

CAMECO CORP  
Form 6-K  
September 17, 2008

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 20549  
FORM 6-K  
Report of Foreign Private Issuer  
Pursuant to Rule 13a-16 or 15d-16 Under  
the Securities Exchange Act of 1934  
For the month of September, 2008  
Cameco Corporation  
(Commission file No. 1-14228)  
2121 11th Street West  
Saskatoon, Saskatchewan, Canada S7M 1J3  
(Address of Principal Executive Offices)**

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F  Form 40-F

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes  No

If  Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b):

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**Exhibit Index**

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1.	Press Release dated September 16, 2008	3 6

**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: September 17, 2008

**Cameco Corporation**

By: *Gary M.S. Chad*  
Gary M.S. Chad, Q.C.  
Senior Vice-President, Governance,  
Law and Corporate Secretary

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**TSX:** CCO  
**NYSE:** CCJ

**website:** [cameco.com](http://cameco.com)  
**currency:** Cdn (unless noted)

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**Cameco Updates Status of Port Hope Conversion Plant**

Saskatoon, Saskatchewan, Canada, September 16, 2008 . . . . .

**Cameco Corporation** reported today that it has resolved the issue of leaks underground from its uranium hexafluoride (UF<sub>6</sub>) production plant last year.

In a presentation to Port Hope municipal council, the company said it has combined extensive groundwater control measures with major repairs and improvements to its UF<sub>6</sub> plant that are intended to prevent uranium and other production-related chemicals from spreading further and to ensure there are no underground leaks in the future.

The company provided council with a summary of the final reports it recently submitted to the Canadian Nuclear Safety Commission (CNSC) regarding the investigation and formal risk assessment that were conducted after the July 2007 discovery that material had leaked through the floor of the plant into soil and groundwater. Cameco voluntarily suspended operations within the UF<sub>6</sub> plant to investigate the cause of the leak and to develop short- and long-term plans to address that issue. Operations at the adjacent plant that produces uranium dioxide (UO<sub>2</sub>) were not affected.

Andy Oliver, vice-president of Cameco's fuel services division, told council members that the company was notified September 12, 2008 that CNSC staff has accepted Cameco's plans to restart UF<sub>6</sub> production. He expects that this will happen within the next several days. The company will issue a news release once the plant has started to produce UF<sub>6</sub>.

After the CNSC accepted our plan to restart production, we began the final phase of putting the plant back into operation, he said. Since the plant has been shut down for over a year, we have been following a cautious, thorough approach to restart in order to ensure it happens properly and safely.

Cameco has sufficient hydrofluoric acid (HF) to resume operations at a reduced rate that will allow production to continue for about a month. Cameco's sole supplier of HF, which is necessary to produce UF<sub>6</sub>, has terminated its long-term supply contract with Cameco. Cameco believes the contract was wrongfully terminated. The supplier has offered to supply HF, but at a significantly increased price. Cameco is working to resolve the matter and is seeking alternate supply sources. HF supply on a spot basis is not readily available or deliverable without pre-approved transportation plans.

We have carried out a broad series of corrective actions and other control and preventative measures inside and outside the plant to resolve the issue and to ensure leaks do not occur in the future, Oliver said. Cameco has learned a lot from the experience and will apply those lessons to other areas of its Port Hope operations and right across the company.

Cameco expects total remediation costs to be \$50 to \$55 million of which approximately \$20 million (including \$17 million incurred in 2007) will be expensed and the remainder capitalized. These expenditures were used to investigate the cause and effects of the subsurface leakage, rehabilitate the plant and install a system of wells that collect impacted groundwater in the vicinity of the plant and between the plant and the harbour. The groundwater collected is then evaporated to remove and safely dispose of contaminants.

Inside the plant, Cameco has carried out a number of major improvements, including replacement of large sections of the ground floor and application of chemical-resistant coatings to all floors, as well as removal of some contaminated soil from beneath the building. In addition, the company has significantly increased its leak prevention and detection capability by using double containment around sumps and adding leak detection sensors to some in-ground structures. Trenches have been sloped to ensure liquids are drained immediately to sumps. All trenches will be inspected regularly as part of improved liquid management practices.

Oliver said he was pleased and reassured by the fact that the final risk assessment conducted by an independent third party shows that the level of contaminants that entered the soil and groundwater on the site do not pose a threat to human health or the environment.

The company also reported that it is developing a comprehensive program to address other subsurface contamination that is the legacy from about 150 years of various industries operating on the site that Cameco now occupies. Oliver said Cameco, in consultation with the CNSC and Ontario's Ministry of the Environment, is in the process of completing this program that will provide more details about contamination across the site, most of which pre-dates Cameco's ownership of the property. Documenting historic use of the site has been a key element in understanding the findings of the investigation.

It's essential to understand the complex industrial history of this site in order to put the results of our investigation into the proper context, Oliver said. Cameco is committed to developing a plan to deal with this issue in an environmentally responsible manner, regardless of who was originally responsible for the contamination.

The company has received a preliminary report on the investigation which is part of the program that will be used in the development of an environmental management plan for the entire site. In advance of finalizing that plan, Cameco has already established a long-term monitoring program that is expected to help ensure that the environmental management plan is effective and to provide early detection of leaks. An important part of that plan will be Cameco's multi-year site cleanup and modernization project, known as Vision 2010. The project, that includes removing up to 150,000 cubic metres of contaminated soil, building materials and stored historic waste, is currently undergoing an environmental assessment.

The site-wide environmental investigation has identified a number of subsurface contaminants in various locations on the property. It confirms that small amounts of material, mainly from operations that pre-date Cameco, appear to be entering the harbour, a point that Cameco has regularly reported to various regulators for many years.

Initial data from the ongoing independent risk assessment being conducted in conjunction with the site-wide investigation indicates that the small amounts of contamination that reach the harbour pose no risk to the environment.

Cameco has tested water quality in the Port Hope harbour for about a decade and there has been no deterioration of water quality in that time, Oliver said. In fact, sediment samples indicate the quality is much better than in earlier decades.

Cameco, with its head office in Saskatoon, Saskatchewan, is the world's largest uranium producer. The company's uranium products are used to generate electricity in nuclear energy plants around the world, providing one of the cleanest sources of energy available today. Cameco's shares trade on the Toronto and New York stock exchanges.

#### **CAUTION REGARDING FORWARD-LOOKING INFORMATION AND STATEMENTS**

Statements contained in this news release which are not current statements or historical facts are forward-looking information (as defined under Canadian securities laws) and forward-looking statements (as defined in the U.S. Securities Exchange Act of 1934, as amended) which may be material and that involve risks, uncertainties and other factors that could cause actual results to differ materially from those expressed or implied by them. The statements above regarding the resumption of Port Hope UF<sub>6</sub> production and certain other statements regarding future events, including measures that are intended to prevent uranium and other production-related chemicals from spreading further and to ensure there are no underground leaks in the future, are forward-looking information and are based upon the following key assumptions and subject to the following material risk factors that could cause results to differ materially: we have assumed that the ground water control measures, coupled with the major repairs and improvements to the UF<sub>6</sub> plant, will prevent uranium and other production-related chemicals from spreading further from the plant and will ensure that there are no future underground leaks, but that is subject to a number of risks including lack of success or equipment failure; we have assumed that the UF<sub>6</sub> plant can be brought back into production without unforeseen difficulty or delay, but that is subject to a number of risks including the risk of unusual difficulties arising from the extended length of time that the UF<sub>6</sub> plant has been shut down, the risk of equipment failure, the risk of natural phenomena including inclement weather conditions and fire, and the risk of delay or ultimate lack of success; we have made certain assumptions in connection with our cost estimates, which are subject to the risk that costs are higher than expected; we have assumed that the findings in the preliminary investigative report on site contamination prove to be correct, but that is subject to the risk of adverse findings in the final report; we have assumed that the long-term monitoring plan will ensure that the long-term management plan is effective and will provide early detection of leaks, but that is subject to a number of risks including lack of success or equipment failure.

The forward-looking information and statements included in this news release represent Cameco's views as of the date of this news release and should not be relied upon as representing Cameco's views as of any subsequent date. While Cameco anticipates that subsequent events and developments may cause its views to change, Cameco specifically disclaims any intention or obligation to update forward-looking information and statements, whether as a result of new information, future events or otherwise, except to the extent required by applicable securities laws. Forward-looking information and statements contained in this news release regarding the status of Port Hope conversion plant, including the resumption of UF<sub>6</sub> production, noted above is presented for the purpose of assisting Cameco's shareholders in understanding management's current views regarding those future outcomes, and may not be appropriate for other purposes.

There can be no assurance that forward-looking information and statements will prove to be accurate, as actual results and future events could vary, or differ materially, from those anticipated in them. Accordingly, readers of this news release should not place undue reliance on forward-looking information and statements.

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