

2025 Second Quarter Compliance Monitoring & Operational Performance Report

Reporting Period April 1 – June 30, 2025

Cameco Fuel Manufacturing Inc. Fuel Facility Operating Licence FFL-3641.00/2043

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Submitted to:
The Canadian Nuclear Safety Commission
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Executive Summary

Cameco Corporation (Cameco) is committed to the safe, clean, and reliable operations of its facilities and continually strives to improve safety performance and processes to ensure the safety of both its employees, local residents, and the environment. CFM maintains the required programs, plans and procedures as required by the applicable regulations including but not limited to the areas of health and safety, radiation protection, environment, emergency response, fire protection, waste management, and training.

As a result of the programs, plans and procedures, CFM's operations have maintained radiation exposures to workers and the public well below the regulatory dose limits. Environmental emissions are also being controlled to levels that are a fraction of the regulatory limits. During the second quarter, there were no exceedances of the action levels in the radiation protection or environmental protection program. There was one event reported to the CNSC during the second quarter related to an unplanned release from the groundwater treatment system.

In the second quarter there was no planned shutdown of the facility.



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1.0 Second Quarter Overview

1.1 Facility Operation

Cameco continues to strive for operational excellence at all of its facilities through consistent application of management systems to ensure that they operate in a safe, clean, and reliable manner. Corporate policies and programs, including those for Safety, Health, Environment and Quality (SHEQ), provide guidance and direction for all site-based programs and procedures that define the CFM Management System.

CFM operates under a twenty-year licence (FFL-3641.00/2043) effective March 1, 2023 until February 28, 2043. The licence is supported by a Licence Conditions Handbook (LCH) dated August 31, 2023.

There were no significant changes to Structure, Systems and Components (SSC) or processes in the second quarter.

The LCH for the facility references core CFM documents that form the licensing basis in each safety and control area.

There were four documents that were submitted to the CNSC in the second quarter of 2025.

- Change and Design Control (MSP 13-02), version #24 updated to include a
 facilitation task for the Compliance Coordinator to track MOC Change Requests
 (CRs) and revise the Design Authority responsibility.
- Preventative Maintenance Execution procedure (AP 018), version #11 updated to include the weekly review of Regulatory PMs in the planning meeting as a corrective action to a previous inspection finding.
- Environmental Protection Program (CFM-EP), version #7 updated references, included an interim action level for stack emissions in g/hr, addressed formatting issues, corrected liquid effluent DRL value, updated groundwater section, and updated the organizational structure.
- Persons Authorized to Act for CFM in Dealings with the CNSC (PHF 4449),
 version # updated to reflect the change in for the Vice-President position of the Fuel Services Division.

In the second quarter there was no planned shutdown of the facility and no exceedances of the radiation protection or environmental protection action levels

There was one event in the second quarter that required reporting to the Commission as detailed in the Reg. Doc 3.1.2 Reporting Requirements, Volume I: Non-Power Reactor Class I Nuclear Facilities and Uranium Mines and Mills. On April 3, 2025, Cameco CFM became aware of a Loss of Primary Containment (LOPC) event that occurred after



groundwater was seen surcharging from a pumping well in the parking lot. It was estimated that up to approximately 270 litres flowed from the access cover of the well into the municipal catch basin. A collection system was set up immediately to pump excess water into a temporary holding tank and samples of the runoff and catch basin contents were taken for analysis for primary constituents of concern. After an investigation it is believed that an unplanned facility power outage along with heavy rainfall tied with spring ground thaw conditions, resulted in elevated groundwater levels in the underground utility system. The well system experienced significant rates of inflow and infiltration over a short period of time. The recovery and treatment system remained fully operational and the water levels receded in the wells the same day and the precipitation event ended. The event was entered into CIRS and corrective actions were identified to mitigate recurrence, with a report issued to the CNSC.



1.2 Physical Design / Facility Modification

Modifications to facility buildings, processes, equipment, procedures, programs, or organizational structure with the potential to impact safety are evaluated through the internal change and design control process from planning through to completion. This process is used to help identify impacts and potential impacts to the licensing basis, the environment as well as to the health and safety of employees and local residents.

In the second quarter of 2025, there were no modifications undertaken that required written approval from the Commission or a person authorized by the Commission.

There were also no significant changes to the physical design of equipment, processes, or the facility in the quarter. Commissioning of the third press was completed in the second quarter and operation started at the end of the quarter.



2.0 Radiation Protection

This safety and control area covers the implementation of a radiation protection program, in accordance with the *Radiation Protection Regulations*. The program must ensure that contamination and radiation doses are monitored and controlled.

CFM has established action levels pertaining to radiation protection, which are listed in CFM's LCH. A result above an action level is investigated and remedial actions taken if necessary. During the second quarter there was no exceedance in the Radiation Protection program.

Whole Body Dose

Table 1 shows the second quarter whole body dose for three work groups: employees in the operations group, employees in administration/support roles, and outside contractors/visitors. The highest exposures are from the operations work group, consisting of production, inspection, and maintenance personnel. There were no action level exceedances for whole body dose in the radiation protection program during the quarter. In the second quarter, most NEWs received a whole body dose below 1 mSv (99%).

Table 1

Second Quarter 2025 Whole Body Dose Results								
Work Group	Number of Individuals	Average (mSv)	Minimum (mSv)	Maximum (mSv)				
Operations	114	0.22	0.00	1.13				
Administration / Support	82	0.01	0.00	0.14				
Contractors/Visitors	18	0.00	0.00	0.02				

Monthly action level is 1.6 mSv (for NEWs such as production employees). Quarterly action level is 1.0 mSv (for NEWs such as support staff and contractors).

Table 2 shows the quarterly average, minimum and maximum individual external whole body exposure for all NEWs from the second quarter of 2024 to the second quarter of 2025 (five monitoring periods). The average whole body dose in the second quarter for all NEWs was 0.12 mSv. The average and maximum whole body dose was lower than previous quarters except the third quarter of 2024. The individual with the highest exposure in the second quarter was an operator working in the Pelleting area on the furnaces.



Table 2

Whole Body Dose Results by Quarter							
Monitoring Number of Average Dose Minimum Maximu							
Period	Employees	(mSv)	Dose (mSv)	(mSv)			
Q2 2024	217	0.15	0.00	2.08			
Q3 2024	220	0.10	0.00	0.91			
Q4 2024	216	0.13	0.00	1.69			
Q1 2025	217	0.13	0.00	1.31			
Q2 2025	214	0.12	0.00	1.13			

Skin Dose

Table 3 shows the second quarter skin dose results for three work groups, employees in operations (monitored monthly), employees in administration and/or support roles and outside contractors/visitors (both monitored on a quarterly basis). The highest exposures are from the operations work group, consisting of production and maintenance personnel. The maximum skin dose for all NEWs was 11.75 mSv in the second quarter and the average skin dose for all NEWs was 0.89 mSv. The action levels for skin dose were not exceeded in the quarter. The majority of NEWs received a skin dose in the second quarter below 10 mSv (99.1%).

Table 3

Second Quarter 2025 Skin Dose Results						
Number of Individuals	Average Minimum (mSv) (mSv)		Maximum (mSv)			
114	1.67	0.00	11.75			
82	0.01	0.00	0.23			
18	0.00	0.00	0.03			
	Number of Individuals 114 82	Number of Individuals (mSv) 114 1.67 82 0.01	Number of Individuals Average (mSv) Minimum (mSv) 114 1.67 0.00 82 0.01 0.00			

Monthly action level is 20.0 mSv (for NEWs such as production employees). Quarterly action level is 5.0 mSv (for NEWs such as support staff and contractors).

Table 4 shows the employee quarterly average and maximum individual skin exposure from the second quarter of 2024 to the second quarter of 2025. The average dose was higher than the previous quarters except for the second quarter of 2024 and the maximum dose was higher in the second quarter than previous quarters except the first quarter of 2025. The individual who received the maximum skin dose was a Pelleting area employee and was the same individual with the maximum whole-body dose.



Table 4

Skin Dose Results by Quarter							
Monitoring Number of Period Employees		Average Dose (mSv)	Minimum Dose (mSv)	Maximum Dose (mSv)			
Q2 2024	217	0.95	0.00	11.05			
Q3 2024	220	0.62	0.00	7.63			
Q4 2024	216	0.79	0.00	9.99			
Q1 2025	217	0.79	0.00	12.58			
Q2 2025	214	0.89	0.00	11.75			

Eye Dose

Table 5 shows the second quarter eye dose results for three work groups, employees in operations (monitored monthly), employees in administration and/or support roles and outside contractors/visitors (both monitored on a quarterly basis). The highest exposures are from the operations work group, consisting of production and maintenance personnel. The maximum eye dose for all NEWs was 5.52 mSv in the second quarter and the average eye dose for all NEWs was 0.46 mSv. The interim action levels for eye dose were not exceeded in the quarter. The majority of NEWs received an eye dose below 2 mSv (90%).

Table 5

Second Quarter 2025 Eye Dose Results						
Number of Individuals	Average Minimum (mSv) (mSv)		Maximum (mSv)			
114	0.85	0.00	5.52			
82	0.01	0.00	0.16			
18	0.00	0.00	0.03			
	Number of Individuals 114	Number of Individuals Average (mSv) 114 0.85 82 0.01 18 0.00	Number of Individuals Average (mSv) Minimum (mSv) 114 0.85 0.00 82 0.01 0.00 18 0.00 0.00			

^{*}Monthly interim action level is 6.0 mSv

Table 6 shows the employee quarterly average and maximum individual eye exposure from the second quarter of 2024 to the second quarter of 2025. The average dose in the second quarter of 2025 was higher than the previous quarters except the second quarter of 2024. The maximum dose in the second quarter was lower than the third and fourth quarters and was higher than first quarter of 2024 and the first quarter of 2025. The individual who received the maximum eye dose was a Pelleting area employee and was the same individual with the maximum whole body and skin dose.

^{*}Quarterly interim action level is 12.0 mSv.

^{*}Interim action levels approved by CNSC July 11, 2022



Table 6

Eye Dose Results by Quarter							
Monitoring Number of A Period Employees		Average Dose (mSv)	Minimum Dose (mSv)	Maximum Dose (mSv)			
	1 0	` ,	` ,	` ,			
Q2 2024	217	0.50	0.00	5.82			
Q3 2024	220	0.35	0.00	3.70			
Q4 2024	216	0.42	0.00	4.61			
Q1 2025	217	0.42	0.00	5.92			
Q2 2025	214	0.46	0.00	5.52			

Extremity Dose

The action level for extremity dose at CFM is 55 mSv per quarter. The quarterly action level applies to production NEWs who regularly handle product as part of their daily task. It has been determined that the extremity dose for NEWs at CFM do not exceed 50 mSv/yr; and therefore, NEWs are not required to wear dosimeters from a licensed dosimetry service provider. Extremity dose can be estimated using historic data.

If there is a change in processing techniques or work configurations that would impact extremity dose, then an assessment is required to determine if the 50 mSv/yr criteria would be exceeded. Changes to equipment or processes are captured through CFM's Management of Change (MoC) process. The third press is currently under evaluation. Due to the limited operation of the press during the second quarter there was no impact to extremity dose. The assessment will continue in the third and fourth quarter until the operation of the press has stabilized.

Table 7 shows the average, minimum, and maximum extremity dose for NEWs over the period from the second quarter of 2024 to the second quarter of 2025. If the second quarter dose from 2021 was used as the basis for the second quarter of 2025 the average dose is estimated at 1.90 mSy and the maximum dose is estimated to be 10.50 mSy.



Table 7

Extremity Dose Results by Quarter							
Monitoring	Number of	Minimum	Maximum Dose				
Period	Employees	(mSv)	Dose (mSv)	(mSv)			
Q2 2024	-	1.90*	0.00	10.50*			
Q3 2024	-	1.25+	0.00	7.87^{+}			
Q4 2024	-	1.90*	0.00	10.50*			
Q1 2025	-	1.90*	0.00	10.50*			
Q2 2025	-	1.90*	0.00	10.50*			

^{*}estimation based on Q2 2021 data

Urine Analysis

The action level for a single routine urine sample is $10 \mu g/L$ of uranium concentration. During the quarter there was no exceedance of the urine analysis action level. Routine urine samples results analyzed during the second quarter are provided in Table 8 below.

Table 8

Second Quarter Routine Urine Analysis Results								
Work Group	Number of Samples	Average (μg/L)	Minimum* (μg/L)	Maximum (μg/L)				
Operations	450	0.23	< 0.20	1.40				
Routine urine sample action	Routine urine sample action level is 10 μg/L							

^{*}detection limit of equipment is 0.2 µg/L therefore reported as <0.20 µg/L

Internal Dose

Routine urine analysis samples are collected on a biweekly basis for trending purposes; if an acute uptake is noted it is verified using lung counting and dose assigned if required.

In the second quarter of 2025, there were no routine urine sample results that were above the internal administrative level of $4.0~\mu gU/L$.

During the second quarter the spring campaign was conducted in June. In total 59 NEWs attended a lung count. The next campaign is scheduled for November and December of 2025.

⁺ estimation based on Q3 2021 data



Contamination Control

CFM has other programs to ensure radiation exposure levels remain low. An extensive contamination control program at CFM is zone control. The facility is divided into four zones for contamination control purposes. Zone 1 areas are designated as clean areas with no contamination permitted. Food and drink can be consumed in these areas and include the lunchroom and office areas. Zone 2 areas contain no open sources of radioactivity but have the potential for contamination. These areas include the assembly area, change rooms and the machine shop. Zone 3 areas are the access points to Zone 4. Zone 4 areas contain open sources of radioactivity and include the Pelleting Area. Consumption of food and drink are restricted in Zones 2, 3, and 4.

The administrative limits are provided in Table 9 as well as the routine contamination monitoring results for the second quarter. Of the 887 samples taken none exceeded the internal administrative control limits (ACL).

Table 9

Second Quarter Alpha Contamination Monitoring Results								
Area # of Samples Taken Administrative Limits (Bq/cm²) # of Samples Above Limits								
Zone 1	165	0.4	0					
Zone 2	225	4.0	0					
Zone 3	49	4.0	0					
Zone 4	448	40	0					

In-Plant Air

Routine air sampling is conducted at workstations throughout the plant continuously during operations to monitor airborne uranium dioxide in the work environment. The results for the second quarter of 2025 taken in each area, including the CAM heads in the PP2 area, dry Waste Treatment area and the Furnace Hall are shown in Table 10 below. There were no results above the 80-hour ACL or the 2000 hour ACL in the second quarter. In December of 2024, the in-plant air sampling was reduced to three locations at the manual grinders and in the Pangborn room. This transition is part of the final stages of the upgrade to the CAMhead system in the furnace hall of the Pelleting Area. Once the manual grinders are replaced the system will be removed completely. This is expected to be completed within the next year.



Table 10

Second Quarter Uranium In-plant Air Sampling Results								
Plant Area	# of Samples	Average (μg U/m³)	Maximum (μg U/m³)	# Samples > ACL ^{2000 hr}	# Samples > ACL ^{80 hr}			
Pangborn Room	127	6	42	0	0			
UO2 Grinders	254	1	8	0	0			
Dry Waste Treatment	455	1	8	0	0			
Furnace Hall	546	1	17	0	0			
PP2	728	1	7	0	0			
TOTAL	TOTAL 2110 1 42 0 0							
2000-hour Administrative Control Limit = 52 μg/m ³								
80	-hour Admi	nistrative Cont	rol Limit = 59	5 μg/m ³				

Gamma Surveys

An ongoing ALARA initiative involves posting OSLD's around the facility to determine areas of elevated gamma radiation. The result for each location in the second quarter is summarized in Table 10. The results illustrate that the Fuel Storage Area had the highest gamma fields (6.4 μ Sv/hr), which is expected due to the amount of product stored in the area. The area is posted instructing workers to limit the time spent in this area. The next highest reading (5.8 μ Sv/hr) was in the PP2 South area which is where the carts are stored in the Pressing area. This is also expected due to the amount of pressed pellets in process in this area.



Table 11

Second Quarter Gamma Survey Results							
Location #	Area	Result (μSv/hr)		Location #	Area	Result (μSv/hr)	
13	Kitting	0.3		37	PP2 Powder Rec. N.	-	
14	S Stacking	1.7		38	Powder Receipt	0.2	
15	Stacking	0.1		39	U ₃ O ₈ Add-back	0.7	
16	Pelleting Entry	0.5		40	S End Cap	0.2	
17	Pelleting Lab	0.1		41	End Cap	0.3	
18	S Grinding	1.1		42	N End Cap	0.1	
19	Grinding	1.0		43	E Offices	0.0	
20	N Grinding	0.6		44	S End Plate	0.0	
21	S Wall	0.0		45	End Plate	0.1	
22	S Furnace	0.5		46	N End Plate	0.1	
23	Furnace	0.7		47	W Offices	0.0	
24	PP2 South	5.8		48	S Inspection	0.2	
25	SE Wall	0.4		49	Inspection	0.2	
26	E Wall Furnace	0.5		50	N Inspection	0.5	
27	NE Wall	0.4		51	W Inspection	0.0	
28	N Corridor	0.2		52	Strapping Bay	0.4	
29	Ceramics Lab	0.1		53	Packing	0.4	
30	R7#1 East Wall	2.0		54	Fuel Storage Area	6.4	
31	PP2 West Wall	0.3		55	Graphite East	0.2	
32	S Pressing	0.6		56	BMS Loading	0.9	
33	N Pressing	0.8		57	PP2 Receiving	5.0	
34	Pangborn	1.0		58	PP2 Press R53-1	1.9	
35	S. Waste Treat	1.6		59	PP2 East Wall	0.6	
36	N. Waste Treat	0.5					

⁻ Dosimeter lost



3.0 Conventional Health and Safety

This safety and control area covers the implementation of a program to manage non-radiological workplace safety hazards and to protect personnel and equipment. Table 12 shows the safety statistics for the Port Hope facility.

Table 12

2025 Safety Statistics						
Year / Parameter	Q1	Q2	Q3	Q4	YTD	
First Aid Injuries	2	0			2	
Medical Diagnostic Injuries	0	1			1	
Medical Treatment Injuries	0	0			0	
Lost Time Injuries	0	0			0	
Lost Time Injury Frequency	0.0	0.0			0.0	
Lost Time Injury Severity	0.0	0.0			0.0	

There were no lost time incidents that occurred in the second quarter. The Total Recordable Injury Rate (TRIR) for January through June 2025 is 1.44 for the Port Hope facility.

Health and Safety Activities

- Communications: The second quarter safety meetings were held each month with a different topic including Workplace Violence Prevention, Heat Stress and Control of Hazardous Energy (CoHE). Each month an update is also included for the previous month on 4 topics: Safe, healthy, and rewarding workplace, clean environment, supportive communities, and outstanding financial performance. Safety statistics as well as the status on quality and production targets are also included in the update on these topics.
- Education and Training: During the second quarter, work continued on the inscope SAT positions. The Health Physics Lab Technician SAT Design and the Waste Treatment Operator SAT Analyze and Design were completed, work instructions for these two positions continues into the third quarter and are nearing completion. In May 2025, CFM hired a Document Control Administrator to help support the development and implementation of SAT work instructions.
- Safety Awareness Activities: In the second quarter CFM supported Northumberland's Day of Caring with team members traveling to specific



- locations to paint, build, garden, etc. CFM also celebrated Earth Day with a seed giveaway.
- JHSC: In the second quarter, the JHSC continued focus on the promotion of "Safety Wins" and introduced a site wide promotion contest to encourage team members to look for opportunities to improve safety in the workplace. The committee also began preparation for performing risk assessments. This includes determining how to prioritize the process to assess and outlining a step by step guide in performing a risk assessment. Monthly workplace inspections continued. The committee is also looking at new ways to promote itself and make meeting minutes more accessible.
- Safety & Industrial Hygiene: During the second quarter air assessments were completed at our existing weld prep process to determine graphite levels in air. Results indicated amounts were well below acceptable levels and the report was communicated with team members.



4.0 Environmental Protection

This safety and control area covers the programs that monitor and control all releases of nuclear and hazardous substances into the environment, as well as their effects on the environment, as the result of licensed activities.

Public Dose

Public dose is calculated by summing the total amount of uranium dioxide released to air in process stacks, building ventilation as well as liquid emissions, and is added to the gamma dose to the critical receptor (represented by location #12). This is demonstrated in the following formula:

Public Dose = Dose Air (stacks) + Dose Air (building ventilation) + Dose Water + Dose Gamma

The estimated public dose, along with each component, for the second quarter of 2024 to the second quarter of 2025 is provided in Table 13. The total dose for the member of the public from air, liquid emissions and gamma levels for the quarter is calculated to be 0.007 mSv, which is lower than previous quarters except last quarter. Late in the fourth quarter a shield wall was construction to reduce the gamma levels to the critical receptor. Bundles from the Bundle Wash Project were moved back into the Fuel Storage Building during the quarter. Therefore, it appears the shield wall was successful in lowering dose to the critical receptor.

Table 13

Public Dose by Quarter (mSv/quarter)							
DRL Component	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025		
Air (stacks)	0.000	0.000	0.000	0.000	0.000		
Air (building ventilation)	0.007	0.008	0.006	0.006	0.007		
Liquid	0.000	0.000	0.000	0.000	0.000		
Gamma (Location 12)	0.055	0.087	0.007	0.000	0.000		
Total dose to Critical Receptor (location #12)	0.062	0.095	0.014	0.006	0.007		



Gamma Monitoring

The perimeter gamma derived release limit for the critical receptor at location #12 is 1.35 $\mu Sv/hr$ and the action level is 1.0 $\mu Sv/hr$. The other DRL's listed for gamma monitoring are for location #1 and location #2 DRL's at 4.96 $\mu Sv/hr$ and 0.46 $\mu Sv/hr$ respectively with the action level of 0.2 $\mu Sv/hr$ for both locations. There were no exceedances of the DRL's or the action levels during the second quarter.

Table 14 provides the quarterly gamma levels in μ Sv/hr for all fence line monitoring locations (i.e., 1-12) for the quarter.

Table 14

Second Qua	Second Quarter 2025 Gamma Monitoring Results (μSv/hr)					
Location	Action Level	Dose Rate				
1	0.2	0.00				
2	0.2	0.03				
3	1.0	0.00				
4	1.0	0.00				
5	1.0	0.00				
6	1.0	0.00				
7	1.0	0.00				
8	1.0	0.00				
9	1.0	0.00				
10	1.0	0.00				
11	1.0	0.02				
12	1.0	0.00				

The monitoring results for location 12 (closest location to the critical receptor) from the second quarter to the second quarter in 2024 to the second quarter of 2025 are provided in Table 15. Results have been corrected to consider background gamma levels by subtracting $0.08~\mu Sv/hr$. The dose rate for the second quarter of 2025 at location 12 is lower than previous quarters except last quarter. The dose rate in the second quarter was lower due to the installation of the shield wall.



Table 15

Gamma Monitoring Results at Critical Receptor by Quarter (μSv/hr)					
Period	Regulatory Limit (DRL)	Action Level	DRL Contribution		
Q2 2024	1.35	1.0	0.30		
Q3 2024	1.35	1.0	0.47		
Q4 2024	1.35	1.0	0.04		
Q1 2025	1.35	1.0	0.00		
Q2 2025	1.35	1.0	0.00		

Stack Emissions

The total amount of uranium dioxide released to the environment during the quarter in gaseous effluent from stacks was 0.001 kg. The action level for stack emissions is 2.0 $\mu g/m^3$ uranium concentration for a daily stack reading. There were no exceedances of the action levels with respect to air emissions during the quarter. Table 16 provides the average and maximum uranium concentration for all stacks in $\mu g/m^3$ from the second quarter of 2024 to the second quarter of 2025. The overall average concentrations in $\mu g/m^3$ measured in stack emissions in the second quarter were similar to the concentrations in previous quarters.

In the second quarter of 2024, a new database for calculating environmental data was commissioned. One of the improvements was the ability to calculate and report the stack data in grams/hour (g/hr). After collecting data for stack emissions in this format in the new database, CFM is in the process of setting an action level in g/hr units. Table 17 provides the average and maximum uranium results for all stacks in g/hr from the second quarter of 2024 to the second quarter of 2025. The results reported in g/hr show that stack emissions from the Pangborn North Dust Collector were the highest emitter.



Table 16

	Daily Stack Emissions by Quarter (µg/m³)						
Source	Action Level	Avg. / Max.	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025
PP2 West	2.0	Avg. Max.	0.0	0.0	0.0	0.0	0.0
PP2 East	2.0	Avg. Max.	0.0	0.0	0.0	0.0	0.0
Waste Treatment Area Absolute	2.0	Avg. Max.	0.0	0.0	0.0 0.1	0.0	0.0
BMS Extraction	2.0	Avg. Max.	0.0	0.0	0.0 0.4	0.0	0.0
Hoffman Vacuum	2.0	Avg. Max.	0.0	0.0	0.0 0.1	0.0	0.0
Pangborn North Dust Collector	2.0	Avg. Max.	0.0	0.0	0.0 0.4	0.0	0.0
Pangborn South Dust Collector	2.0	Avg. Max.	0.0	0.0	0.0 0.1	0.0	0.0
DeVilbiss Mist Collector	2.0	Avg. Max.	0.0	0.1	0.1 0.2	0.1	0.0
Furnace Burn-off	2.0	Avg. Max.	0.0	0.0	0.0 0.1	0.0	0.0
Overall	2.0	Avg. Max.	0.0	0.0	0.0 0.4	0.0	0.0



Table 17

	Daily Stack Emissions by Quarter (g/hr)						
Source	Release Limit	Avg. / Max.	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025
PP2 West	1.2	Avg. Max.	0.0000	0.0000	0.0000	0.0000	0.0000
PP2 East	1.2	Avg. Max.	0.0000	0.0000 0.0001	0.0000 0.0005	0.0000 0.0001	0.0000 0.0002
Waste Treatment Area Absolute	1.2	Avg. Max.	0.0000 0.0004	0.0000 0.0002	0.0001	0.0000 0.0002	0.0001 0.0003
BMS Extraction	1.2	Avg. Max.	0.0000	0.0000	0.0000 0.0004	0.0000	0.0000 0.0001
Hoffman Vacuum	1.2	Avg. Max.	0.0000	0.0000	0.0000	0.0000	0.0000
Pangborn North Dust Collector	1.2	Avg. Max.	0.0001	0.0001	0.0001 0.0011	0.0000	0.0001 0.0007
Pangborn South Dust Collector	1.2	Avg. Max.	0.0001	0.0001 0.0005	0.0001 0.0005	0.0001 0.0016	0.0001
DeVilbiss Mist Collector	1.2	Avg. Max.	0.0003	0.0005 0.0010	0.0006 0.0012	0.0006 0.0015	0.0001
Furnace Burn-off	1.2	Avg. Max.	0.0000 0.0002	0.0000 0.0003	0.0001 0.0009	0.0001 0.0005	0.0001 0.0004
Overall	1.2	Avg. Max.	0.0001 0.0014	0.0001 0.0010	0.0001 0.0012	0.0001 0.0016	0.0001 0.0007

Building Ventilation Emissions

The action level for building ventilation is 1.0 g/hr and is monitored daily for the Pelleting Area and 0.4 g/hr for the PP2 area. There were no exceedances of either action level in the second quarter.

Beginning in the second quarter of 2024, the emissions for the Pelleting Area are calculated using the continuous air sampling system (CAM heads) instead of the fixed air sampling system which was used prior to this change. CAM heads continuously monitor air in the area 24 hours a day, 7 days a week for the presence of airborne radioactive particulate contamination and signal an alarm when an airborne release occurs at specified levels.

The estimated release of uranium dioxide in exhaust ventilation from both areas during the quarter was 0.28 kg (0.25 kg from the Pelleting Area and 0.03 kg from the PP2 area).



Table 18 provides the average and maximum uranium concentration emitted through the building ventilation system in g/hr from the second quarter of 2024 to the second quarter of 2025.

The table demonstrates that the PP2 area has much lower emissions through building ventilation than the Pelleting Area and the results are consistent between the quarters with the Pelleting Area average result similar to previous quarters whereas the maximum result was higher than previous quarters.

Table 18

Building Ventilation Rates by Quarter (g/hr)							
Parameter	Action Level	Measure	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025
II . E	1.0	Average	0.11	0.14	0.10	0.10	0.11
Uranium Emissions		Maximum	0.33	0.53	0.48	0.24	0.59
from Pelleting Area		Minimum	0.04	0.03	0.03	0.03	0.02
Uranium Emissions		Average	0.01	0.01	0.01	0.01	0.01
from PP2 Area	l ——	Maximum	0.05	0.05	0.04	0.02	0.03
		Minimum	0.00	0.00	0.00	0.00	0.00

Liquid Emissions

The action level for liquid effluent released to the sewer is 0.10 mg/L. In the second quarter there was no exceedance of the action level.

Table 19 provides the average and maximum uranium concentration for a single composite sample from the second quarter of 2024 to the second quarter of 2025. Also provided in the table is the minimum and maximum pH measured in the samples. The discharge in the second quarter is lower than or equal to previous quarters.



Table 19

Sanitary Sewer Emissions by Quarter							
Parameter	Action Level (mg/L)	Measure	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025
I Imagina (mag/I)	0.1	Average	0.01	0.01	0.01	0.01	0.01
Uranium (mg/L)	0.1	Maximum	0.02	0.02	0.02	0.03	0.03
all (all maits)	6.5	Minimum	7.5	7.4	7.4	7.2	7.5
pH (pH units)	9.0	Maximum	8.0	8.2	8.0	7.9	7.7
Volume of water	-	(m^3)	5142	5197	4111	4831	3556
Estimated Discharge	-	(kg)	0.07	0.05	0.04	0.07	0.04

Ambient Air Monitoring

High volume air samples are collected in the four corners of the CFM property. Table 20 shows the quarterly average and maximum results for all four locations from the second quarter of 2024 to the second quarter of 2025. The maximum result occurred in the Northwest location beside the Waste Storage Building.

Table 20

Overall Uranium-in-Air Concentration at Hi-Vol Stations by Quarter (µg/m³)					
Parameter	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025
Average	0.0003	0.0002	0.0004	0.0002	0.0003
Maximum	0.0005	0.0006	0.0054	0.0009	0.0010

Table 21 provides the quarterly average and maximum uranium-in-air concentrations for all locations from the second quarter of 2024 to the second quarter of 2025.



Table 21

Ura	Uranium-in-Air Concentration at Hi-Vol Stations by Quarter (μg/m³)						
Quarter	Result	East	North	Northwest	Southwest		
02.2024	Average	0.0002	0.0003	0.0003	0.0003		
Q2 2024	Maximum	0.0005	0.0005	0.0004	0.0005		
02.2024	Average	0.0002	0.0003	0.0003	0.0002		
Q3 2024	Maximum	0.0003	0.0005	0.0006	0.0005		
04.2024	Average	0.0003	0.0007	0.0003	0.0004		
Q4 2024	Maximum	0.0023	0.0054	0.0023	0.0033		
01 2025	Average	0.0002	0.0002	0.0002	0.0002		
Q1 2025	Maximum	0.0004	0.0004	0.0009	0.0004		
02.2025	Average	0.0003	0.0003	0.0003	0.0004		
Q2 2025	Maximum	0.0006	0.0008	0.0007	0.0010		



Legacy Waste Management

In the first quarter of 2025, CFM completed the review of drummed material that did not meet the disposal site's criteria. Each drum was opened systematically to visually identify the contents, sort, and segregate like materials. From this activity, recoverable uranium material was consolidated to be verified and the uranium recovered with other scrap material. Marginally contaminated material was repackaged, rescanned, and prepped for disposal in the United States. An inventory of drums generated in this project containing recoverable uranium will be stored onsite.

CFM continues to progress phase 1 of the trailer project in 2025. Two shipments of marginally contaminated material were made to an appropriately permitted facility in the United States in the second quarter.



5.0 Public Information Program

During the second quarter of 2025, CFM continued to meet the requirements of CNSC RD/GD 3.2.1, Public Information and Disclosure programs.

Public Engagement

On April 10, students from Loyalist Colle's Radiation Protection Program toured Cameco Fuel Manufacturing Port Hope (CFM PH). Also, on April 10, five Cameco representatives attended Ed's House Handbags for Hospice Fundraiser. Cameco was a sponsor for the event.

On April 11, two groups of 25 representatives from the World Nuclear Fuel Conference, taking place in Montreal, participated in a day trip to Port Hope to tour CFM PH. From April 15 to 17, Cameco representatives attended the annual Canadian Nuclear Conference. Cameco was a bronze sponsor of the event and had an exhibition booth set up to speak with industry professionals, students, and other attendees.

On May 9, Cameco was the title sponsor of the 4th annual Ryan Huffman Charity Golf Tournament. Cameco representatives also played in the tournament. As the title sponsor, Cameco was able to contribute items to the swag bag including two postcards about Cameco's local operations and fuel facts. Cameco also provided promotional materials to be set up at the event to highlight Cameco's operations within the nuclear fuel cycle.

On May 13, seven representatives from the Ryan Huffman Foundation and Real Estate Team toured CFM PH.

On May 15, eight Cameco representatives attended the annual Cornerstone Women's Day Lunch. Cameco was a sponsor and purchased additional tickets.

On May 16, new signage was installed at the Jack Burger Sports Complex in Port Hope to promote Cameco in the community and share ways for community members to learn more and connect.

On May 21, the VP, Fuel Services Division, attended Habitat for Humanity's dedication day for its Baltimore Build project. In 2023 and 2024, Cameco donated \$100,000 in support of this project.

On May 29, Cameco representatives met with the YWHN to discuss project progress and to arrange an opportunity for a Cameco behind the scenes tours this summer.

In early June, mailed invitations went to approximately 3,200 households in Port Hope, inviting local residents and business members to attend our Port Hope Community BBQ. In early to mid-June, the latest Energize issue was mailed to approximately 7,000 local Port Hope residents. In this issue Cameco shared information about FSD leadership changes,



Cameco's Charity Golf Tournament, NCAM support, and an invitation to Cameco's Port Hope Community BBQ.

On June 12, Cameco took part in a photo and video fundraising announcement to share the total dollars raised through the annual Ryan Huffman Foundation Golf Tournament. YMCA representatives were also photographed receiving a \$25,000 donation from the proceeds to support its UpTurn program.

On June 13, Cameco hosted its annual Port Hope Charity Golf Tournament to raise funds for the Cameco Fund for Mental Health. The tournament raised \$34,000 and welcomed 140 participants including community members, local business and industry professionals.

On June 19, Cameco hosted its annual Community BBQ in Port Hope. It was attended by approximately 430 attendees.

On June 26, Cameco representatives met with Jason Williams from the Port Hope Fire Department to discuss potential future financial support of Port Hope's new fire station. Construction is expected to begin in 2026. That day they also met with Municipality of Port Hope Mayor Hankivsky to discuss future opportunities to work together. Finally, they met with the Capitol current collaborations including Cameco's employee program and support of the upcoming Rez Gas production.

Cameco provided free advertising to local charitable organizations with its sponsorship of MyFM's Community Partner Program. Through the quarter, the Capitol Theatre in Port Hope, Community Counselling and Resource Centre and Trent Hills Pride benefitted from this sponsorship by receiving free advertising spots.



Public Disclosure

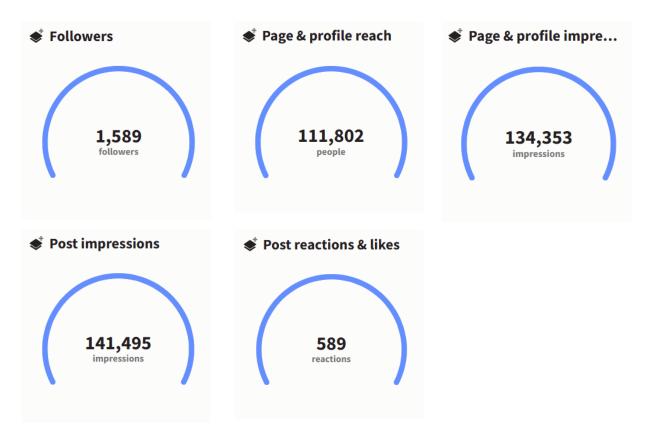
There was one public disclosure during the second quarter: <u>Environment & Safety | Cameco</u>

April 7, 2025
April 3, 2025
Reportable Spill
Groundwater was observed to be seeping from the access cover of a pumping well in the CFM Port Hope Parking lot and a small portion entered into the municipal catch basin, which ultimately discharges to Gages Creek. The total volume of untreated groundwater discharge is unknown but the flow rate was estimated at less than 1L/minute. There was no health or safety risk posed to the public, workers, or the environment by the release of groundwater.
CFM staff mobilized a collection system to pump excess water into a temporary holding tank and will monitor well levels and pump down as required. Two water samples were collected for sampling – one at the surcharging maintenance hole and one from the municipal catch basin. The Spills Action Centre, the Municipality of Port Hope, the CNSC Project Officer and the CNSC Duty Officer have been notified.
1



Social Media

Facebook: April 1 to June 30, 2025



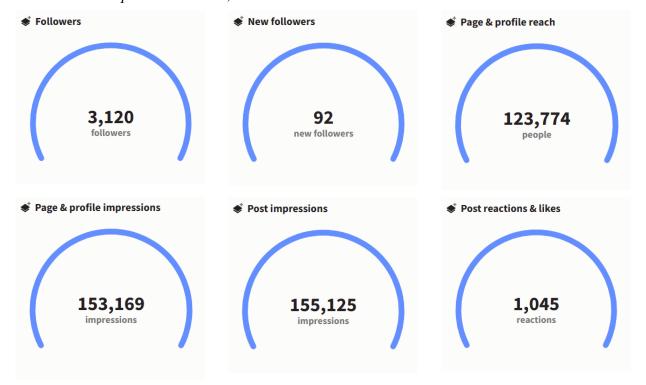
Other platforms (Instagram, X & YouTube): April 1 to June 30, 2025







All Platforms: April 1 to June 30, 2025





Top Performing Posts





Join Cameco on Thursday, June 19 for a free Community BBQ in Memorial Park,

80 likes and reactions



Cameco would like to share an important leadership update that reflects our

53 likes and reactions



Cameco's annual Port Hope Charity Golf Tournament returns on Friday, June 13,

46 likes and reactions

Top posts



Cameco would like to share an important leadership update that reflects our ongoing commitment to investing in our people and strengthening our role in powering a secure energy future. After 17 years of dedicated service,

32 likes



On Tuesday, representatives of Ryan Huffman Foundation and Real Estate Team visited Cameco Fuel Manufacturing in Port Hope to learn about the fuel bundle assembly process. Did You Know: CANDU fuel bundles, like the one

31 likes



P ? \$

On Thursday, over 60 employees from the Blind River Refinery participated in our annual Cameco Cares Day. This is the 20th year that employees have traded a day of work at the Refinery to work outside beautifying

30 likes

Top tweets



Two weeks ago, Cameco employees participated in United Way Northumberland's Day of Caring! We're grateful to be a part of this important day for our community – as an industry sponsor and member of the organizing

19.05% engagement rate



Cameco would like to share an important leadership update that reflects our ongoing commitment to investing in our people and strengthening our role in powering a secure energy future. Read the full story in our latest

17.65% engagement rate



Our Cameco Community BBQ is underway! We're here in Memorial Park in Port Hope until 6:30 p.m. Come down and enjoy a BBQ dinner and speak with Cameco subject matter experts.

10.34% engagement rate



Summary

Cameco Ontario's 116 posts (combined across Facebook, Instagram, X and YouTube):

• Facebook: 40 posts

• Instagram: 39 posts

• X: 37 posts

These posts covered information such as:

- Cameco's latest Energize issue including stories about Building 27's demolition winning an award, a 'Did You Know' section about CANDU Fuel Bundles and more
- Cameco's 2024 Sustainability Report
- Community engagement activities
 - o Port Hope's annual Community BBQ
- Community investment activities, including:
 - Cameco's annual Port Hope Charity Golf Tournament supporting the Cameco Fund for Mental Health
 - o Cameco's participation in the 26th annual United Way Day of Caring
- Industry participation
 - Cameco CEO Tim Gitzel's panel presentation at the Canadian Nuclear Association conference
- Career opportunities

Website

Spring issue of Energize

• Energize - Spring 2025 | Cameco Fuel Services

One public disclosure: Environment & Safety | Cameco

CFM 2024 Annual Compliance Report

• Media Library | Cameco Fuel Services

2025 Q1 CFM Compliance Report

• Media Library | Cameco Fuel Services

2024 Sustainability Report

• Cameco Releases 2024 Sustainability Report | Cameco Fuel Services

Website announcement to promote Cameco's Port Hope Charity Golf Tournament



Cameco Charity Golf Tournament Returns for 2025 | Cameco Fuel Services

Website announcement to promote Cameco's upcoming Port Hope Community BBQ

• Community BBQ in Port Hope | Cameco Fuel Services

Media Analysis

Cameco received media coverage for its emergency services support in responding to a fire at a local company, AkzoNobel

- Breaking News Video Four Fire Departments on Scene of Fire at AkzoNobel in Port Hope - Today's Northumberland - Your Source For What's Happening Locally and Beyond
- Update Fire at AkzoNobel Caused Significant Damage to Building, Contents and Fire Apparatus - Today's Northumberland - Your Source For What's Happening Locally and Beyond
- Firefighters praised for quick action in Port Hope industrial blaze | Classic Rock 107.9

Cameco received media coverage for its support of the new Northumberland County Museum and Archives inaugural exhibition:

- Cameco plans Indigenous exhibition as part of new museum
- Northumberland County Archives & Museum announces its inaugural exhibit will be on the Michi Saagiig language | kawarthaNOW
- Northumberland County Archives & Museum announces its inaugural exhibit will be on the Michi Saagiig language Northumberland 89.7 FM
- Cameco supports Northumberland County Archives & Museum and Michi Saagiig language exhibit | 93.3 myFM

Cameco received media coverage for its support of Northumberland Food for Thought:

 <u>Cameco Supports Student Nutrition Programs in Northumberland - Today's</u> Northumberland - Your Source For What's Happening Locally and Beyond

Communication Products

• Energize - Spring 2025 | Cameco Fuel Services

Mailer to promote Port Hope Community BBQ delivered to local residents and businesses





Social media campaign to promote Cameco Port Hope Charity Golf Tournament











Social media campaign to promote Cameco Port Hope Community BBQ



Paid advertising on My Broadcasting Corporation's website to promote Cameco's Port Hope Charity Golf Tournament.







Cameco backdrops and banners were set up at the Ryan Huffman Foundation Golf Tournament, Cameco's Port Hope Charity Golf Tournament and Cameco's Port Hope Community BBQ.







6.0 Indigenous Engagement

Cameco continues regular engagement with Curve Lake First Nation (CLFN) and the Mississaugas of Scugog Island First Nation (MSIFN).

On April 7, the public disclosure regarding groundwater at CFM was shared with CLFN, MSIFN and Hiawatha First Nation.

On May 7, Cameco and CLFN held a joint Environmental Working Group and Oversight Committee meeting. The meeting was focused on the development of a harvest food study and included a presentation from a third-party consultant. A similar meeting was held with MSIFN on May 20.

The 2024 Annual Compliance Report was sent to CLFN, MSIFN, Hiawatha First Nation, Alderville First Nation, Chippewas of Rama First Nation and the Mohawks of the Bay of Quinte on April 10. They were also provided with the 2025 Q1 Compliance Report on May 27, the winter issue of the Energize newsletter on April 4, and the Spring issue of Energize on June 18.

Cameco sent email invitations to its annual community barbeque to Alderville, Curve Lake, and Hiawatha First Nations on May 26.

On May 31, Cameco representatives attended the Alderville First Nation career fair. Cameco's booth featured information about its local operations and career opportunities.

Cameco and Curve Lake's Environmental Working Group met on June 17. The meeting focused on the PHCF's environmental monitoring programs. Cameco will arrange a tour for specific CLFN representatives that will focus on environmental monitoring at the site.

Cameco and MSIFN's Environmental Working Group met on June 18. The meeting focused on the PHCF's environmental monitoring programs. Cameco will arrange a tour for specific MSIFN representatives that will focus on environmental monitoring at the site.

Cameco held focused meetings with CLFN and MSIFN during the quarter to continue discussions around education and development of the respective programs for each community.



7.0 Other Matters of Regulatory Interest

There were no processing activities of enriched material conducted on site in the second quarter of 2025 and CFM met all site-specific reporting requirements.



8.0 Concluding Remarks

Cameco is committed to the safe, clean, and reliable operations of its facilities and continually strives to improve safety performance and processes to ensure the safety of both its employees and the local residents.

During the second quarter of 2025, CFM did not exceed any CNSC regulatory limits. CFM maintained environmental emissions and public radiation exposures to levels that are a fraction of the regulatory limits. There was one environmental incident reported to the CNSC during the quarter related to groundwater discharge.

Cameco's relationship with residents remains strong and we are committed to maintaining the strong support and trust we have developed over the past several years.