



ORDER BY AN INSPECTOR UNDER SUBSECTION 35(1) OF THE *NUCLEAR SAFETY AND CONTROL ACT*

CNSC File #6896616 (4.04.03)

Unclassified

Date of Order: October 28, 2022

TO:

Cameco Corporation
2121 – 11th Street West
Saskatoon, Saskatchewan
S7M 1J3
Corporate Number 332981-0

AND TO:

Lloyd Rowson, General Manager Cigar
Lake Operation.

WHEREAS Cameco Corporation, hereinafter referred to as “the licensee”, holds Canadian Nuclear Safety Commission (CNSC) licence number **UML-MINE-CIGAR.00/2031** issued pursuant to the *Nuclear Safety and Control Act* (NSCA) which authorizes the licensee to:

- a) prepare a site for and construct, operate, modify and decommission a nuclear facility (hereinafter “the facility”) at a site known as the Cigar Lake Operation in the province of Saskatchewan as shown on the drawing referenced in appendix A to this licence;
- b) mine a nuclear substance (uranium ore);
- c) possess, transfer, import, use, store, and dispose of nuclear substances; and
- d) possess, transfer, import, use prescribed equipment that is required for or associated with laboratory studies, field studies, fixed gauge usage and borehole logging devices in relation to (a) and (b).

AND WHEREAS pursuant to licence condition 11.1, the licensee is required to implement and maintain a waste management program at the Cigar Lake Operation, which Cigar Lake Waste Management Program (CGR-WMP) was approved by the Commission at paragraph 151 of the Record of Decision DEC 21-H2.1 The CGR-WMP includes in particular the quantities of wastes produced, recycled, stored and disposed of, and the locations used for waste storage and disposal.

AND WHEREAS for the period of October 17, 2022 to October 21, 2022, CNSC staff conducted an inspection of the Cigar Lake Operation, including Stockpile “C”.

¹ <https://www.nuclearsafety.gc.ca/eng/the-commission/pdf/Decision-CigarLake-April2021-e.pdf>



AND WHEREAS on October 19, 2022, Cigar Lake staff informed the inspector that the September 28, 2022, surveyed volume of material on Stockpile “C” was 413,172 m³.

AND WHEREAS on October 20, 2022, CNSC staff confirmed the Stockpile “C” as identified on page 3-4 of the approved CGR-WMP (e-Doc 6257688), referenced in the Cigar Lake Licence Conditions Handbook Rev. 3 (e-Doc 6327196), is described as:

“Stockpile C is lined with a HDPE liner. The stockpile is used to store PAG (reactive) waste rock from underground. Stockpile C has a capacity of 400,000 m³. All drainage from Stockpile C is collected within the area of the stockpile and runoff is piped within secondary containment to PCPI for treatment in the MWTP.”

AND WHEREAS on October 21, 2022, CNSC inspectors informed the licensee that the volume of material on Stockpile “C” was in excess of the limit identified in the approved CGR-WMP. Excerpt from the preliminary facts and findings report provided to Cigar Lake staff on October 21, 2022:

“Stockpile “C”. Current volume 413,172 m³. The current program indicates the limit for stockpile “C” is 400,000m³.” (e-Doc 6889303)

AND WHEREAS on October 24, 2022, Trent Hamilton, of Cigar Lake, submitted an initial agency notice stating:

“Stockpile C contains potentially reactive waste rock (PRWR) that is generated from underground development activities. Recent survey results of the pile estimate that the volume on the pad is 413,172 m³, which is in excess of the 400,000 m³ capacity listed in the Cigar Lake Waste Management Program, CGR-WMP.” (e-Doc 6896610)

AND WHEREAS Cigar Lake Operation is currently developing mining areas producing waste rock, and as of October 28, 2022, was still placing waste rock on Stockpile “C” although the quantity authorized on Stockpile “C” is already exceeded. (e-Doc 6898554)

AND WHEREAS, these events demonstrate a non-compliance of the licensee with the approved CGR-WMP and a failure of the licensee to meet its obligation to take all reasonable precautions to protect the health and safety of persons, and the environment, pursuant to paragraph 12(1)(c) of the *General Nuclear Safety and Control Regulations* (GNSCR) made under the NSCA.

AND WHEREAS, I am an inspector authorized by the Canadian Nuclear Safety Commission to make any order considered necessary to protect the environment or the health or safety of persons or to maintain national security or compliance with international obligations to which Canada has agreed under subsection 35(1) of the NSCA.



THEREFORE, in accordance with subsection 35(1) of the NSCA, I order Cameco Corporation to:

1. Immediately suspend all additions of material to Stockpile “C”.
2. By November 15, 2022, provide the CNSC with information regarding the stability of the Stockpile “C” in its current state and initiate any necessary mitigatory actions to ensure safety at the current volume.
3. By November 30, 2022, provide a plan, including schedule, to bring the volume of Stockpile “C” to a volume less than the allowed value of 400,000 m³, including measures to ensure that this work is performed safely.
4. By November 30, 2022, provide a plan to ensure that future operation of Stockpile “C” respects the limits contained in the Cigar Lake Operation Waste Management Program as referenced in the Licence Conditions Handbook for the Cigar Lake Operation (e-Doc 6327196).

The licensee must comply with the requirement of subsection 29(2) of the GNSCR and submit a full report to the Commission within 21 days of having after becoming aware of this non-compliance. The licensee should be aware that any modifications to the approved CGR-WMP which are beyond the current licensing basis approved by the Commission, must be approved by the Commission before their implementation.

This order will remain in effect until all of the information required by this Order has been provided, actions required by this Order have been completed and that I am satisfied that Cameco Corporation can operate in accordance and in compliance with the licence issued by the CNSC, and in doing so, has made adequate provision for the health and safety of persons, protection of the environment and maintenance of national security.

Stewart, William

Digitally signed by Stewart, William
DN: C=CA, O=GC, OU=CNSC-CCSN, CN="Stewart, William"
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William Stewart
Inspector and Senior Project Officer
Uranium Mines and Mills Division
Canadian Nuclear Safety Commission

Dated at Saskatoon, Saskatchewan, Canada this 28th day of October, 2022.