Dear Mr. Miller:

Thank you for your letter of July 12, 2008 (attached), with respect to Cameco’s Port Hope Conversion Facility located in Port Hope, Ontario. You have raised a number of concerns in your letter, which can be summarised as follows:

- Your earlier attempts to obtain satisfactory answers from the Canadian Nuclear Safety Commission (CNSC) staff were not successful;
- You are unclear on the reasons for Cameco not removing 100% of contaminated soil underneath the UF$_6$ Plant;
- You are unsure as to how the current approach to manage contamination issues is consistent with the CNSC mandate to protect the environment;
- There appears to be a discrepancy between Cameco’s earlier estimates of contaminated soil removal and the actual removal as per technical reports; and
- You question why there appears to be more stringent clean-up criteria for the historic contamination funded by taxpayers, compared to the current approach funded by a private company.

I understand that CNSC staff responded to your requests on June 6, 2008 (attached). My letter is intended to address your above-noted concerns, which I am sure would also be of interest to the other citizens of Port Hope.

The starting point for all of the actions that have taken place at Cameco’s UF$_6$ plant over the course of the past year or so was, of course, the discovery of some unexpected uranium contamination in an excavation made to install a new cooling water tank in Building 50.
Following that discovery, all production operations inside Building 50 were shutdown and an independent investigation to determine the sources and extent of the contamination was initiated by Cameco. Concomitantly, CNSC staff, in conjunction with the Ontario Ministry of the Environment (MOE) staff conducted enhanced regulatory oversight to ensure that there was no unreasonable risk to human health and the environment. I would like to emphasize that a part of CNSC’s mandate is to ensure that our licensees’ activities do not pose unreasonable risk to their employees, members of the public and the environment.

There are two elements to addressing contamination under Building 50. We require Cameco to remove contaminated soils to the extent possible under Building 50, or manage any identified contamination in an appropriate manner. We also require that any contamination left in place does not pose both short-term and long-term unreasonable risks to employees, members of the public, and the environment.

Through its regulatory oversight of the spill discovered in July 2007 at Building 50, CNSC staff has ensured that Cameco has conducted the following:

- new operational and house-keeping procedures have been implemented, in order to prevent similar incidences in the future;
- secondary containment features of Building 50 have been improved or redesigned, such as chemical resistant coatings on flooring and trenches and lined sumps in order to minimize potential impacts, should similar incidences occur in the future;
- while maintaining the structural integrity of the Building 50, some contaminated soils underneath and immediately adjacent to the building have been excavated;
- the remaining contaminants under Building 50 have been mapped using on-site soil sampling methods, in order to properly manage any identified contamination left in place; and
- a ground water treatment system approved by the Ontario MOE is in place to capture contamination that may migrate from underneath Building 50 to the environment.

All of these above actions are intended to ensure that the contamination under Building 50 is either removed or controlled and monitored so that there is no present or future risk to health and safety of site workers, members of the public and the surrounding environment.

I can assure you that the CNSC does not differentiate between public and private properties used for authorized nuclear activities when fulfilling its mandate. In either of those situations, the CNSC would require complete removal of contaminated soils if there is evidence that such action is required to prevent any unreasonable risk to the health and safety of persons or to the environment.
In the case of Cameco’s UF₆ plant, there is no regulatory or risk basis for the removal of 100% of contaminated soils under Building 50 at this time. CNSC’s regulatory basis for remediation of the remaining contamination will vary in accordance with any changes in land use or new evidence of changes to site characteristics so as to ensure protection of the health and safety of the public and the environment.

In its declaration before the Commission, Cameco had originally estimated that 40% of contaminated soils were removed from underneath Building 50. However, based on a CNSC requirement to refine site characterization results, Cameco has further revised their original soil removal estimates. While you have referred to the various ranges of soil contaminants either removed or remaining under Building 50, please note that in this situation, percent removal of contaminated soils is not the determining indicator of a successful remediation. What is more critical is that there are measures in place to safely manage the remaining contamination under Building 50.

In addition to its control of Building 50 contamination, the CNSC has required Cameco to extend their investigation beyond Building 50 to map all site sources of contamination, be they related to current operations or historic activities at the site. Cameco has installed an extensive ground water monitoring network along the Port Hope Harbour Turning Basin, the closest off-site receiving environment. In an effort to determine whether unreasonable risks exist, the CNSC has asked for, and Cameco has collected both ground water and surface water samples; to date, no adverse changes have been observed in surface water quality that can be attributed to the recent discovery of the spill at Building 50. In conclusion, ground water and surface water monitoring data indicate that workers and members of the public are not exposed to levels of contaminants that represent a health risk, either in ground water or water in the turning basin.

Let me assure you and the residents of Port Hope that CNSC will continue its regulatory oversight at the Cameco Port Hope Conversion Facility as well as other licensed facilities across Canada to ensure that the health and safety of persons and the environment are protected.

Yours sincerely,

Michael Binder

Attachments (2)
Michael Binder
Chairman and CEO
Canadian Nuclear Safety Commission
280 Slater St.
P.O. Box 1046, Station B
Ottawa, ON K1P 5S9

Dear Dr. Binder:

I am writing to you because I have been unable, for the last five months, to get from your staff an answer to two important questions relating to the health and environment of Port Hope.

I have highlighted them in the copy of my last letter, dated May 20, 2008:

- “I am respectfully asking you for the reason your agency did not make Cameco clean up 100 per cent of the contamination that its negligent practices allowed to leak onto our town’s waterfront.”

- “Can you explain the technical, economic and environmental justification for the CNSC staff accepting Cameco’s argument that removing any more soil will undermine the footings of the UF₆ building? How is that consistent with your mandate to protect the environment?”

My May 20 letter was passed on by Barclay Howden to Henry Rabsky, who eventually responded but he did not answer these two questions. My subsequent request for him to do so was not answered.

You know the history of nuclear contamination in Port Hope. As a citizen, I want to know that the CNSC will not repeat the mistakes made by the AECB. We now have 2 million cubic metres of low-level radioactive waste that was allowed to be left in the ground over the years and that the federal government has yet to put a shovel to. Cameco’s spill of uranium, arsenic and other toxic materials should not be allowed to add to our environmental burden without compelling reasons.

My questions take on new urgency because Cameco is telling our community that it has already cleaned up 40 percent of the contamination under Building 50, and there is no threat to the public or the environment. However, documents I recently received from CNSC through an Access to Information request show that this is not true.

A Goldar Associates report to Cameco, dated March 10, 2008, says there are eight contaminants in the soil beneath Building 50 that exceed the Ministry of the Environment’s standards for industrial soil – uranium, arsenic, fluoride, silver, cobalt, copper, nickel and antimony.
It also gives the following information about how much contamination Cameco believes is in the soil, and how much has actually been removed:

**Uranium:** An estimated 1,000 to 1,700 kilograms (1,000 kg. of which is above the Port Hope Area Initiative standards for U235 and U238). Only about 10 to 17 percent of this has been removed.

**Fluoride:** An estimated 20,000 to 26,000 kg. (between 1,600 and 7,500 kg. of which is above the PHAI standard). Only 2 to 7 percent of this has been removed.

**Arsenic:** An estimated 400 to 500 kg. (most of which is within PHAI standards). Between 15 and 55 percent of this has been removed.

This tells me that the CNSC is allowing Cameco to leave thousands of kilograms of new contamination in the ground (and this appears to be only a rough estimate). If this were historic waste, it would have to be cleaned up under the federally funded low-level clean-up. But because it was put into the ground by a private company in 2008, and it might undermine the building if it were dug up, it will stay there until the plant is decommissioned.

Please tell me how your commission can justify this.

John Miller
6083 Knoxville Road
RR 4, Port Hope, ON
L1A 3V8

July 12, 2008
June 6, 2008

Mr. John Miller  
Port Hope, Ontario  
e-mail: semiller@syrptatico.ca  

Subject: CNSC Staff's Response to Your Letter of May 21, 2008  

Dear Mr. Miller:

Thank you for your letter dated May 21, 2008. The Canadian Nuclear Safety Commission (CNSC) staff has reviewed your letter and offers the following response:

In July 2007, uranium contamination was discovered under Cameco’s Port Hope uranium hexafluoride (UF6) plant building. CNSC staff, in conjunction with the Ontario Ministry of the Environment staff, has been monitoring Cameco’s corrective actions and remedial measures since this discovery, through monthly inspections, meetings and reports.

As part of its regulatory oversight, CNSC staff obtained Cameco’s most recent groundwater and harbour water quality monitoring data shortly before the May 14, 2008 Commission’s meeting in Ajax, Ontario. That information indicated that although trace amounts of contaminants from the UF6 plant had reached the harbour’s turning basin, there were no indications that water quality in the harbour had changed.

As you may know, CNSC staff required Cameco to submit a remediation plan to address the contamination of soil and groundwater underneath the UF6 plant building. On December 20, 2007, Cameco submitted its remediation plan for CNSC staff’s review and acceptance. The review of Cameco’s remediation plan took into account the structural integrity of the existing UF6 plant building. CNSC staff accepted one of the options proposed by Cameco that addressed the CNSC requirement; to prevent an unreasonable risk to the environment.
The responsibility to enforce Section 36 of the *Fisheries Act* with respect to the deposition of deleterious substances entering waterbodies belongs to Environment Canada. The CNSC has been in contact with Environment Canada since Cameco reported discovering contamination beneath the UF₆ building and was informed on May 7, 2008 that a groundwater plume had reached the western shoreline of the harbour.

CNSC staff, during the Commission meeting on May 14, stated that they have verified that the interim groundwater controls and treatment systems are in place by Cameco and there is no immediate risk to the environment or the general public.

In CNSC staff’s opinion, Cameco is, currently, meeting its obligations outlined in paragraphs 12(1)(c) and 12(1)(f) of the CNSC’s *General Nuclear Safety and Control Regulations*.

If you have any questions related to this matter, please do not hesitate to contact me.

Yours truly,

[Signature]

Henry Rabski, P. Eng.
Director General

c.c.: A. Oliver, (Cameco)
M. Longpre (Ontario Ministry of the Environment)
E. Lopez (Environment Canada)
C. Cannon (Municipality of Port Hope)