

TSX: CCO
NYSE: CCJ



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Cameco Provides Update on Cigar Lake Mine

Saskatoon, Saskatchewan, Canada, July 16, 2014

Cameco (TSX: CCO; NYSE: CCJ) today provided an update on recent developments at the Cigar Lake uranium mine in northern Saskatchewan.

The Cigar Lake uranium deposit occurs at depths ranging from 410 to 450 metres below the surface where the water-saturated Athabasca sandstone meets the underlying basement rocks. To prevent water from entering the production areas of the mine and to help stabilize weak rock formations, the ore zone and surrounding ground is being frozen by circulating a brine solution through cased holes drilled from both surface and underground.

As part of the ongoing commissioning process, Cameco has been assessing the current state of ground freezing at Cigar Lake. We have determined that freezing has not advanced as quickly as expected in some localized areas of the mine. Given that the McClean Lake mill has not yet started processing Cigar Lake ore, we have decided to temporarily stop jet-boring at Cigar Lake to allow the ore body to freeze more thoroughly in these areas. The additional freezing will allow more continuous production at the mine once the mill is operational.

Based on early indications from our assessment we expect the production schedule could shift by a couple of months. Although a minor change to the schedule, it means ore that was expected to be milled at the end of the year, will shift into early 2015 thereby affecting our 2014 production target. Cameco will provide an update to its 2014 production target in its second quarter MD&A on July 31 when the assessment is complete.

The company's long-term annual production target of 18 million pounds U₃O₈ by 2018 will not be impacted.

The Cigar Lake mine 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%) and is operated by Cameco. Ore from Cigar Lake will be processed at the McClean Lake mill, which is majority owned and operated by AREVA.

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.

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 our expectation that additional freezing will allow more continuous production at the mine once the mill is operational; the expected impact of temporarily stopping jet-boring on our production schedule; our expectation that our 2018 production target will not be impacted; and our plans to process ore from Cigar Lake at the McClean Lake mill. 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; the McClean Lake 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; and the plan to mill Cigar Lake ore at the McClean Lake mill is delayed or does not succeed for any reason. Please also see our most recent annual information form, annual MD&A and quarterly MD&A for other risks and assumptions relevant to the forward-looking information in this news release, including our 2018 production target. We are providing this forward-looking information to help you understand management's views regarding the status of the Cigar Lake uranium mine 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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