

CAMECO CORP  
Form 6-K  
December 21, 2006

**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 December, 2006

**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):

---

**Exhibit Index**

Exhibit No.	Description	Page No.
1.	Press Release dated December 21, 2006.	3-4

**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: December 21, 2006

Cameco Corporation

By: "*Gary M.S. Chad*"  
Gary M.S. Chad  
Senior Vice-President, Governance,  
Legal and Regulatory Affairs, and  
Corporate Secretary

---

<b>Listed</b>	<b>Share</b>
TSX	Symbol
NYSE	CCO
	CCJ

**web site address:**  
[www.cameco.com](http://www.cameco.com)

2121 1<sup>st</sup> Street West, Saskatoon, Saskatchewan, S7M 1J3 Canada  
 Tel: (306) 956-6200 Fax: (306) 956-6201

**Cameco Provides Update on Remediation of Cigar Lake Project**

Saskatoon, Saskatchewan, Canada, December 21, 2006 . . . . .

**Cameco Corporation** is proceeding with a phased plan to restore the underground workings at Cigar Lake after a water inflow on October 23, 2006 flooded the project.

The first phase of the remediation plan involves drilling holes down to the source of the inflow. Concrete will be pumped through the drill holes and sealed off with grout. Subsequent phases include removing water from underground areas, ground freezing in the area of the inflow, restoring other underground areas and resumption of mine development. Regulatory approval is required for each phase of the remediation plan.

Drill crews completed one hole in the area of the rockfall and nearly completed another hole before leaving for their Christmas break. About 18 holes are now planned including four for mine dewatering. The crews will resume working on December 27, 2006 working around the clock, seven days a week.

Drilling through the Athabasca sandstone has been more challenging than anticipated, said Terry Rogers, Cameco's senior vice-president and chief operating officer. However, the experience we gain in the first few holes is expected to accelerate progress in the future.

We will be in a better position to estimate when we expect the first phase to be completed after the first concrete is poured, said Rogers. Cameco had expected to be pouring concrete in December, as part of the first phase, but that is now expected to occur in January 2007.

Cameco will issue another news release in January to update progress and in February 2007 plans to provide preliminary capital cost estimates and timelines for the remediation, as previously indicated. The company continues to work in consultation with international experts to develop a comprehensive remediation plan including contingency options.

Based on current plans, Cameco expects the remediation phases mentioned above will fall within the scope of the original environmental assessment of the Cigar Lake project. Cameco is working closely with the Canadian Nuclear Safety Commission and Saskatchewan regulatory agencies to achieve timely approvals for the various elements of the plan.

The Cigar Lake project is a joint venture owned by Cameco Corporation (50%), AREVA Resources Canada Inc. (37%), Idemitsu Uranium Exploration Canada Ltd. (8%) and TEPCO Resources Inc. (5%). The project is located in northern Saskatchewan.

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. Statements contained in this news release, which are not historical facts, are forward-looking statements that involve risks, uncertainties and other factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements. Factors that could cause such differences, without limiting the generality of the following, include: the impact of the sales volume of fuel fabrication services, uranium, conversion services, electricity generated and gold; volatility and sensitivity to market prices for uranium, conversion services, electricity in Ontario and gold; competition; the impact of change in foreign currency exchange rates and interest rates; imprecision in decommissioning, reclamation, reserve and tax estimates; environmental and safety risks including increased regulatory burdens and long-term waste disposal; unexpected geological or hydrological conditions; adverse mining conditions; political risks arising from operating in certain developing countries; terrorism; sabotage; a possible deterioration in political support for nuclear energy; changes in government regulations and policies, including tax and trade laws and policies; demand for nuclear power; replacement of production; failure to obtain or maintain necessary permits and approvals from government authorities; legislative and regulatory initiatives regarding deregulation, regulation or restructuring of the electric utility industry in Ontario; Ontario electricity rate regulations; natural phenomena including inclement weather conditions, fire, flood, underground floods, earthquakes, pit wall failure and cave-ins; ability to maintain and further improve positive labour relations; strikes or lockouts; operating performance, disruption in the operation of, and life of the company's and customers' facilities; decrease in electrical production due to planned outages extending beyond their scheduled periods or unplanned outages; success of planned development projects; and other development and operating risks.

Although Cameco believes that the assumptions inherent in the forward-looking statements are reasonable, undue reliance should not be placed on these statements, which only apply as of the date of this report. Cameco disclaims any intention or obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

- End -

**Investor and media inquiries:** Alice Wong (306) 956-6337

**Investor inquiries:** Bob Lillie (306) 956-6639

**Media inquiries:** Lyle Krahn (306) 956-6316