

CAMECO CORP  
Form 6-K  
December 22, 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):

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**Exhibit Index**

Exhibit No.	Description	Page No.
1.	Press Release dated December 22, 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 22, 2006

Cameco Corporation

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

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**FORM 51-102F3  
MATERIAL CHANGE REPORT**

**Item 1 Name and Address of Company**

Cameco Corporation ( Cameco )  
2121 1<sup>st</sup> Street West, Saskatoon, Saskatchewan S7M 1J3

**Item 2 Date of Material Change**

December 21, 2006

**Item 3 News Release**

The English version and the French translation version of the press release relating to this material change were distributed and filed by Canadian Corporate News through their Canadian Timely Disclosure Pack and U.S. Timely Disclosure Pack on December 21, 2006.

**Item 4 Summary of Material Change**

On December 21, 2006, Cameco reported it 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.

Drilling through the Athabasca sandstone has been more challenging than anticipated.

Cameco will be in a better position to estimate when it expects the first phase to be completed after the first concrete is poured. 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.

**Item 5 Full Description of Material Change**

On December 21, 2006, Cameco reported it 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

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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.

Cameco will be in a better position to estimate when it expects the first phase to be completed after the first concrete is poured. 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 plans to provide preliminary capital cost estimates and timelines for the remediation in February 2007, as previously indicated. Cameco 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.

**Item 6 Reliance on subsection 7.1(2) or (3) of National Instrument 51-102.**

Not applicable.

**Item 7 Omitted Information**

Not applicable.

**Item 8 Executive Officer**

Gary M.S. Chad

Senior Vice-President, Governance, Legal and Regulatory Affairs, and Corporate Secretary

Cameco Corporation

(306) 956-6303

**Item 9 Date of Report**

December 22, 2006.