CAMECO CORP Form 6-K August 15, 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 August, 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 o Form 40-F b 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 o No b

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. Material Change Report Dated August 11, 2008

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: August 15, 2008 Cameco Corporation

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

2

FORM 51-102F3 MATERIAL CHANGE REPORT

Item 1 Name and Address of Company

Cameco Corporation (Cameco)

2121 1th Street West, Saskatoon, Saskatchewan S7M 1J3

Item 2 Date of Material Change

August 11, 2008

Item 3 News Release

The English version and the French translation version of the news release relating to this material change were distributed and filed by CCN Mathews through their Canadian Timely Disclosure Pack and U.S. Timely Disclosure Pack on August 11, 2008.

Item 4 Summary of Material Change

On August 11, 2008, Cameco completed the acquisition of a 70% interest in the Kintyre uranium exploration project in Western Australia for \$346.5 million (US). Cameco funded the acquisition through existing credit facilities.

Item 5 Full Description of Material Change

On August 11, 2008, Cameco completed the acquisition of a 70% interest in the Kintyre uranium exploration project in Western Australia for \$346.5 million (US). On July 9, 2008, Cameco issued a press release announcing it had signed an agreement to acquire this interest and that closing of the agreement was subject to ministerial approval in Western Australia and execution of certain agreements with the Martu people who are the traditional owners of the land. That approval was received and agreements executed by the Martu allowing closing of the acquisition to proceed on August 11, 2008.

A joint venture comprised of Cameco (70%) and Mitsubishi Development Pty Ltd (30%) purchased the Kintyre project from Rio Tinto for \$495.0 million (US) through a bidding process. Cameco will operate the project and funded its share of the purchase price through existing credit facilities.

Kintyre is an advanced exploration project located in Western Australia about 1,250 kilometres northeast of Perth. Uranium was first discovered in the area in 1985 and followed up with further exploration that identified eight deposits. The project was placed in care and maintenance in 1988 when uranium prices declined below \$12 per pound (US). Rio Tinto initiated the sale process in 2007.

Based upon Cameco s due diligence, it is estimated that the Kintyre project may host potential mineral deposits ranging from 62 to 80 million pounds U_3O_8 in total, with an average grade between 0.3% and 0.4% U_3O_8 . These estimates are conceptual in nature. The basis for these conceptual estimates includes 355 historical diamond drill holes totalling 70,279 metres. There has been insufficient exploration, however, to define a resource at the Kintyre project in compliance with Canadian mineral resource reporting standards. Although Cameco plans to undertake an exploration program with the objective of estimating a resource for the deposits, it is uncertain if further exploration will result in the target being delineated as a mineral resource.

The joint venture plans to work toward a mine development agreement with the Martu.

Development of the Kintyre deposits is subject to state government approval. The current Labor government in Western Australia permits uranium exploration, but continues to oppose new uranium mine development. However, Australian governments and political parties generally are becoming more supportive of uranium development. In 2007, the federal Australian Labor Party abandoned a long-

standing policy opposing development of new uranium mines. Since forming the national government, the party has become supportive of uranium mining generally in Australia.

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, Law and Corporate Secretary Cameco Corporation (306) 956-6303

Item 9 Date of Report

August 15, 2008

4