CCNR submission to the CNSC on the proposed relicensing of Cameco's Port Hope Conversion Facility.

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The Canadian Coalition for Nuclear Responsibility (CCNR) is opposed to the relicensing of the Port Hope Conversion facility for another five years under present conditions.

In terms of radiological and chemical hazards to the public and to the environment, CCNR asserts that no case has been made by the licensee for maintaining and expanding these potentially dangerous operations in the heart of a thriving downtown community, without any effective buffer zone, and sited as it is immediately adjacent to one of the most important bodies of freshwater in North America – namely Lake Ontario.

It is evident to the most inexperienced observer that if such a major nuclear facility – the largest uranium refining operation in the world – were to be built today, it would never have been allowed to be constructed where it is now situated. Yet Cameco plans not only to continue operating at this site, but to increase production significantly – possibly even doubling its output – in the foreseeable future.

CCNR believes that a regulatory agency truly committed to protecting the health and safety of citizens and the environment would never allow such a facility to be relicensed without insisting that the licensee make a strong case for retaining the current site as opposed to seeking a new site -- especially since a great deal of consolidation, involving demolition of old properties and construction of new buildings will be taking place during the licence period according to the Vision 2010 Plan.

If the Commissioners feel that they would not be comfortable licensing a new facility of this nature at the site in question, those same Commissioners should be asking themselves why they should comply with the CNSC staff's advice to go on extending the Cameco licence indefinitely, five years at a time, without ever asking the crucial question: if this is an inappropriate site, why is the licence being extended at all?

Has Cameco even been asked to make their case? Or does CNSC simply approve what Cameco wants without asking any truly fundamental questions or challenging Cameco's determination to cling to the perpetuation of this historical siting mistake?

For example, why is the facility located on a floodplain? Are we waiting for a major unanticipated flood – possibly combined with "weird weather" – before it dawns on us that the Port Hope harbour and waterfront areas may be in jeopardy from this facility?

Does it make sense to perpetuate the Cameco complex as an operating entity when a \$260-million radioactive cleanup plan is underway in Port Hope, including large volumes of sediment that will have to be removed from Port Hope harbour after retaining walls have been installed around the perimeter?

Does it make sense to tear down old radioactively contaminated properties and build new buildings on the same site, while leaving other major facilities intact, when the best way to decontaminate the entire site would be to remove all the structures so that the entire

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inventory of contaminated soil can be removed? This would require Cameco to consider an alternate site for their entire complex – a course of action that is long overdue. CCNR is concerned over the failure of both the licensee and the CNSC staff to address the potential health hazards of chronic exposure of the population to alpha-emitting radionuclides – especially aerosol-sized particles of uranium dust via inhalation.

Just as the most dangerous emissions from an automobile exhaust are not the visible emissions but the invisible ones, so too with radioactive emissions. HEPA filters remove the larger, non-respirable particles, but the micron and sub-micron particles of uranium dust escaping from the HEPA filters at the conversion facility will be available in the environment to be inhaled into the deepest parts of the lungs of the residents of Port Hope as long as the plant continues to operate in the middle of town.

It has long been recognized that alpha radiation is a particularly dangerous form of ionizing radiation, when it is in close contact with sensitive living tissue. Because there are only a handful of uranium refineries in the world, there is very little epidemiological evidence involving populations that are exposed to such tiny uranium aerosol particles. Mill workers are not subjected to the same kind of insults because the particle sizes are generally much larger and therefore non-respirable.

Current evidence shows that aerosols of any kind that are inhaled into the lungs pass easily into the blood and are carried to the brain in a very short time. Past studies of Port Hope residents have shown an excess of brain cancer – evidence that was discounted by the CNSC on the grounds that uranium is not known to cause brain cancer.

What studies have been done by the licensee or by the CNSC staff to keep abreast of modern research in brain cancer or aerosols of alpha-emitting radioactive particles?

Isn't it axiomatic that the best public health measures are preventative? The precautionary principle would suggest that populations should not be routinely subjected to known carcinogens unless there is no alternative. The alternative is relocation of Cameco.

Surely a public agency like CNSC which is charged with protecting the health and safety of Canadians and the environment should be challenging the licensee to justify its intention to remain where it is, by specifically addressing the potential health risks to the population and providing detailed information regarding the consequences of a major unforeseen flood coupled with weird weather conditions.

The CCNR finds it beyond belief that the Cameco facility is given a "satisfactory" rating by the CNSC staff for every aspect of its operations, in light of the 2007 incident of substantial leakage of radioactive and chemical pollutants into the soil under the conversion facility – leakage which was not detected by the monitoring wells set up around the plant.

CCNR opposes the relicensing of the Cameco conversion facility on the grounds that there has been inadequate attention paid to health, safety and environmental concerns.