

TSX: CCO
NYSE: CCJ



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Jet Boring in Ore Under Way at Cigar Lake

Saskatoon, Saskatchewan, Canada, December 16, 2013

Cameco (TSX: CCO; NYSE: CCJ) announced today that jet boring in ore is underway at the Cigar Lake uranium project in northern Saskatchewan. All additional mine work identified in September 2013 has been completed and construction is essentially complete.

Commissioning in ore for the underground mining and process equipment continues. Cameco is on track to begin ore production at Cigar Lake during the first quarter of 2014 as previously announced.

During production, ore from the Cigar Lake mine will be transported 70 kilometres by truck to the McClean Lake mill for processing to uranium concentrate. The McClean Lake mill is majority owned and operated by AREVA.

AREVA has reported that work on required mill modifications is proceeding on schedule for completion by the end of the second quarter of 2014 when milling of Cigar Lake ore is expected to begin.

The project is owned by Cameco (50.025%), AREVA Resources Canada Inc. (AREVA) (37.1%), Idemitsu Canada Resources Ltd. (7.875%) and TEPCO Resources Inc. (5.0%). The project is operated by Cameco.

Qualified Person

The above scientific and technical information related to the Cigar Lake project was approved by Scott Bishop, principal mine engineer for Cameco, who is a qualified person for the purposes of NI 43-101.

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, including Ontario where we are a limited partner in North America's largest nuclear electricity generating facility. 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" within the meaning of Canadian and U.S. securities laws. These include the statements that: Cameco is on track to begin ore production at Cigar Lake during the first quarter of 2014 as previously announced; and AREVA has reported that work on required mill modifications is proceeding on schedule for completion by the end of the second quarter of 2014 when milling of Cigar Lake ore is expected to begin. 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: there is no material delay or disruption in our plans as a result of ground movements, cave ins, additional water inflows, natural phenomena, delay in acquiring critical equipment, equipment failure, labour disputes, failure to obtain or maintain regulatory approvals, or other causes; our Cigar Lake mining and production plans succeed, including the success of the jet boring mining system; mill modifications and commissioning of the McClean Lake mill are completed as planned and the mill is able to mill Cigar Lake ore as expected; and that any technical challenges at the Cigar Lake mine and McClean Lake mill will be resolved in a timely manner as they arise. This forward-looking information also involves known and unknown risks, uncertainties and other factors that may cause actual results and developments to differ materially from those expressed or implied. They include the risks that: unexpected geological, hydrological, underground condition, or ground movements and cave ins or an additional water inflow delays or disrupts our plans; natural phenomena, labour disputes, technical challenges, equipment failure, failure to obtain or maintain regulatory approvals, delay in obtaining the required equipment or other reasons cause a material delay or disruption in our plans; our mining or production plans for Cigar Lake are delayed or do not succeed for any reason, including technical difficulties with the jet boring mining system; and the plan to mill Cigar Lake ore at the McClean Lake mill is delayed or does not succeed for any reason, including technical difficulties with mill modifications or commissioning or milling Cigar Lake ore. We are providing this forward-looking information to help you understand management's views regarding Cigar Lake 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.

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