building, they're escorted by Cameco E.R.T.

For hazardous materials incidents, we'll use them in a back-up role as long as they are operating within their scope of training or awareness level of what they've agreed to with the municipality to respond to.

So I felt like we have a pretty good working relationship there.

MEMBER GRAHAM: Thank you. Does CNSC Staff have a comment on the -- I realize you've written up the improvements and what's happened, but you're still giving them a "C" rating, and I guess what I'd like to know is, are you satisfied that progress is being made compared mid-term and licensing, the last licensing hearings?

MR. HOWDEN: Barclay Howden speaking. for the record.

I'd just like to make one clarification, Mr. Graham, the "C" rating is in fire protection, but there's another cost component that we call "Emergency Management" which we've given a "B" rating.

And much of what's been discussed here is under the "Emergency Management Area" which has been given a "B" rating, and we've assessed -- done a verification of that through the assessment of the emergency exercise that they did in the Port Hope Fire Department to make sure that was working. So that's a "B" rating.

The "C" rating is on fire protection which is more in the manner in which they design and operate the plant. And we still have given that a "C" rating because it's not fully up to anticipated -- the requirements that we have. They have put commitments in place, and we can speak to those if you wish, and we're satisfied that they will be able to meet those commitments because they have demonstrated up to now that any commitments they make, they can make.

So if you'd like us to comment further on the fire protection and why it's not a "D" and why we think that it's improving and why we think that it's improving and why we think we can go forward with this licence because of the commitments, we can add more if you wish.

MEMBER GRAHAM: Yes, that would probably be helpful. I'm sorry that I didn't tie in "B" and "C", I guess I was lumping the whole fire protection and fire hazards and all of the other into one, but I realize

there's two.

My first question is though, are you satisfied, is CNSC now satisfied -- and you haven't given it a "B" rating, but you are satisfied with the improvements that have proceeded so far with regard to fire suppression and so on and HAZMAT; are you recommending anything further that needs to be done?

MR. HOWDEN: Barclay Howden speaking. I'm going to ask Marty O'Brien, the Project Officer who is more familiar with this.

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

Yes, you'll notice in the fire protection question, there is reference to the Fire Protection Program elements which are impacted by this issue.

What we're seeing primarily outstanding related to Fire emergency response in the fire program are various documentation, operating procedures for the industrial fire brigade for Cameco, underlying analysis, fire hazard analysis which would be an enhancement to the current analysis that exists.

There is, of course analysis within the current Safety Report to form the basis of the response that's been planned.

However, this can be advanced in terms of

fire -- a fire hazard analysis is a more advanced, technical engineering analysis in the area of fire safety which could possibly identify additional improvements that are required in the current planned response.

MEMBER GRAHAM: Thank you. Does Cameco wish to comment on anything further or will there be anything brought forward on Day-2 with regard to the expectations of CNSC Staff with regard to Fire Protection and improvements you will have done with regard to the document, especially what was outlined 5.7 on page 23.

MR. STEANE: Bob Steane for the record.

No, I don't think we have any further comments at this point.

At Day-2 we can have more information. From their presentation there were some of those commitments there, some documents were going to be by the middle of November, some were going to be done in October, so there will be some further discussion update of progress.

THE CHAIRPERSON: If appropriate. This is really for the interveners, that if there is anything that can be given for Day One -- you know, it's important that any elaboration is based on new information.

I believe the Staff would like to comment, Mr. Graham.

MR. HOWDEN: Yes, Barclay Howden speaking.

I just want to comment on the licence conditions. In the current licence from 2002 there is a requirement to comply with the National Building Code and the National Fire Code. The proposed licence, there is a new requirement being proposed, and that's compliance with NFPA-801.

That will, if accepted by the Commission, that will be a new requirement within the licence. One of the differences is, is over the past three years or so we've been encouraging Cameco very strongly to put in whatever is required to comply with this particular standard, and they have been doing quite a bit of work in that area.

And when the licence goes into place, if you accept our licence condition, they won't be in full compliance at that time, but they will be well on their way as compared to as if we dropped it on them now and it was brand new. And I think this is the reason why Cameco has raised the concerns about a transition period for that particular licence condition.

And I think for Day-2 we'll be in a position to indicate to you what we think should be in place on Day One and what requires time to put in place.

THE CHAIRPERSON: I think this is

important, because I think Mr. Steane raised it in his presentation, and I think Mr. Grandey raised it as well in a broader sense, is that, you know, others think that there is an evolution of standards, there is evolution of the areas, but finding an appropriate risk-based approach to ensure that it's clear what the standards are, but also giving what is appropriate time for putting those in place.

I don't know if Cameco has any comments right now with regards to the statement by Mr. Howden on the licence. I know you talked about it briefly in your overview; are there any further comments you'd like to make at this time, Commission members?

MR. STEANE: Bob Steane, for the record.

I think the comments that I made in my presentation are Cameco's concerns and where we are to go, I agree with what -- I think what I heard Mr. Howden say, is that we would have some discussions and perhaps some additional clarification at the Day-2 hearing, but it isn't an area where we want to be not inadvertently put into a position of non-compliance just because we've got a new standard that’s started.

And while Mr. Howden says we have been working towards it, we -- there are still aspects that we need clarification of what comes into effect and what

doesn't.

THE CHAIRPERSON: Before we start Round 2, I have a question, and it's with regards to the safeguards.

Both the Staff and Cameco have made comments with regards to during the licence period in the past. There were some changes in the safeguard regime required.

This is an area that is perhaps not as well known as others within the Commission licensing and I think it's important for us to have some clarity on that.

Perhaps I could ask Staff because the requirements came from the Staff's discussions with international agencies, exactly what the safeguard regime will be -- what they expect it to do at Port Hope and what would be the inspection regime that would be put in place and would be continuing for the licence period under consideration, ie. the five-year request.

So CNSC Staff?

MR. HOWDEN: I'd like to ask Jim Casterton who is the Director responsible for this area to respond to your question.

MR. CASTERTON: Thank you, Mr. Howden.

My name is Jim Casterton, for the record, I'm the Director of the International safeguards Division,

Director of Security and Safeguards.

Yes, indeed, Madame Chair, as noted in the CMD for the most recent period there have been some significant changes in international atomic energy agency policy with respect to the requirements for the implementation of safeguards at conversion facilities in general, ie. around the world, not just in Canada.

To be brief, in 2003 the IAEA took an internal decision to reinterpret what they call the starting point of safeguards, that point at a particular fuel cycle facility where safeguard measures come into play.

The rationale for a change in this approach was a concern that there were certain intermediate products in the conversion progress which could be used for fuel fabrication or for isotopic enrichment.

As a result of that, the safeguard measures to be applied to conversion plants were changed dramatically. In Cameco's Port Hope facility the traditional approach to safeguards began with the production of UO2 and UF6 as noted in Staff's comments.

As a result of the change in the policy approach, the starting point in the safeguards moved clearly or into the fuel cycle and yet realistically the safeguard measures began with the receipt of the UO3 feed

material from Blind River.

When we mentioned "subject to safeguards", generally we're talking about three or four different aspects. One is that the facility must maintain and establish a record system. They must report on inventories of materials subject to safeguards and any inventory changes.

They must be available to accept IAEA verification of the location, identity, quantity and composition of the declared material. Furthermore, they must be available for inspection to confirm design information that has been provided by the facility. They also must be available for complimentary accesses which are really unannounced inspections that are called by the Agency pursuant to commitments made by the Government of Canada.

Madame Chair, over the next five year period, if I can address that as well, we are currently in the process of developing with the IAEA a state-levelled approach for safeguards in Canada.

This is an approach that would be compatible with new directions by the International Atomic Energy Agency to move away from a facility specific application of safeguards, to a more generic state-level consideration.

And in that context we will -- the application of safeguards at Cameco Port Hope, as with other facilities, will be evolving.

I should say at the moment that Cameco does meet all the requirements arising from the change in the policy and so future requirements, future outstanding issues or outstanding issues that we are working on are really related to the elaboration of this state-levelled approach as it would apply to Cameco. Thank you.

THE CHAIRPERSON: Perhaps you could give us some sense in the other areas.

We have talked a little bit about the inspection frequency or the inspections that would be done. I think it's noted in the CMD, but perhaps you could give us a sense of what is done by CNSC Staff with regards to compliance, inspections and how that is performed in the area of safeguards on this facility.

MR. CASTERTON: For the record, Jim Casterton. Thank you, Madame Chair.

Under current procedures the International Atomic Energy Agency performs one annual physical inventory verification, and they also perform two, what are called "interim inventory verifications." So the facility is currently subject to three inspections that are scheduled by the International Atomic Energy Agency.

CNSC Staff participate in each of these inspections. We ensure that the IAEA has access and can undertake activities that fulfill the objective of the inspection. We also ensure that the facility has in place the necessary procedures to accommodate such inspection and the necessary equipment to support such inspection activities.

In addition to this, over the last reporting period the CNSC Staff have been working closely with Cameco and Cameco Staff in developing the safeguards approach and the safeguards program for Cameco Port Hope as a result of the change in this policy.

On the basis of our participation in agency inspections, and on the basis of our own judgments as to Cameco's efforts to put in place the procedures necessary to satisfy our requirements and the requirements of the IAEA, we have provided the rating.

THE CHAIRPERSON: Thank you. Does Cameco have any comments with regards to safeguards?

MR. STEANE: Bob Steane, for the record.

The application of the new safeguards at the conversion facility has presented some significant challenges. While in the pure sense of the flow of products through the facility is a stream which is tracked, but one of the real challenges with a site that

goes back 70 years and numbers of materials in storage and inventory records in the past not at the level of today's inventory accounting and materials, it has been a considerable effort to develop and make the necessary information such that we could make the inventory declaration.

So it has been a very onerous and large challenge that we think we can come to working closely with Staff and have reached a very satisfactory conclusion given all the challenges we faced.

THE CHAIRPERSON: Just a comment. I'll assume that Cameco and the appropriate Staff of CNSC have looked at this and will be looking at this with the Vision 2010 in terms of any changes within -- and security as well.

My second question is much more specific; it's with regard to the written submission by Cameco, page ten of 38. This is in the 06-H18.1, and it's with regard to the environmental monitoring results. It's just a very specific question that I think would be worthwhile elaborating on for Cameco.

And that's with regards to the ambient air monitoring areas, you've made on the third item within the ambient air monitoring -- so this is Item 4.0, "Environmental Program", page 10 of 38.

You've made a comment with regard to suspended particulate and the 2006 has both a "*", which makes sense, it's six months -- the 1st and 2nd quarter, but the second is with regard to the footnote No. 2.

And perhaps you could just elaborate on that, because people may see it going up and wonder what's happening here. So perhaps you could explain that more further.

MR. STEANE: Bob Steane, for the record. I'll call on Kirk Vetor, our Superintendent Compliance & Licensing to answer that question.

MR. VETOR: Kirk Vetor, for the record.

We spoke earlier about five programs, or five data gaps that were identified in the Ecological Risk Assessment. One of them was that the high volume air samplers are ambient air monitoring stations, one necessarily located at the area of maximum point of impingement of our emissions.

So one of the recommendations was to move the station that was located at the former Canadian Tire store to the area of maximum point of impingement which is along our fence line, just on the south east corner of the UF6 plant. And since we have moved that there, we are seeing higher ambient air concentrations for suspended uranium, and that's the reason why you're seeing these

numbers go up in 2005 and 2006 as an overall average.

But it's important to note that the dispersion model that we're using is predicting a maximum suspended air concentration for uranium of in the neighborhood of 0.39 to 0.40 megagrams per cubic meter. The highest single daily result we've observed at this station is 0.17, so we're still less than half of what the model is predicting at that location.

THE CHAIRPERSON: Any comments from CNSC Staff on that matter?

MR. HOWDEN: Barclay Howden speaking. I'm going to ask Marty O'Brien to comment.

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

CNSC Staff on inspections reviewed these numbers with Cameco's Staff and we have discussed this issue. And we were satisfied that the increased values recorded here are not due to increased emissions, but due to relocation of the sampler closer to the site, closer to the source.

THE CHAIRPERSON: Could I ask then, Cameco, is there a prediction -- do you have a prediction with regards to this number if you were to look at it, say on an annual basis and going forward for the five years of the licence? Would you have a prediction or a model that

you're using as to how that would change or not change in the next five years?

MR. VETOR: Kirk Vetor for the record.

We do have a new dispersion model. I would not expect the numbers to change -- I should go back first and clarify that in 2005 the station was only moved mid-way through the year, part way through the year, so that wasn't a full year. 2006 was the first full year of monitoring data at that new location and I wouldn't expect the number to change significantly over the next five years unless we make changes within the facility that reduces our emissions.

THE CHAIRPERSON: So would there be a sense that we would have -- that we would continue to have monitoring -- how can I put this? That the CNSC will continue to monitor this, and if there was an unexpected change, that this would be brought to the attention of Staff?

MR. HOWDEN: Barclay Howden speaking. Yes, that is the case and if there was something significant between hearings we would bring it to you as part of our significant development report.

THE CHAIRPERSON: Mr. Harvey, do you have further questions?

MEMBER HARVEY: For the source emissions,

the uranium dioxide, you've got also there an increase from 2002 to 2005 and possibly 2006. You've got 24.5 and it was 11.8, so what's the reason for that?

THE CHAIRPERSON: Cameco first, please.

MR. VETOR: Kirk Vetor, for the record.

The increase here is primarily due to the calculation of fugitive emissions over the period.

THE CHAIRPERSON: I think if you could elaborate a little bit more and then we'll turn to Staff. I just want to make it clear, just for the record, we're talking about Table 4 still on page 10 of 38.

MR. VETOR: As a result of the dispersion model that was conducted at the facility, we have new information and new emission estimates for the fugitive emissions of uranium from the facility and we are applying those and that's why we've seen an increase in that data.

THE CHAIRPERSON: Would the Staff wish to comment and perhaps we may come back, Mr. Harvey, to the chemical again.

MR. HOWDEN: Barclay Howden speaking. I'm going to ask Marty O'Brien to comment.

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

To clarify, there's two elements of the emissions: one is the from the stack and the other is

from what we call a "fugitive emission", which is the HVAC ducts that are ventilating the equipment, because these processes take place inside buildings so they have a heating ventilation which gives some -- the building will get vented out through the HVAC ducts, so those are the kind of things that are fugitive emissions.

There was a change in 2004 in how fugitive emissions are calculated and that can be -- we're satisfied that it's probably the reason it's increased the numbers.

MEMBER HARVEY: Are you preoccupied by the fact that you've got an increase like that?

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

We monitor these numbers on an ongoing basis. We have -- the numbers are reported in quarterly compliance reports. We go for routine inspections; we monitor any adverse trends and review the licensee's response to any increase such as this.

MEMBER HARVEY: Thank you.

THE CHAIRPERSON: Perhaps now we'll start with Round 2. We could maybe start with Dr. Dosman and we'll do a complete Round 2 again.

MEMBER DOSMAN: Thank you, Madame Chair.

THE CHAIRPERSON: I'm sorry, I think

Cameco would like to speak first; is it with regards to Mr. Harvey's question? Yes, thank you.

MR. STEANE: Bob Steane, for the record. Thank you, Madame Chair.

One aspect I think that hasn't come out, is we have a monitoring program, we look at monitoring of source. "Stack", as you've heard described, is on line and it's close to real time as we can make it. We have other programs around the fugitive emissions, and we're continually trying to better that method of assessing and estimating and knowing what the total emissions are.

Those are ones we make at the source, they're the ones that are out in the field and the real indication is what is happening, has there been a change in the field? And if we look at our soil monitoring results, particularly with respect to uranium and dust, those numbers are decreasing and have decreased over the licenced period.

So while we're changing our refining and getting better in our means of estimating what the emissions are, it doesn't mean that the emissions themselves have gone up or estimates of what it is has gone up. And our soil monitoring is telling us in fact the opposite, that the numbers are going down.

MEMBER HARVEY: No, the essence of my

question is just -- what do you think about -- the numbers are decreasing almost everywhere, but there's a place where it's going up. So I just put a question mark and say "I will follow that in the future in order to be certain that it won't be going up and up and up ..." So with new equipment you will find it's worse than you thought. So that's just the essence of my question to look at it in the future.

MR. STEANE: Bob Steane, for the record.

Yes, I agree with you completely, but it is something we are looking at and incorporating it and our intent through our whole programs, our numbers ought to be going down and not to be going up, and that is our focus.

MEMBER HARVEY: Thank you.

THE CHAIRPERSON: Yes, I think that's particularly appropriate when you're really dealing with an audience of interested people around and clearly I think we have to all do the necessary job to try to explain what is, in essence, some very difficult scientific matters into a voice that people will understand. So I appreciate that difficulty. Thank you for that.

May I turn now to Dr. Dosman?

MEMBER DOSMAN: Thank you, Madame Chair.

I would like to refer to Staff CMD-06-H18,

page 13, Table 6. And, specifically, on Table 6 of page 13 I would like to note that the nitrates emissions, while being very stable over a four-year period, are suddenly in the first six months of 2006, increased by about 50 per cent.

Now they certainly are within the licenced limit. And granted, that this is a six month period of observation, I just wonder whether we might have comments from Cameco as to why they think the nitrate emissions have increased during this period. And then I would appreciate if Staff might also comment.

MR. STEANE: Excuse me, Bob Steane, for the record.

Was your initial request to Staff or to Cameco?

MEMBER DOSMAN: Madame Chair, my request was to Cameco. And then I would appreciate, however, if Staff might also comment.

MR. VETOR: Kirk Vetor, for the record.

In this case both of the North MISA and the South MISA -- at the south MISA the discharge is exclusively cooling water; at the North MISA location it's predominately cooling water, approximately 95 per cent cooling water. So this would be a reflection of the cooling water that we've brought into the facility.

And typically in the spring -- like this would average over the year -- in the spring when we have fertilizing going on on the agriculture fields, we get run-off coming down the Ganaraska River. It's not uncommon to see a spike in agricultural type nutrients and this should balance out by the end of the year.

MEMBER DOSMAN: Madame Chair, may I ask why should it be increased this year versus the previous four or five years?

MR. VETOR: The 2006 data is just for the first half of the year, so we don't have the second half in here.

In the second half we'll see lower metric numbers, so the overall average for the year will come down. By the end of the year I expect this number to be similar to the metrics you're seeing in the 2002 to 2005 data.

MEMBER DOSMAN: Thank you for that explanation.

MR. HOWDEN: Thank you, Barclay Howden speaking. I'll ask Marty O'Brien to speak.

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

Yes, this trend has happened previously; it's been noted in past historic data that in the spring

sometimes the numbers do go up, and it's been primarily attributed to causes that Mr. Vetor referred to: increased fertilization and things like this.

MEMBER DOSMAN: Thank you. I wonder if there's anyone from the Ontario Ministry of Environment here, whether they might be interested in commenting, Madame Chair.

MR. HOWDEN: Madame President, there is someone here from the Ministry of the Environment, but they're here for soil, not for the water, so I think they're not able to comment at this time.

MEMBER DOSMAN: Thank you, I accept the explanations.

THE CHAIRPERSON: Well, now we'll go to Dr. McDill, please.

MEMBER McDILL: Thank you, several quick questions, fairly specific.

In Cameco's slide on page eleven they show a new concrete wall at the fence line to reduce gamma.

In terms of occupational safety, that wall appears to be about 3 meters high; is it a single brick in-depth and is there any risk stacking the barrels like that against a wall of that height?

MR. VETOR: Kirk Vetor, for the record.

I haven't looked at this from an

occupational safety perspective, but I know that it was engineered by our Engineering Department. There was a full project so they would have taken that into account when they built the wall. I know that we did construct a special footing for that wall to support the wall to make sure that it could take the load and make sure that it was stable and there was no shifting taking place.

MEMBER McDILL: Yes. Thank you, it just struck me that a nice little earthquake would give me concern, but perhaps Staff would like to comment.

MR. HOWDEN: Mr. O'Brien will make a short comment on this.

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

We examined that wall as part of our routine inspections and haven't identified any concerns with occupational health and safety risks.

MEMBER McDILL: Thank you. A second question. It's a follow-up to Mr. Graham's questions on the fire protection.

If the switch to 801 is going to add much -- I realize this is maybe a bit premature, but there are 10 per cent of items left over from 2000, 20 per cent of items left over from 2004 and 30 per cent of items left over from 2005. Is the switch to NFPA-801 going to reduce

that number or increase the number of things that are outstanding? And I guess I should ask both Cameco and Staff to answer the question, please.

THE CHAIRPERSON: Start with Cameco, please.

MR. STEANE: I'm sorry, Bob Steane.

I believe the point that we have raised, we don't need to go through it, but as you apply NFPA-801 there will be items that will frankly be added to that list.

MEMBER McDILL: Will any go away or is it too premature to know? But I mean things left over from 2000 strike me as being a concern unless they're minute documentation issues.

MR. STEANE: I think what I'll do, is call on our Fire Engineering Specialist, Ivan Bollinger, to give a more -- a better summary.

MR. IVAN BOLLINGER: Ivan Bollinger, for the record.

In respect to the 2000 audit the items outstanding from that, a valid question has been -- all these items have -- there's an overview of that.

The 2000 audit raised a number of questions that were rated as compliant and mandatory and good engineering design items. All the mandatory items have

been ticked off and have been completed.

The remaining 20 odd items are actively being addressed. Of those, we expect approximately 16 to be completed within the next month or so. The remainder of them, for example, the sprinkler installation is actively being addressed as well.

The extent of that has been expanded and that is one reason why we're looking at it. Originally that was just looking at the installation of sprinklers on the ground.

Cameco has voluntarily decided to install sprinklers throughout the building, therefore the extent of that has expanded obviously to install those. There's a lot of pre-planning and everything involved in that. We expect the project to be completed within the first half of 2007 and all the other items to be finished in the first half of 2007 as well.

MR. HOWDEN: Barclay Howden speaking. Mr. Rabski is going to comment on this issue.

MR. RABSKI: Henry Rabski, for the record.

As pointed out in the CMD there have been three audits conducted at the facility. There were -- in each case there were a number of recommendations and improvements that were identified.

Cameco identified an implementation plan in

each case, obviously staging some of the work and trying to be effective and efficient in implementing the highest priority issues that were identified in each case.

Staff has been satisfied in each case with the plan that has been presented in terms of implementation and agreed to a staged approach, and we're satisfied with the progress that's being made addressing these items as we continue assessing the program.

We also wanted to point out that as part of our working towards the NFPA-801 standard, some of the 801 initial requirements were also included in these inspections and that's progressed towards reducing the level of risk of fire in the facility. And we're satisfied with the progress that's being made on implementing the recommendations and the progress on outstanding items.

MEMBER McDILL: Is this list available to the members of the community so they have some idea of the status of these items and issues? Maybe Staff could try and then Cameco.

THE CHAIRPERSON: I would actually suggest the reverse. This is Cameco's issue; Cameco?

MR. STEANE: The lists of all the items have been assembled and we have reported regularly to CNSC so those reports can be made available to others. They

are quite involved with a detailed list.

MEMBER McDILL: I can believe that they're quite involved. Frequently there's sort of an action list, you know, what's opened and what's closed, and so I was wondering perhaps if Staff would be able to answer that.

MR. RABSKI: Henry Rabski, for the record. At the end of each one of those audits there would have been an actual list generated and we track that list. It's either in a written form or a table form that we are tracking and obviously updating the Commission as Cameco and Staff have. What still remains outstanding is the dates of when we anticipate those to be completed.

THE CHAIRPERSON: If I could follow-up just on two items Dr. McDill has raised. And I want someone to tell if I'm mis-interpreting this. It is, I think -- there wasn't necessarily a concern about the wall as much as there was concern about the way that those barrels were stacked. However, I just wonder if -- this would obviously be something your Occupational, Health & Safety Group would look at at Cameco, so I think that if there is an issue, I don't think we need to have a long list for Day-2 of everything, but I think what would be important is, if this hadn't been looked at by Occupational, Health in Cameco, we would just like to know

that. You know, if that is an issue, we'd like to know that.

I think with the second matter, I think what the gist is, if we -- Cameco has talked about a vigorous community communications approach, which is also documented in your CMD and which is discussed as well in a special CMD on this matter.

There's a number of issues that seem to be of concern to the public and it's interesting that perhaps communications around this -- not the details of every report or whatever, but communications of the progress of the fire protection program is -- would be a helpful area for Cameco to communicate with the community to say that, especially when there could be some misunderstanding about the fact that things are changing, so understanding this it could -- it is an area where -- because it involves City Fire as well -- fire protection, that it would be an area.

So I think that Cameco is suggesting that we ask members of the community to have to, you know, use the Access to Information or whatever, but that perhaps you used in their community work nonetheless, but that this may be an area where some probes of communication would be suitable. I don't know, Dr. McDill, if that is really it.

MEMBER McDILL: Thank you.

In the past there have been questions about fire protection. If there is access to that on a website, it's much easier for your community to see it; so my question was, is there a list and is it available?

MR. STEANE: Bob Steane, for the record.

First picking up on Ms. Keen's comment there. We have the community forum process that we have started, and this is the type of information, and those are the types of things we would bring to those forums.

The way that forum process has been working, when we first started it off we met with all those who were at the community forums and we asked them to tell us what is it that they think was the most important topics to deal with, and we have been focussing and going forward, starting with what the community is telling us the areas they need the information and we're working down that list.

There is an area in the listing but it wasn't in the top so we haven't got the formal process. But that's really where we hope to take the formal process, is to bring these types of interchanges and information on our operation to the community so they're aware of what it is we're doing and where we are with what we're doing.

THE CHAIRPERSON: Any further questions? Dr. Paquet?

MEMBER PAQUET: Madame Chair, I would like to go back to the safety and health paragraphs on page 4 of 38.

If we look at the safety statistics for 2006 I imagine that's for six months. All the numbers in the last column have increased, so in the preceding paragraph it's mentioned:

> "Cameco is in the process of establishing common leading performance indicators to supplement the traditional lagging, injury-based statistics."

Could we have more information about these new performance indicators that are going to be developed?

THE CHAIRPERSON: I believe that's Cameco, so let's give it to Cameco.

MEMBER PAQUET: Yes.

MR. CARISSE: For the record, it's Hess Carisse, Manager of Technical Services.

In giving some leading indicators as far as health and safety is concerned, we have set some targets, and just for an example, one of the targets that we've set is attendance of employees at safety meetings, so we are

tracking the overall attendance at safety meetings at our facility, and that's a positive leading indicator so that our employees are getting the information from safety meetings.

There are other ones that we could go into detail at this point in time, I'm just trying to think of a few.

Yes, we've got in here some near miss reportings just recently. Again, it's a leading indicator -- "near misses" is an area that builds on the safety triangle and we're going through some efforts to ensure that our employees are reporting "near misses" as well as to gather some information. Again it's a leading indicator of a safety statistic.

MEMBER PAQUET: On the public opinion survey, page three, there's a question asked about the support to the conversion facility, and it's mentioned that 83 per cent of the people surveyed mentioned that their support is about the same.

I'd like to know what are the next steps that could be taken to move this 83 per cent to a higher number?

MR. STEANE: Bob Steane, for the record. I'm sorry, where is this 83 per cent ---

MEMBER PAQUET: Page 3 of the Public

Opinion Survey.

MR. STEANE: Page 3 of the Public Opinion Survey?

MEMBER PAQUET: Yes.

MR. STEANE: Oh, I was on page 3 of our CMD, I apologize.

First I think we should preface it, 83 per cent public support in the community for a company is very, very high to start with and this has -- I think in our graphs we have shown that this support has come from in high high 60s, 66 to into the 80s. So having said that, the support is very high. We are in the process of increasing that support and that's through our community forum process, through the communication process, through our whole changed view to how we interact with the community, so that's all there to sustain and grow that support number.

MEMBER PAQUET: So we might except that the next survey this number will be higher?

THE CHAIRPERSON: I guess -- the support could be the same meaning people haven't changed their support pro or con.

Mr. Steane, I'm not sure about the interpretation of the question, and I think that's what Dr. Paquet is saying is -- the support level hasn't

changed. I guess it would have to be interpreted with the rest of the data to understand what that means; is that right?

MR. STEANE: Bob Steane, for the record.

I think that is correct because -- actually if one looks at the whole report there has been a change in the number of people who are in the "strongly support" category has gone over 50 -- it's about 53 per cent. So there has been a change from "support" to "strongly support." So taking this one graph in isolation I think may be giving some -- may be interpreted in the context of the whole survey, and I think we have seen increasing support and increasing depth and strength of support.

THE CHAIRPERSON: Dr. Barnes?

MEMBER BARNES: I would like to return to the barrels.

I would like some kind of clarification from perhaps Staff or Cameco that that wall -- which appears to me to be a single thickness of brick, and at the bottom of it we do see at least two levels of brick per barrel so there must be at least seven -- those bricks must be concrete stacked seven high. It appears to be up against a corrugated wall, I'm not quite sure -- and then we have barrels that there's some concern about there for liability let's say in the case of an earthquake, but why

would I believe that there is -- that that wall has any significant strength if there was a moderate earthquake with a magnitude of five or six which can occur in this region that in effect wouldn't in toppling -- would assist in the toppling of the barrels. Is that not a concern?

MR. STEANE: Bob Steane, for the record. I think, Dr. Barnes, that wall and perhaps the picture is not -- you don't get a three dimensional view of it. Those concrete blocks are in fact quite deep, they're quite large concrete blocks, but I think earlier it was mentioned that that wall was not just put up; we have a civil engineer, it was an engineering project; there were footings poured and put in place; the wall was engineered to engineering standards for a structure of such nature. So I think through the project control processes that we have in place, the wall has been engineered appropriately and properly and is a substantive structure.

MEMBER BARNES: So the individual blocks making up that wall are somehow connected together; are they, by bolts or concrete or are they simply stacked one on top of each other, which appears to be what it is?

MR. STEANE: Bob Steane, for the record.

Those blocks are a tongue and groove arrangement so that the block then fits into the block above it, it's not just standing one on top of the other

on a flat surface.

MEMBER BARNES: Maybe I should perhaps cut to the chase; if I could just make a couple of observations and then some -- maybe some specific comments.

It seems to me that one of the frustrating aspects of reading documents like this somewhat is that we're given a little bit of information but not enough to completely give us assurance. And in many cases the suggestion that more information has been given to CNSC Staff through the summer or by the end September, but we're not given perhaps assurance that we will see the review of these documents by Day-2.

I give you, for example, with the soil monitoring, there's a report in to Staff by late September available, so my question is, is it going to be available on Day-2?

We've heard earlier about the harbour wall was a Staff response. I think that was given to Staff on September 1st. The decommissioning plan was given in June and will we have more information at Day-2? The hydraulic assessment, the floodplain mapping you've give the Staff to review possibly by Day-2.

So I would be happy perhaps if Staff could give us some indication as to what additional information

on these reviews of documents that have come into you in the last say –- well, since June -– June, August, September type of period; are you going to have enough time to give us some information and give us your response back to these documents that we don't see, but we're told have been submitted to you? Those are just some examples, and there are quite a few.

MR. HOWDEN: Barclay Howden, speaking for the record.

From the process of accepting an application, we get all the application documents and we go through them. And part of our ongoing compliance program we get additional info which goes on and on.

Our intention, and Mr. O'Brien has just informed me that all of the commitments that Cameco has made for submitting additional information have been met so those documents are in.

So when we do get to Day-2 we will be in a position to provide you with either completed reviews, or at least a position on how it is going through.

For example, the soil monitoring is a long term program so I would expect that we would give you what we can on Day-2, and if you issue the licence, then you'd get updates.

On other things that we feel that are part

of the application and need to be assessed and presented to you such that you can make a decision, our intention is to make sure that information is to you. But right now everything that was promised to be presented to us so that we can do an assessment to present that to you, Cameco has met those commitments.

MEMBER BARNES: Let me a little bit more specific. And that refers to pages 12, 13 and 14 probably of the Cameco document, and this is 4.1 "Ecological Risk Assessment and Environmental Effects Monitoring".

So there was a report submitted in October of 2004 -- and this is the middle paragraph of 4.1:

> "However, the ERA/EEM study recommended that five special studies (referred to as 'programs' in the report) should be performed to fill data gaps found during the risk assessment exercise."

Okay?

And we see in these programs (a), (b), (c), (d) and (e) reported on pages 12, 13 and 14. Let me give you an example -- a couple of examples, and it might be worthwhile starting with a point Mr. Harvey was making with program (d), where it's been recognized that it would helpful to move the monitoring station to where the

maximum point of impingement was actually hitting the ground.

And to go back to that data that we just discussed a little while ago, on Table 4 on page 10 of 38, that's the ambient air monitoring where previously it was .004, .004, .004, .002, and you indicated that in '05 it was .005 -- I think it was Cameco who indicated that that was the year in which the monitoring device was moved, and here we are in '06 and it's at .010 halfway through, so I presume it's going to go to .02. It's just an order of magnitude greater than the data being recorded in the previous years when it was at the Canadian Tire.

Am I right in thinking that we have a situation here when we found it useful to move the devices to the point of impingement but that the value might be as much as an order of magnitude greater than what was previously being recorded at the Canadian Tire; am I right in thinking that or do I have something wrong there? I think Cameco would wish to respond.

MR. VETOR: Kirk Vetor, for the record.

The value we're reporting here in Table 4 under the "suspended particulate", under the "ambient air monitoring" row, that's actually a concentration, that's a measured concentration in the air, it's not an cumulative ambient so it won't change and that is reflective of the

concentration of suspended uranium in the air as a result of measurements we've taken through the first half of the year. And I see no reason for that to change over the second half of the year.

MEMBER BARNES: So are you actually recording particular fallout at that location as opposed to concentration in the air?

MR. VETOR: Kirk Vetor, for the record.

We also have the duct small jars there that measure a particular fallout and we're going to be ---

MEMBER BARNES: You have that in the line above; agreed?

MR. VETOR: That's correct.

MEMBER BARNES: And that presumably is an average of a number of sites; is it?

MR. VETOR: That's correct, yes.

MEMBER BARNES: So, again, it comes back to the point Mr. Harvey was making, and what I find is somewhat frustrating in the documents earlier, is how we differentiate between the averages because we don't have that information. I'm sure you and Staff do on the distribution of the sample locations and whether the peaks of precipitation, for example, are widespread, you know, how wide is the point of impingement, et cetera.

And this is important when I think we're

trying to get a grasp on the fallouts.

MR. VETOR: Okay.

MEMBER BARNES: Because again we're told that there was a long period of -- in particular the Ministry of Environment trying to do soil analysis which were never fully satisfactory and we now have -- both Cameco and also the Ministry have a new program, all right, including 25 new locations.

But, again, I have yet to be convinced by this that those locations are in the best position to properly evaluate things like the point of impingement of the plumes coming from the stacks here.

And it's only because I don't have the information on the nature of the sampling and or information of why the new sampling program by the Ministry or by Cameco is going to be a significant improvement on the ones previously that weren't entirely satisfactory.

And if I just go on to one more and then I'll ask for a response. And this is "Benthic Invertebrates" which is 4.1.2. Again, what we're told in the document is that there have been recent studies:

> "In order to characterize the benthic invertebrate community in the harbour sediment and to assess whether on-

ongoing operations are impacting these benthic communities."

And then the conclusion -- so we're not given very much information on the nature of that study, but the conclusion, the last sentence is:

"Program B concluded that 'despite high metal levels in the Port Hope Harbour sediment, the benthic invertebrate population in Port Hope Harbour is not experiencing negative effects from the conditions in the turning basin in the west slip."

How do we know that? My guess is the benthic invertebrate population is there because it can live within those particular environments, right, within those particular metal loadings. It doesn't tell us what the –- we've been given nothing about the actual community, no information, and we're not told whether that community is pinged or what type. We've been give the impression that everything is fine because some benthic invertebrates do live there. But would that community be the same if there were no metal loadings there; would it be a different benthic community or is it simply the benthic community can tolerate those levels of metal loading, and yet the impression is that we don't need to

worry about it because they're not experiencing negative effects.

The information we have in here is insufficient for me to really feel comfortable that that's an appropriate interpretation. There are four of these things where it seems to me that -- and I realize that these documents shouldn't be encyclopaedic, but this was an area, the whole environmental monitoring where new information, new activities were to be brought forward. And they have been brought forward in a rather brief way by Cameco. Almost every one of these concludes with the fact that they've given a report to -- in the last month or two to the Commission Staff and I'm not quite sure if we're going to find a review of that in time for Day-2.

THE CHAIRPERSON: Would Cameco like to start and then we'll turn to Staff.

MR. STEANE: There are a number of points there that -- I can't speak to the review of the Staff or do those reports -- sorry, Bob Steane, for the record.

Going back to -- starting with the soil study you talked about. While the previous study that had been undertaken was on the specific soil plots was discontinued, in that report that was finally issued by the Ministry of Environment on that study, part of the information in there as well though was that they had

throughout that program sampled the soil adjacent to those soil plots and saw no change of increase, and they also sampled 16 -- I think it was 16 different studies throughout -- in Port Hope of areas that had been sampled in the mid-80s, and again they sampled them in 2001 or 2 and those were areas that had been not disturbed and they found no change in the increase of uranium in there. So I think that we're a little -- we'd want some information on the accumulation of uranium in the soil. We haven't gone forward with developing a replacement study for those -- for testing this soil and getting information. It is certainly an area of interest.

This sampling study that is now there is a Cameco initiative, it's not a joint initiative, those various locations have been -- and the program has been put together by Cameco so that's going forward now.

Mr. Vetor can talk about the selection of those sites relative to the impingement, but prior to turning it over to Mr. Vetor, the other one is with the benthic invertebrates in the Harbour.

The Harbour has been a site of historical contamination going back to the 30s, and I think the question is, is the current benthic population being impacted by the current operation? So I think that's what this work is showing, that they're not being impacted to

go back that far -- I suppose the benthic community that lives there is one that lives in that environment, so there isn't, I believe, information going back to when the environment was created, which was some time ago.

There is a much more involved report on that that says that it was done by the Port Hope Area Initiative, they did quite a comprehensive study and I guess we could pursue looking into the more detailed information in that, but I think the conclusion of -- we've reported the conclusion of that study and really from us it's in the context that our own little operation is not continuing or contributing to negatively impact on that benthic community.

But I'll ask Mr. Vetor to talk to the selection of these new soil sampling locations.

MR. VETOR: Kirk Vetor, for the record.

When we set out to determine the locations for this long term soil monitoring program there were a number of criteria we wanted to meet. The first one, of course, was that there will be some longevity to these sites, that they wouldn't become subdivisions or golf courses or what have you.

The second consideration was that the majority of the locations be within 500 meters of the facility as that's the area that's immediately impacted by

our discharges as is predicted by the dispersion modelling and all of the information that the Ministry of Environment has presented on this topic up to this date, supports that the impacts that we're seeing from the current operation are within that 500 meter zone. I don't have the exact number, but I think it's about eleven or 12 or 13 of those stations out of the 25 are in that zone.

We then went to a 1,000 meter radius and then to a 1,500 meter with fewer in each of those. So, yes, to answer the question, most of the stations are located in the immediate vicinity of the facility. The results -- this is a baseline year. We can draw some conclusions but they're going to be fairly rudimentary.

Basically there were no surprises; the results were seen -- the highest single result we got from the first round of samples was 59 parts per million that was located in the area of the former waterworks, and we know that there's been contaminated soil placed there.

And beyond that, as soon as you move out into that 500 to 1,000 meter range, the numbers drop off rather quickly, and we're looking at maximums in the range of 1.7, 1.1, 2.4 parts per million which is pretty close to the Ontario typical range for uranium in soil.

I certainly understand your concern with the amount of data and the level of detail that's provided

in our CMD. It's always a challenge to determine what level to put in there, but we can certainly make an effort in the future to elaborate on the specific programs and provide drawings and figures as has been suggested earlier in these documents. And we can certainly make additional information available through a supplemental report prior to the Day-2 hearing.

MEMBER BARNES: I guess I'm trying -- and is it not perhaps inappropriate enough to find out, but since we're going to have Day-2 in Port Hope and there's a significant public interest, if not concern, on the part of some people on some of these issues that we're talking about today. And I would add that Cameco clearly has made a major effort in the area of public information for each of us. In terms of the volume of paper, that's the bulk of what we have today deals with your public information activities.

I'm simply saying that if someone wanted to understand what you were doing, you would need to explain what the nature of the announcement was, how you went about it, the methodology in sufficient detail in order that the results, if you were reporting results, that some people could be confident that that was a fair interpretation. But I would argue in the case of this, because this was a new program, that there's so little

information here that we're only obliged to take confidence in the summary that you give.

And the summary is largely that you've written a report and you've given it to Staff and everything is fine. But there's very little detail in there to give me confidence or knowledge that that in fact is the interpretation.

THE CHAIRPERSON: Would Staff like to comment?

MR. HOWDEN: Yes, thank you, Barclay Howden speaking.

From our perspective, yes, we've been working very diligent on the ERA, the identified gaps and Camecos' response to the gaps, but we do understand the Commission would like to see more evidence to make decisions to have confidence. And with that I'm going to pass the microphone to Dr. Thompson to speak to that a little further.

MS. THOMPSON: For the record, my name is Patsy Thompson. I'm the Director of the Environmental Assessment and Protection Division.

Essentially a lot of the information that has been presented in both Cameco's CMD and the Staff's CMD is the outcome of a combination of requirements that came into force with the **Act**.

Staff requested that Cameco conduct an ecological risk assessment when the new **Act** came into place, because the focus previously had been on releases of uranium and doses to members of the public.

At the same time there were many questions being asked about the potential accumulation over the long term of uranium in soils in Port Hope, in the vicinity of the facility and what impact that might have over the long term on both people using the area, as well as non-human species.

Staff also conducted a number of assessments and compliance verification activities that led to questions about the appropriateness of some of the monitoring that was being conducted in terms of where, when and in what frequency and the Ecological Risk Assessment identified also some gaps and deficiencies.

Staff conducted detailed reviews of those documents and prioritized essentially actions that Cameco had to put in place. The issues related to harbour sediment and benthic invertebrates were considered a low priority because it was recognized that releases -- contaminates in liquid releases, discharges from the facility are extremely low and it was unlikely that they had contributed significantly to harbour contamination. It was more likely to be from historical practices.

The other consideration that Staff took was, the fact that with the Port Hope area initiative the harbour is targeted for clean-up and remediation and so spending a lot of effort and detailed characterization of sediment and benthic invertebrate was seen as to be not very -- an area where we would get a lot of benefit in terms of the future operations at the site because of the -- it started for remediation, essentially removing contaminate sediments to be moved off site.

From the lines of questions, Dr. Barnes, and your comments, what Staff will do for Day-2, and early enough for interveners and people in Port Hope to have access to the information before the hearing, is to provide that context and Staff's assessment of what has been done in Port Hope and what it might mean for people now and in the future if the Cameco facility continues to operate.

THE CHAIRPERSON: I think perhaps just a general comment may be appropriate, is that back to Dr. Barnes' comment about compliance, reports, et cetera and Mr. Howden's answer, it may be appropriate to, in general on these types of licensing actions, is to give a sense of not only the risk in the broader sense of the risk and if there are expected analysis to be done or not and at a certain time period, and even at that I would submit it

would be done in the oral presentation at the time to say "As of this day we're aware that we will be finished" or "We have finished" or whatever, whether you've done the analysis or not.

It may be just helpful, rather than leaving it hanging in the air as to that. I think the Commission realizes that the Staff specialists have a great many areas to look at, and you have to make decisions as to the relative risk and priority of these analysis. So I think it's communication that would be helpful to that, and that, again, as you mentioned, Mr. Howden, that the report would -- I think it's in the various areas, but let's say that the licensee as complied with the requirements, be whether we're licensing or not, I think, is an issue that you would, I think, have ongoing requests for reports and whatever. I think that's important to give a sense to all that that's been happening or whatever.

I think in terms of the focus under these areas, that is the advantage of Day-1, is we have an opportunity to ask as well about certain reports in certain areas and that analysis of the questions from Dr. Barnes and responses should give an opportunity for perhaps for some summary looks at some of these areas for Day-2. And, particularly, understanding the ongoing historical nature of the area as well as specifics.

Dr. Barnes?

MEMBER BARNES: I think this is an example, since we're going to Port Hope, and having been there before on previous occasions, and the issue of soil monitoring, people essentially, in the past anyway, have wished to address that issue. And we certainly in the past have seen diagrams and maps showing locations.

So I'm just going to read a couple of things from the Staff presentation on the issue of soil monitoring, and that's on page -- at the bottom of page 14 and 15 of the Staff's CMD.

And it says:

> “In 2005, Cameco also initiated an ongoing soil sampling program to replace the former soil plot program conducted in conjunction with the Ontario Ministry of the Environment. The program involves taking periodic soil samples from various locations in close proximity to the facility. Sampling activities have commenced but results have yet to be reported to CNSC Staff."

So this started in 2005 and here we are late in 2006. And the results, according to the Staff CMD

have not been reported.

And it goes on at the top of page 15:

> "Also, the Ontario Ministry of Environment has redesigned its long-term soil monitoring program in Port Hope due to the problems encountered during the previous 1996-2002 study on accumulation of uranium in soil ..."

Et cetera.

> "The redesigned program is to resume soil test activities on the locations that have been remediated with clean soil to avoid interference with historic ... Staff will continue."

So I would just ask the question of Staff; is there information, at least in this document, which will be -- along with our transcript, that would be reviewed by possible interveners or members of the public in Port Hope that have a concern about soil sampling; have they been given enough information to understand what these redesigned programs are all about? It tells me that there is that level of information available or -- there's probably a reference to it.

So it's a concern for me whether there is a basis for sensible communication discussion on this topic

as opposed to having questions of concern on Day-2 and then suddenly scrambling to try and provide appropriate information during a meeting like that.

So I think that's a question to Staff: is there enough information -- do you feel there's enough information with these new initiatives for people to have confidence that the results that are coming in, are going to be reported and the sampling design is sufficient to, again, respond to what have been long term concerns?

THE CHAIRPERSON: I would just add though, for information we do have 4.1.5 of page 14 of 38 of Cameco, which doesn't necessarily give information about timing, but it's 14 of 38, 4.1.5, "Special Soil Study" and it talks about timing as well on that specific issue.

So, perhaps, Dr. Barnes, your question is suitable for Cameco as well because it's Cameco's responsibility to report on soil, and then it is the Staff's responsibility to analyze that.

So I clearly will ask the Staff to comment on Dr. Barnes' comment, but that you can come back with regard to that.

We'll ask Staff to comment. You were specifically asked a question by Dr. Barnes.

MR. HOWDEN: Okay. I'm going to ask Dr. Thompson to reply.

MS. THOMPSON: Patsy Thompson, for the record.

The information currently available in CMD-06-H18 on the pages Dr. Barnes' referred to, which are pages 14 and 15, do not contain enough information for people to understand what the issue is and what the context for the new -- or redesigned programs are about. That information is available. We have enough data to put things into context and to explain the reasons and the purposes of the programs going forward. And we commit to doing that for Day-2 in enough time for members of the public to have the information before they need to intervene.

THE CHAIRPERSON: And we turn to the fact that this is a soil study of property that is Cameco's property so it would be suitable for the Staff to comment, but I'd also, for Cameco, would assume that there might be some operation on 4.1.5, Program "E", page 14 of 38 that could be provided.

MR. VETOR: Kirk Vetor, for the record.

This study is pretty much wrapped up as far as the collection of samples, and we're in the process right now of completing the analysis. We've been speaking with our consultant and they've assured us that they can have that report submitted to us in November of this year.

And as soon as we have that report, we'll be forwarding that off to the CNSC.

There are conclusions that can be made in that report, and those can be shared with the public. The purpose of this study was really to revisit the soil model that was used in the Ecological Risk Assessment, but rather than using a generic in that model, to have some site specific soil numbers that speak directly to the soils in the immediate vicinity of our conversion facility. So as soon as those conclusions -- that report is prepared and the conclusions are available, we can share those with both the CNSC and the public.

MEMBER BARNES: I guess what I'm trying to get at here, and I hope it's clear, is that the best means of communicating information in particularly those areas that have historically been of concern to the public, and that's one of the areas of the business of this Commission, is that we have to be sensitive to that. So I'm just going to make the point again, that there's very little information here on the design of soil sampling. Staff indicated that it could be available.

It's best to refer to Cameco's page 14 of 38, the last sentence says, and I think you just reiterated that:

"Cameco expects to submit the final

report to the CNSC, including the revised modeling results, in November of this year."

It's November that we're meeting in Port Hope and I would be very thankful, if at all possible, and I'll put it politely, that those results would be made available for Day-2, which when combined with the design of the sampling and any other information the Ministry of Environment can also provide, would allow the public to see the data that has been collected, which I think could be a lot more systematic than some of the more controversial previous data. I think it's just an essential approach to try and get that in front of the public that may be concerned or might not be concerned, but it has been in the past and it seems to me that that's the responsibility to try and get that new data, since we're going to be there in an open public forum discussing these things, then it should be discussed in the most scientific and logical way possible.

THE CHAIRPERSON: If we could move on then. Mr. Graham?

MEMBER GRAHAM: Thank you. I have a couple of questions.

First of all, the first question I have is with regard to your overheads that you presented this

morning on page 18 regarding Vision 2010. The two overheads on that there, they're both of the same site, I presume; are they? And that's to Cameco.

MR. STEANE: Bob Steane. Yes, that is the same site.

MEMBER GRAHAM: One goes -- one's looking one way and one's looking the other; it's very difficult to overlay it in the right direction, and I'm wondering if -- wouldn't it be more prudent if -- because you know the buildings are going to be removed, but then the new ones are going to be installed, and you're not looking at it -- it is backwards, I believe, and it is difficult to see what you're doing. Is it possible to have something a little more clearer?

MR. STEANE: Bob Steane, for the record. These are actually -- these are photographs of a couple of models that we've made, and I think they're different perspective is because from one angle the -- the one that's showing what's going to be removed, the key buildings that are going to be removed are in the front.

If you look at it from the other side, you don't see the buildings that are going to go. The other perspective shows the buildings that are going to be added, and they're more or less on the same side of the property. So looking at it from the same perspective, you

don't get the -- you wouldn't see the buildings that are being added.

And further, what we have done, is these are pictures of two models that we had made and we have taken those to the public and we are taking them to the public. We had them at our fall fair exhibit. 4,000 or more people came through and saw these models and we're using those to convey that to people so that they can get a real feel of what the site would look like. And we could make those available at the Day-2 hearing as well.

MEMBER GRAHAM: Well, it's a little confusing, that's all. If it hadn't been for the breakwater out there, and it was covered up under "Vision 2010", I wasn't sure if it was even the same site, so -- anyway, that's one point. Really my questions though are around storage.

And the storage material on leased land, during -- and I realize that -- and that's across on the other side of the harbour, I believe, if I remember correctly being there, you're hoping for a low level waste disposal site to be commissioned soon, I believe. It hasn't been commissioned by the Federal Government yet to move some of this material; is that correct?

MR. STEANE: Bob Steane. That is correct, it does not have a licence from this organization to

construct that.

MEMBER GRAHAM: So my question is, during this licence period are you adding any new material on that site that is leased?

MR. STEANE: Bob Steane, for the record, no.

MEMBER GRAHAM: During the licence period on the site that we look at based on the licence site -- the site of Vision 2010, that whole site, what is the anticipated material that will be stored waiting for transfer on the site, how much additional material will you have to store on site that isn't going anywhere else that you have to store during this licencing period that you're applying for?

MR. STEANE: Bob Steane, for the record.

We are not building an inventory of materials as we go forward for that site. The materials that will be going to that site are from the main site and are historically contaminated soils, the historical contaminated material from the buildings. We are producing recycled products and sending our products off-site, so we're not gathering new storage inventory of materials.

MEMBER GRAHAM: So you are not adding an inventory of either low level or more contaminated

materials as you go -- contaminated materials go off on a regular basis to be recycled somewhere else like Chalk River or somewhere; is that correct?

MR. STEANE: We are a radioactive program to the extent that we can decontaminate; we do that; we do have some materials that we are -- some small quantities of materials that we are -- like storing for some facilities such as Chalk River or some other facility; they're not being stored for this coming facility for the Port Hope Area Initiative.

MEMBER GRAHAM: Another question I have -- there are two other questions. The next question I have is, is based on the -- and this is to CNSC Staff -- based on the licence condition 2.1(a) and (b) with regard to the amount of UF6 that is being increased from 40, 45 tonnes a day as maximum equivalents, but the total does not increase more than 12,500 annually even though the average may be more in a day of manufacturing. The condition is that the amount still doesn't increase on an annual basis; correct?

MR. RABSKI: Henry Rabski, for the record. That change was to just change the daily production rate; it did not have an affect on the annual limit. The limit stays the same and will remain the same for the proposed licence.

MEMBER GRAHAM: So in essence, if you hit the maximum, and not necessarily you hit the maximum every day, but if you hit the maximum every day you would do all your production in 275 to 280 days. Is that -- really is that the way you operate? You'd do the maximum each day or you some days may only do 30 tonnes compared to another day at 45?

MR. STEANE: Bob Steane, for the record. I look forward to the day of 45 tonnes. We don't reset our maximum; we do hit 41, 42 tons and the production varies from the 30s to 40s.

MEMBER GRAHAM: A question to CNSC Staff, a day is the day you're referring to, so to start production, you don't run it over the average for a week; it would be 45 tons a day; is that correct?

MR. RABSKI: Henry Rabski, for the record.

Yeah, the daily production is calculated on these single days, and we review those records when we're on site to verify that they're in compliance with that upper limit of a daily production, not an average of daily.

MEMBER GRAHAM: Thank you.

The other question I have is with regard to "slight enriched". There is no -- in this licence application there is no processing of "slightly enriched"

being requested -- or part of this licence?

MR. STEANE: Bob Steane, for the record. That is correct. There is no processing of enriched or slightly enriched in this licence. There is the current approval for working with small quantities in the research lab.

MEMBER GRAHAM: The other question -- it's not a question I have, it's really a comment. It's with regards to the chart on 4 of 38, 6 of 38 and 10 of 38 and so on, it's difficult to follow them sometimes, whether they're cumulative or average with regard to 2006. Would you multiply by two for 2006 or would you take it as the averages going forward. And I guess the environmental monitoring is one with regard -- some of them are on average, but then there are other ones that are incidents and sometimes it might be easier to read, I think, that if you have to take 2006 and multiply it by two to get what it will be for the year or not. And that's a comment that sometimes people who have trouble reading it and automatically just say, "Well, it's up to June and you've got to double it", and that's not the case in many instances, but yet, it's not clear, and it should be more clear when you're putting this forward to the general public.

THE CHAIRPERSON: I think perhaps 2006

predicted based on current levels would be helpful.

Thank you, Dr. Dosman.

MEMBER DOSMAN: Madame Chair, just two questions. One is on the preliminary decommissioning plan, Cameco would be required to submit a revised financial guarantee. And I would like to ask Cameco if you'll have that preliminary decommissioning plan available by the 2nd Day hearing?

MR. STEANE: Bob Steane, for the record.

That preliminary decommissioning plan is available and has been completed; it has been submitted for review. Subject to Staff's review and acceptance, it's there, but -- the plan is done and has been submitted.

MEMBER DOSMAN: Thank you. And is there a comment from CNSC Staff on the preliminary decommissioning plan?

MR. HOWDEN: Barclay Howden, speaking. Yes, we will be in a position to -- we will have completed our review of the PDP for Day-2 and be able to report to the Commission where we stand there.

MEMBER DOSMAN: Thank you. And, Madame Chair, if I might, on page 29 of CMD-06-H1, Staff document, I would like to refer to the proposed -- it's number seven: "Proposed changes to the Licence." And the

bottom bullet of that page refers to:

"Appendix 'A' being modified to add the licensing documents 'Environmental Monitoring Program' and 'Radiation Protection Program Manual' to enhance the licence coverage in these safety areas and provide for additional consistency with other licences issued for similar processing facilities."

I would like to ask Cameco, do you have confidence that these documents can be provided in a timely manner?

MR. VETOR: Kirk Vetor, for the record.

We recently revised our Radiation Protection Program and that's being submitted to CNSC Staff for their review. And my understanding is, they are very close to issuing us some comments, and it should be very shortly after that that we'll be able to issue that as a final document.

And the Environmental Monitoring Plan, it's already been revised, so there should be absolutely no problem issuing that when it's asked for.

MEMBER DOSMAN: CNSC Staff, do you have any comment?

MR. HOWDEN: Barclay Howden speaking. I'm going to ask Marty O'Brien to comment.

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

record.

Yes, those two documents are just being finalized right now. The final comments are being resolved, but they'll be resolved in short order.

MEMBER DOSMAN: I presume that you have full confidence that Cameco can meet this requirement? That's a question.

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

MEMBER DOSMAN: Thank you.

THE CHAIRPERSON: Although I'd just like to make it clear that it's Cameco's responsibility, not the Staff's responsibility to guarantee Cameco abilities. Any further?

Well, thank you very much, Mr. Secretary.

MR. LeBLANC: Merçi beaucoup. This hearing is to be continued with Day-2 on November 28 and 29, 2006 at the Town Park Recreation Centre in Port Hope.

The public is invited to participate either by oral presentation or written submission on Hearing Day-2. Persons who wish to intervene on that day must file submissions by October 27, 2006.

The hearing is now adjourned to November 28, 2006. Madame Présidente.

THE CHAIRPERSON: Well, that you very much

for your attendance today. We will be taking a break for lunch and we will be coming back in -- well, it is just -- let's see, quarter to two would be, I think, most reasonable. That would be just over -- 13:30 then.

--- Upon recessing at 12:35 p.m.