



Canadian Nuclear  
Safety Commission

Commission canadienne  
de sûreté nucléaire

Canada



# Regulatory Oversight Report for Uranium Mines, Mills, Historic and Decommissioned Sites in Canada: 2023



CNSC Staff Presentation

Commission Meeting  
January 29, 2025  
CMD 25-M4.A

# Commission Member Document Submission

- CNSC staff's Commission Member Document (CMD) was posted October 10, 2024
- Contains CNSC staff assessments, licensee performance, and Indigenous engagement efforts for operating uranium mine and mill (UMM) facilities in 2023, and historic and decommissioned UMM facilities from 2021-2023
- New dashboard format in appendix B, C, D, E and F




## CMD 25-M4 - CNSC Staff Submission

**Regulatory Oversight Report for Uranium Mines, Mills, Historic and Decommissioned Sites in Canada: 2023**

<b>Level of security</b>	UNPROTECTED
<b>Status</b>	ORIGINAL
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ROR for UMMs in Canada: 2023  
Posted to CNSC Web-site on  
2024 October 10



# Summary of Report

- All 5 UMM sites which are licensed to operate have satisfactory safety ratings for all 14 safety and control areas (SCAs) in 2023
- All historic and decommissioned sites were rated satisfactory for the SCAs of radiation protection, conventional health and safety, and environmental protection from 2021-2023
  - Dyno and Madawaska were rated “Below Expectations” in 2022 for management systems, and Port Radium had “Below Expectations” from 2021-2023 for operating performance; these circumstances were considered to have low safety significance
- Updates provided on Orders issued to Cigar Lake in 2022, and Rabbit Lake in 2023
- Information on CNSC staff’s ongoing Indigenous engagement work

# Indigenous Engagement and Interventions

- CNSC staff engaged with Indigenous Nations and Communities throughout 2023, with the goal of furthering open, respectful and trusting relationships
- CNSC staff thank all intervenors for their submissions



## Key Themes from Interventions:

- A general appreciation of the regulatory and engagement work of CNSC staff
- Interest in increased non-compliances over the past several years
- Access to raw machine-readable data
- CNSC staff's conclusions on protection of the environment



# Update on Cigar Lake's 2022 and Rabbit Lake's 2023 Inspector's Orders

## 2022 Cigar Lake

- On October 28, 2022, a CNSC Inspector's Order was issued due to the volume of waste rock Stockpile 'C' being above the limit
- Saskatchewan Ministry of Environment (MOE) also took enforcement action; CNSC and MOE worked collaboratively
- In May 2023, CNSC staff accepted Cameco's Plan to return to compliance and all conditions of the order were met
- As of June 22, 2024, Cameco reported the volume of Stockpile 'C' was reduced to below the limit, which was verified in a CNSC inspection in July 2024

## 2023 Rabbit Lake

- On October 26, 2023, a CNSC Inspector's Order was issued due to expired Personal Protective Equipment (PPE) in use by the Rabbit Lake Emergency Response Team (ERT)
- The Order prohibited work involving open flame, heat production and/or sparks ('hot work') and required an immediate plan for obtaining non-expired PPE, among other actions
- On August 2, 2024, CNSC staff determined that all conditions of the order were met
- In December 2024, CNSC staff verified all responses to the order were properly implemented

All actions related to CNSC Inspector's Orders at UMMs have been closed



# 2024 Administrative Monetary Penalty- Cameco Corporation

- Cameco had previously advised CNSC staff that CSA standard N393-13 *Fire protection for facilities that process, handle, or store nuclear substances* would be implemented at its uranium mine and mill sites by December 31, 2023
- On January 22, 2024, during a reactive inspection at the Rabbit Lake Operation, CNSC Inspectors determined that Cameco had not yet implemented CSA N393-13, and had not informed CNSC staff of the delay in implementation
- On March 14, 2024, CNSC issued an administrative monetary penalty (AMP) to Cameco to promote compliance with the *Nuclear Safety and Control Act*
- CNSC staff are receiving monthly updates on implementation progress, and will continue to monitor until the standard is implemented and verified

CNSC staff are monitoring progress to ensure that workers are kept safe at these facilities



# Conclusions

- Releases of radioactive and hazardous substances to the environment were below regulatory limits
- Radiological doses to the public and to workers were below regulatory limits
- Lost-time injuries were consistent with previous years
- Licensees took appropriate follow-up actions on all reportable events
- Canada's international obligations with respect to UMM sites were fulfilled



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# Errata

- Section 3.4.2, in late 2024 Cameco reclassified an injury at Key Lake to an LTI, bringing the total to 5 LTIs at Key Lake in 2023
- Section 10 states that all historic and decommissioned sites were rated as “satisfactory” save for Port Radium- in fact, Madawaska and Dyno were both rated “below expectations” for the SCA of Management Systems in 2022, as described correctly in sections 7.2.1 and 8.8.1
- Appendices B.3 and F.3, ‘Radon’ should read ‘Radium’
- Appendix B.3, Radium-226 values for 2019, 20, 21 and 22 should each be an order of magnitude larger, e.g. 0.008 instead of 0.0008
- Appendix D.1 - The financial guarantee for Rabbit Lake should read \$202,700,000 instead of \$42,100,000

No changes to the overall conclusions in the report