

Cameco announces start of ore production at Cigar Lake mine

March 13, 2014 (Source: Marketwired) – **Cameco** (TSX:CCO) (NYSE:CCJ) announced today that ore production has begun at the Cigar Lake uranium mining operation in northern Saskatchewan.

The mining system and underground processing circuits are operational and ore is being transported to the McClean Lake mill operated by AREVA Resources Canada Inc. which is located 70 kilometres northeast of the minesite.

“Cigar Lake is among the most technically challenging mining projects in the world,” said Tim Gitzel, president and CEO of Cameco, the operator and 50.025% owner of Cigar Lake. “The start of ore production is a tremendous achievement and I want to thank the many hundreds of people who helped to bring this exceptional orebody into production.

“Uranium from Cigar Lake is expected to fuel clean electricity production around the world for many years while providing quality employment and business opportunities for a generation of Saskatchewan people.”

The McClean Lake mill is expected to begin processing the ore to uranium concentrate by the end of the second quarter of 2014. The mill is expected to produce between 2 million and 3 million pounds of uranium concentrate in 2014 and ramp up to its full production rate of 18 million pounds by 2018.

As at December 31, 2013, the total capital cost of the Cigar Lake project was estimated at \$2.6 billion. Up to 1,000 people worked at the site during construction and the mine will employ more than 600 highly-skilled workers during operation. The majority of the workers are residents of Saskatchewan’s north.

Profile

Cameco is one of the world's largest uranium producers, a significant supplier of conversion services and one of two Candu fuel manufacturers in Canada. Our competitive position is based on our controlling ownership of the world's largest high-grade reserves and low-cost operations. Our uranium products are used to generate clean electricity in nuclear power plants around the world. We also explore for uranium in the Americas, Australia and Asia. Our shares trade on the Toronto and New York stock exchanges. Our head office is in Saskatoon, Saskatchewan.

Caution Regarding Forward-Looking Information and Statements

Certain information contained in this news release constitutes "forward-looking information" or "forward-looking statements" with the meaning of Canadian and U.S. securities laws. These include forecasts of total capital costs and that the McClean Lake mill is expected to begin processing the ore to uranium concentrate by the end of second quarter of 2014, produce between 2 million and 3 million pounds of uranium concentrate in 2014, and ramp up to its full production rate of 18 million pounds by 2018. This information is based upon a number of assumptions that, while considered reasonable by management, are subject to significant uncertainties and contingencies. We have assumed that: our Cigar Lake development, mining and production plans succeed; there is no material delay or disruption in our plans as a result of ground movements, cave-ins, additional water inflows, a failure of seals or plugs used for previous water inflows, natural phenomena, delay in acquiring critical equipment, equipment failure or other causes; there are no labour disputes or shortages; our bulk ground freezing program progresses fast enough to deliver sufficient frozen ore to meet production targets; our expectation that the jet boring mining method will be successful and that we will be able to solve technical challenges as they arise in a timely manner; our expectation

that we will be able to obtain the additional jet boring system unit we require on schedule; we and AREVA obtain contractors, equipment, operating parts, supplies, regulatory permits and approvals when needed; mill modifications and commissioning of the McClean Lake mill are completed as planned, and the mill is able to process Cigar Lake ore as expected, AREVA will be able to solve technical challenges as they arise in a timely manner, and sufficient tailings capacity is available; and our mineral reserves estimate and the assumptions it is based on are reliable. This forward-looking information also involves known and unknown risks, uncertainties, and other factors that that may cause actual results and developments to differ materially from those expressed or implied.

They include risks: that an unexpected geological, hydrological or underground condition or an additional water inflow, further delays our progress; of ground movements and cave-ins; that we or AREVA cannot obtain or maintain the necessary regulatory permits or approvals; of natural phenomena, labour disputes, equipment failure, delay in obtaining the required contractors, equipment, operating parts and supplies or other reasons cause a material delay or disruption in our plans; that sufficient tailings facility capacity is not available; that our mineral reserves estimate is not reliable; that our development, mining or production plans for Cigar Lake are delayed or do not succeed for any reason, including technical difficulties with the jet boring mining method or freezing the deposit to meet production targets, technical difficulties with the McClean Lake mill modifications or commissioning or milling Cigar Lake ore or our inability to acquire any of the required jet boring equipment. We are providing this forward-looking information to help you understand management's views regarding Cigar Lake uranium production and it may not be appropriate for other purposes. Cameco does not undertake any obligation to update or revise forward-looking information, whether as a result of new information, future events or otherwise, except to the

extent legally required.

Qualified Person

The above scientific and technical information related to the Cigar Lake mining operation was approved by Scott Bishop, manager, technical services for Cameco, who is a qualified person for the purpose of National Instrument 43-101.