



## Notice of Violation (Corporation)

**Date of notice: March 14, 2024**

**AMP number: 2024-AMP-02**

<b>Violation committed by:</b> Cameco Corporation 2121 – 11 <sup>th</sup> Street West Saskatoon, Saskatchewan S7M 1J3 Corporate Number 332981-0	<b>Amount of penalty:</b>  <b>\$ 3,310</b>
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### Violation

Failure to make prescribed reports and file them in the prescribed manner in violation of paragraph 27(b)(ii) of the *Nuclear Safety and Control Act* and paragraph 29(1)(a) of the *General Nuclear Safety and Control Regulations*.

Specifically, Cameco Corporation failed to report to the Commission their failure to implement the *CSA N393-13, Fire Protection for Facilities that Process, Handle, or Store Nuclear Substances* by the committed date of December 31, 2023.

### Relevant facts

I, Luc Sigouin, Director General of the Directorate of Nuclear Cycle and Facilities Regulation and designated officer authorized by the Canadian Nuclear Safety Commission (CNSC) to issue notices of violations, believe on reasonable grounds that Cameco Corporation committed the above violation. The facts relevant to the violation and the penalty calculation are as follows:

Cameco Corporation, herein referred to as “Cameco”, holds CNSC licences UML-MINEMILL-RABBIT.00/2038, UML-MINE-CIGAR.00/2031, UML-MINE-MCARTHUR.00/2043, and UML-MILL-KEY.00/2043 issued pursuant to the *Nuclear Safety and Control Act* (NSCA) which authorizes Cameco to:

- a) prepare a site for and construct, operate, modify and decommission a nuclear facility at sites (Rabbit Lake Operation, Cigar Lake Operation, McArthur River Operation, and Key Lake Operation) in the province of Saskatchewan;
- b) mine and/or mill 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).

Pursuant to licence condition G.1 for each of the licences, Cameco is required to conduct licensed activities in accordance with the licensing basis for each site. Pursuant to Section 29(1)(a) of the *General Nuclear and Safety Control Regulations*, Cameco is required to report on self-identified non-compliances with their licensing basis. No report was received by the CNSC regarding Cameco's use of expired Personal Protective Equipment (PPE) at Rabbit Lake and McArthur River, nor for non-compliance with CSA N393-13 across all four Cameco uranium mine and mill sites, even though the agreed implementation date had passed.

Pursuant to licence condition 10.1 for each of the above-mentioned licences, Cameco is required to implement and maintain an emergency preparedness program for each facility. For each facility, the respective Emergency Preparedness programs were accepted by the Commission at the time of last licence renewal.

As a member of industry, Cameco participated in the drafting of *CSA N393-13, Fire Protection for Facilities that Process, Handle, or Store Nuclear Substances*. The standard, published in 2013, has been implemented at Cameco Fuel Services Division facilities.

On November 1, 2021, CNSC staff submitted a request to Cameco to perform a gap analysis between their Emergency Preparedness programs and the requirements in CSA N393-13. On May 31, 2022, Cameco responded to the request with a completed gap analysis and a commitment to implement the standard by December 31, 2023 [1]. CNSC staff accepted this commitment, documented it in relevant Licence Conditions Handbooks, and reported the commitment to the Commission through the Commission Member Documents associated with the licence renewals in June 2023, and via the annual Regulatory Oversight Report of Uranium Mines and Mills in Canada, most recently presented to the Commission on December 14, 2023.

During inspection CAMECO-RL-2023-03 from October 24, 2023, to October 26, 2023, the inspection criteria included aspects to measure compliance to some aspects of CSA N393-13, where all deficiencies were provided as recommendations, as CSA N393-13 was considered for guidance only at that time. A note was provided in the inspection report [2] that indicated that the same deficiencies would be considered non-compliances starting January 1, 2024, when CSA N393-13 was agreed to become compliance verification criteria. The inspection report was provided to Cameco through the Rabbit Lake Operation on December 15, 2023.

Also, during inspection CAMECO-RL-2023-03, CNSC staff found that PPE for Rabbit Lake's Emergency Response Team (ERT) was expired. The inspection team determined that Cameco had reports that informed them that the PPE was expired a year prior to the inspection, but Cameco had not reported this non-compliance to the CNSC as required by NSCA paragraph 27(b). Cameco further informed the CNSC that at the time of CAMECO-RL-2023-03 the McArthur River site also had expired PPE in use, and again this non-compliance had not been reported to the CNSC as per NSCA paragraph 27(b).

In response to the significant findings in CAMECO-RL-2023-03, CNSC staff conducted a reactive Emergency Management and Fire Protection focused inspection CAMECO-RL-2024-01 from January 22, 2024 to January 25, 2024. CAMECO-RL-2024-01 was originally planned as a general inspection but was changed to focusing on the Emergency Management and Fire Protection SCA in response to the findings from CAMECO-RL-2023-01. During CAMECO-RL-2024-01, it was found that Rabbit Lake was not yet



in compliance with CSA N393-13, in spite of the agreed implementation date of December 31, 2023, having already passed. Cameco subsequently informed CNSC staff that Cigar Lake, McArthur River and Key Lake also had significant gaps to implementation of CSA N393-13, which Cameco said will likely take until mid-2025 to complete.

Had CAMECO-RL-2024-01 been carried out as a general inspection as originally planned, it is unlikely that the inspection would have looked closely at matters related to CSA N393-13 implementation, meaning that it could have taken considerably longer for CNSC staff to become aware that Cameco had not reached compliance with CSA N393-13 at all four of Cameco's uranium mine and mill sites by the December 31, 2023. At no time before the deadline did Cameco inform the CNSC that the deadline would not be met and initiate a request for an adjusted deadline.

Throughout the inspections and follow-up analysis, there is evidence to suggest that the observed issues related to non-reporting are tied both to individual sites and to Cameco at the corporate mining division level, including how all 4 operations missed the same deadline. Cameco Corporation, the licensee for all four of Cameco's uranium mine and mill sites, is responsible for the implementation of programs to ensure compliance with regulatory requirements at their licensed sites.

Section 65.07 of the NSCA states that "A violation that is committed or continued on more than one day constitutes a separate violation for each day on which it is committed or continued." As such, the AMP process allows for the multiplication of the assessed penalty by the number of days over which the non-compliance continues, if applying this continuing violation is determined to be necessary in order to promote future compliance.

For this matter, CNSC staff considered different scenarios for the calculation of the potential continuing violation. Based on these facts the continuing violation provision could be applied, however CNSC is issuing this Notice of Violation for one day, as this results in a penalty that is proportionate and sufficient to advance the purpose of the NSCA's administrative monetary penalty scheme – which is to promote compliance and not to punish. This determination is in line with Cameco's compliance history and would be reconsidered if in the future there are more cases where CNSC staff find significant unreported non-compliances.

Based on my review of this matter, I am of the opinion that an administrative monetary penalty will deter recurrence of the above violation and promote future compliance with CNSC regulatory requirements. In consideration of the seven factors in section 5 of the *Administrative Monetary Penalties Regulations (Canadian Nuclear Safety Commission)*, the amount of the penalty was determined based on the following relevant facts:

1. Compliance history: Assessed score = 3

October 24-26, 2023, a team of CNSC inspectors performed a site inspection at the Rabbit Lake Operation to determine compliance on the emergency management and fire protection safety and control area, including the observation of an emergency drill, and ensuring compliance with the licence conditions for the emergency management and fire protection safety and control area.

The inspection team determined that most of the personal protective equipment (PPE) for the emergency response team was expired. The inspection team determined that Cameco had reports that informed them that the PPE was expired a year prior to the inspection. Cameco failed to report on this instance when they were informed through the internal report. The lack of ready PPE resulted in an



Inspector's Order issued on October 26, 2023. At the same time, Cameco informed CNSC staff that expired PPE was also in use at McArthur River, and this also had not been reported to CNSC staff.

As CSA N393-13 was not implemented, the report included recommendations related to the standard, with a description identifying that, as of January 1, 2024, CSA N393-13 would be a required component and all findings related to the standard would be considered notices of non-compliance. During the inspection, Rabbit Lake staff verbally confirmed that Cameco was on track to implement CSA N393-13 by the committed deadline.

All four uranium mine/mill operations licensed to Cameco failed to report non-compliance with CSA N393-13 after the implementation date had passed.

2. Intention or negligence: Assessed score = 1

On May 31, 2022, Cameco responded to a CNSC staff request dated November 1, 2021, and included a gap analysis and letter committing to implement *CSA N393-13 Fire Protection for Facilities that Process, Handle, or Store Nuclear Substances* by end of day December 31, 2023.

October 24-26, 2023, a team of CNSC inspectors performed a site inspection at the Rabbit Lake Operation to determine compliance on the emergency management and fire protection safety and control area, including the observation of an emergency drill, and ensuring compliance with the licence conditions for the emergency management and fire protection safety and control area. As CSA N393-13 was not implemented, the report included recommendations related to the standard, with a description identifying that, as of January 1, 2024, CSA N393-13 would be a required component and all findings related to the standard would be considered notices of non-compliance. During the inspection, Rabbit Lake staff confirmed that Cameco was on track to implement CSA N393-13 by the implementation date but failed to do so as verified during the January 2024 inspection.

3. Actual or potential harm: Assessed score = 0

The CSA N393-13 standard provides improvements to the emergency management and fire protection safety and control area. Implementation of this standard was discussed before the Commission in June 2023 during licence renewal hearings for Rabbit Lake, McArthur River, and Key Lake. While N393-13 implementation is an important consideration in the overall effectiveness of Cameco licence condition 10.1, this action will be taken as part of the inspection report, and not the Administrative Monetary Penalty. CNSC staff intend to action Cameco to perform an extent of condition across all of Cameco's uranium mine and mill facilities to ensure that each has a plan for compliance with N393-13.

There is no evidence to indicate that there is any actual or potential harm for failure to report the non-compliance of CSA N393-13.

4. Competitive or economic benefit: Assessed score = 0

CNSC staff are not aware of any real or perceived economic benefit that Cameco has derived from not reporting late implementation of N393-13.



5. Efforts to mitigate or reverse effects: Assessed score = 2

During October 24, 2023, to October 26, 2023, inspection, the CNSC inspection team imparted the importance of the implementation of CSA N393-13. The notice of inspection sent in preparation for the January 22, 2024, to January 25, 2024, inspection clearly indicated that CSA N393-13 clauses would be inspected. Despite these attempts to underscore the importance of implementing the standard, Cameco did not make any effort to communicate to the Commission that they would not comply with the standard by the committed date of December 31, 2023.

In response to the inspection report from the October 24, 2023, to October 26, 2023, inspection, Cameco did not provide a response to any of the recommendations provided regarding implementation of CSA N393-13. While recommendations presented in an inspection report do not require the licensee to respond to them, the recommendations served as an early warning for what to expect when inspecting against CSA N393-13. It is a long-standing best practice that Cameco responds to recommendations in CNSC staff inspection reports.

Since the end of CAMECO-RL-2024-01, Cameco has since engaged in constructive discussions with CNSC staff regarding the remaining work needed to implement CSA N393-13, and reasonable timelines for that work.

6. Assistance to Commission: Assessed score = 1

Rabbit Lake staff provided the information that they had access to, however there were required documents to assess compliance to CSA N393-13 that were not provided as they were in draft format. These documents included the Fire Response Needs Analysis, and the Training Needs Analysis, both of which are required components for CSA N393-13 that impact the implementation of several clauses in the standard. When estimated timelines for when those documents would be completed were requested, Cameco did not provide this information.

In discussions since CAMECO-RL-2024-01, Cameco has been frank and open regarding the status of N393-13 implementation and has provided to CNSC staff information regarding reasons for the delay in implementation, the gaps that remain and the work associated with these, and a new timeframe for implementation.

7. Attention of Commission: Assessed score = -1

During the October 24, 2023, to 26, 2023, inspection, Cameco was asked by the inspection team whether compliance with CSA N393-13 will be achieved by the previously agreed upon day of December 31, 2023, and Cameco indicated that they will be. In the inspection report issued in December 2023, a note was added to ensure that Cameco was aware that the standard would be considered a licensing basis document with findings against the standard considered non-compliance starting January 1, 2024. During the January 22, 2024, to January 25, 2024, inspection, the inspection team started the inspection with the understanding that the deadline was met. It was not until the inspection team asked Cameco if they were in compliance with the standard that they indicated that they were not in compliance.



On February 2, 2024, one week following the January 22, 2024, to January 25, 2024, inspection close-out meeting, Cameco reported to the Commission that they were not in compliance with the required CSA N393-13 at Rabbit Lake and Cigar Lake. This reporting was carried out by Cameco only following requests by CNSC staff through the inspection close-out meeting as well as subsequent meetings between CNSC staff and Cameco. Cameco further informed CNSC staff verbally and McArthur River and Key Lake were also not yet in compliance.

## References

1. Gap analysis and commitment (CNSC ref. #6808738)
2. Inspection Report for CAMECO-RL-2023-03 (CNSC ref.# 7181326)



## Penalty calculation:

(See *Administrative Monetary Penalties Regulations (Canadian Nuclear Safety Commission) SOR/2013-139*)

<b>(a) Category of violation</b>							
Category A <input checked="" type="checkbox"/>	Category B <input type="checkbox"/>	Category C <input type="checkbox"/>					
<b>(b) Penalty range</b>							
Category	Minimum	Maximum	Maximum – minimum				
<b>A</b>	<b>\$1,000</b>	<b>\$12,000</b>	<b>\$11,000</b>				
B	\$1,000	\$40,000	\$39,000				
C	\$1,000	\$100,000	\$99,000				
<b>(c) Determining factors</b>							
Factors	Scale of regulatory significance			Assessed score			
1. Compliance history	0 <input type="checkbox"/>	+1 <input type="checkbox"/>	+2 <input type="checkbox"/>	+3 <input checked="" type="checkbox"/>	+4 <input type="checkbox"/>	+5 <input type="checkbox"/>	3
2. Intention or negligence	0 <input type="checkbox"/>	+1 <input checked="" type="checkbox"/>	+2 <input type="checkbox"/>	+3 <input type="checkbox"/>	+4 <input type="checkbox"/>	+5 <input type="checkbox"/>	1
3. Actual or potential harm	0 <input checked="" type="checkbox"/>	+1 <input type="checkbox"/>	+2 <input type="checkbox"/>	+3 <input type="checkbox"/>	+4 <input type="checkbox"/>	+5 <input type="checkbox"/>	0
4. Competitive or economic benefit	0 <input checked="" type="checkbox"/>	+1 <input type="checkbox"/>	+2 <input type="checkbox"/>	+3 <input type="checkbox"/>	+4 <input type="checkbox"/>	+5 <input type="checkbox"/>	0
5. Efforts to mitigate or reverse effects	-2 <input type="checkbox"/>	-1 <input type="checkbox"/>	0 <input type="checkbox"/>	+1 <input type="checkbox"/>	+2 <input checked="" type="checkbox"/>	+3 <input type="checkbox"/>	2
6. Assistance to Commission	-2 <input type="checkbox"/>	-1 <input type="checkbox"/>	0 <input type="checkbox"/>	+1 <input checked="" type="checkbox"/>	+2 <input type="checkbox"/>	+3 <input type="checkbox"/>	1
7. Attention of Commission	-2 <input type="checkbox"/>	-1 <input checked="" type="checkbox"/>	0 <input type="checkbox"/>	+1 <input type="checkbox"/>	+2 <input type="checkbox"/>	+3 <input type="checkbox"/>	-1
<b>Total</b>							<b>6</b>
÷ 29 <sup>(1)</sup> [rounded to 2 decimal points] =							<b>0.21</b>
x 11,000 [difference between category minimum and maximum]							
[total] =							<b>\$2,310</b>
+ \$ 1000 [minimum for the category] =							<b>\$3,310</b>
Multiplied by Daily Penalty [number of days of continuing violation] =							<b>1</b>
[total] =							<b>\$3,310</b>

<sup>(1)</sup>29 being the maximum value of regulatory significance





## To request a review

As a person subject to an administrative monetary penalty, you have the right to request a review of the amount of the penalty or the facts of the violation, or both. Your request must be made in writing indicating the reasons why you are requesting a review and providing supporting information.

If you choose to request a review, you must do so in writing by April 11, 2024, to:

Canadian Nuclear Safety Commission  
c/o Malaika Bacon-Dussault  
Commission Registrar  
P.O. Box 1046, Station B  
Ottawa, ON K1P 5S9

Fax: (613) 995-5086  
Telephone: (613) 282-9357  
Email: [registry-greffe@cncs-ccsn.gc.ca](mailto:registry-greffe@cncs-ccsn.gc.ca)

## Payment

You may pay this administrative monetary penalty by sending a cheque to:

Receiver General for Canada  
c/o Canadian Nuclear Safety Commission  
Finance Division  
P.O. Box 1046, Station B  
Ottawa, ON K1P 5S9

For other payment methods and further instructions, please refer to the attached *Notice of Payment Due*.

**Should you neither pay the penalty nor exercise your right to a review, you will be considered as having committed the violation and will be liable to the penalty set out herein.**





## Issued by

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Luc Sigouin

Designated Officer - DNCFR

March 14, 2024

Date

Telephone: (613) 894-3437

Email: [luc.sigouin@cnsccsn.gc.ca](mailto:luc.sigouin@cnsccsn.gc.ca)