

# 2025 Third Quarter Compliance Monitoring & Operational Performance Report

**Reporting Period July 1 – September 30, 2025** 

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

> 200 Dorset Street East Port Hope, Ontario L1A 3V4

Submitted to:
The Canadian Nuclear Safety Commission
P.O. Box 1046, Station B
280 Slater Street
Ottawa, Ontario
K1P 5S9



## **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. Dose to the public was reevaluated in the third quarter due to the installation of the shield wall which lowered the dose to the critical receptor background levels. The alternate receptor, from the 2021 Derived Release Limit (DRL), with the highest dose rate results above background is represented by location #2. Therefore, public dose for both location #12 and location #2 will be provided until the DRL has been updated, which is scheduled to be completed in 2026.

Environmental emissions are also being controlled to levels that are a fraction of the regulatory limits. During the third quarter, there were no exceedances of the action levels in the radiation protection or environmental protection program.

In the third quarter there was a planned shutdown of the facility for three weeks in July. The planned shutdown provides an opportunity to complete maintenance activities, complete any scheduled facility and equipment upgrades as well as allows operators an opportunity to use vacation time.



## **Table of Contents**

EXE	ECUTIVE SUMMARY	2
1.0	THIRD QUARTER OVERVIEW	4
1.1	Facility Operation	4
1.2	Physical Design / Facility Modification	5
2.0	RADIATION PROTECTION	6
3.0	CONVENTIONAL HEALTH AND SAFETY	14
4.0	ENVIRONMENTAL PROTECTION	16
5.0	PUBLIC INFORMATION PROGRAM	26
6.0	INDIGENOUS ENGAGEMENT	37
7.0	OTHER MATTERS OF REGULATORY INTEREST	38
8.0	CONCLUDING REMARKS	39



## 1.0 Third 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 third quarter.

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

There was one document submitted to the CNSC in the third quarter of 2025.

 Persons Authorized to Act for CFM in Dealings with the CNSC (PHF 4449), version # 4- updated to reflect the change in Superintendent of Special Projects role for the Fuel Services Division.

In the third quarter there was a planned shutdown of the facility for three weeks in July. The planned shutdown provides an opportunity to complete maintenance activities, complete any scheduled facility and equipment upgrades as well as allows operators an opportunity to use vacation time.



## 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 third 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. Operation of the third press continued in the third 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 third quarter there was no exceedance in the Radiation Protection program.

#### Whole Body Dose

Table 1 shows the third 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 third quarter, all NEWs received a whole body dose below 1 mSv (100%).

Table 1

Third Quarter 2025 Whole Body Dose Results							
Work Group	Number of Individuals	Average (mSv)	Minimum (mSv)	Maximum (mSv)			
Operations	110	0.18	0.00	0.86			
Administration / Support	95	0.01	0.00	0.20			
Contractors/Visitors	12	0.01	0.00	0.03			

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 third quarter of 2024 to the third quarter of 2025 (five monitoring periods). The average whole body dose in the third quarter for all NEWs was 0.09 mSv. The average and maximum whole body dose was lower than previous quarters. The individual with the highest exposure in the third quarter was an operator working in the Pelleting area.



Table 2

Whole Body Dose Results by Quarter							
Monitoring	Minimum	<b>Maximum Dose</b>					
Period	Employees	(mSv)	Dose (mSv)	(mSv)			
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			
Q3 2025	217	0.09	0.00	0.86			

## Skin Dose

Table 3 shows the third 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 was 7.70 mSv in the third quarter and the average skin dose for all NEWs was 0.61 mSv. The action levels for skin dose were not exceeded in the quarter. All NEWs received a skin dose in the third quarter less than 10 mSv (100%).

Table 3

Third Quarter 2025 Skin Dose Results						
Work Group	Number of Average Individuals (mSv)		Minimum (mSv)	Maximum (mSv)		
Operations	110	1.19	0.0	7.70		
Administration / Support	95	0.01	0.0	0.22		
Contractors/Visitors	12	0.01	0.0	0.04		

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 third quarter of 2024 to the third quarter of 2025. The average dose was lower than the previous quarters and the maximum dose was lower than previous quarters except the third quarter of 2024 which was very close to the third 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)			
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			
Q3 2025	217	0.61	0.00	7.70			

## Eye Dose

Table 5 shows the third 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 3.75 mSv in the third quarter and the average eye dose for all NEWs was 0.32 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 (93%).

Table 5

Third Quarter 2025 Eye Dose Results						
Work Group	Number of Individuals	Average (mSv)	Minimum (mSv)	Maximum (mSv)		
Operations	110	0.62	0.00	3.75		
Administration / Support	95	0.01	0.00	0.21		
Contractors/Visitors	12	0.01	0.00	0.03		

<sup>\*</sup>Monthly interim action level is 6.0 mSv

Table 6 shows the employee quarterly average and maximum individual eye exposure from the third quarter of 2024 to the third quarter of 2025. The average dose in the third quarter of 2025 was lower than the previous quarters. The maximum dose in the third quarter was lower than previous quarters except the third quarter of 2024 but was very similar. 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.

<sup>\*</sup>Quarterly interim action level is 12.0 mSv.

<sup>\*</sup>Interim action levels approved by CNSC July 11, 2022



Table 6

Eye Dose Results by Quarter							
Monitoring Number of		Average Dose Minimum		<b>Maximum Dose</b>			
Period	Employees	(mSv)	Dose (mSv)	(mSv)			
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			
Q3 2025	217	0.32	0.00	3.75			

#### **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 was assessed in the third quarter after full operations was implemented. Team members were asked to wear extremity ring dosimeters while operating the press only for the month of September. The dose received in September by team members operating Press 3 was added to the September 2021 dose received by team members that worked in PP2 in the 2021 assessment. The highest dose from 2021 PP2 team members was used for the assessment and resulted in an annual dose below 50 mSv. Adding the dose instead of substituting the dose and using the highest dose from 2021 PP2 workers represents a conservative approach for assessing the impact to extremity dose. The assessment determined the impact was minimal and remained below the 50 mSv/yr criteria for licensed dosimetry.

Table 7 shows the average, minimum, and maximum extremity dose for NEWs over the period from the third quarter of 2024 to the third quarter of 2025. If the third quarter dose from 2021 was used as the basis for the third quarter of 2025 the average dose is estimated at 1.25 mSy and the maximum dose is estimated to be 7.87 mSy.



Table 7

Extremity Dose Results by Quarter							
Monitoring	Monitoring Number of		Minimum	<b>Maximum Dose</b>			
Period	Employees	(mSv)	Dose (mSv)	(mSv)			
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*			
Q3 2025	-	1.25*	0.00	$7.87^{+}$			

<sup>\*</sup>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 third quarter are provided in Table 8 below.

Table 8

Third Quarter Routine Urine Analysis Results						
Work Group	Number of Samples	Average (μg/L)	Minimum* (μg/L)	Maximum (μg/L)		
Operations	387	0.24	< 0.20	1.80		
Routine urine sample action level is 10 μg/L						

<sup>\*</sup>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 third 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 third quarter there was no routine lung counts conducted. The next campaign is scheduled for November/December 2025.

<sup>+</sup> 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 third quarter. Of the 669 samples taken none exceeded the internal administrative control limits (ACL).

Table 9

Third Quarter Alpha Contamination Monitoring Results							
Area	# of Samples Taken	Administrative Limits (Bq/cm²)	# of Samples Above Limits				
Zone 1	150	0.4	0				
Zone 2	197	4.0	0				
Zone 3	42	4.0	0				
Zone 4	280	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 third 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 third 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

Third Quarter Uranium In-plant Air Sampling Results							
Plant Area	# of Samples	Average (μg U/m³)	Maximum (μg U/m³)	# Samples > ACL <sup>2000 hr</sup>	# Samples > ACL <sup>80 hr</sup>		
Pangborn Room	83	9	38	0	0		
UO2 Grinders	186	3	25	0	0		
Dry Waste Treatment	460	2	10	0	0		
Furnace Hall	552	2	24	0	0		
PP2	736	2	11	0	0		
TOTAL	TOTAL 2027 2 38 0 0						
2000-hour Administrative Control Limit = $52 \mu g/m^3$							
80	-hour Admi	nistrative Cont	rol Limit = 59	5 μg/m <sup>3</sup>			

## 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 third quarter is summarized in Table 10. The results illustrate that the Fuel Storage Area had the highest gamma fields (6.2  $\mu$ 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 (6.1  $\mu$ 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

Third Quarter Gamma Survey Results							
Location #	Area	Result (μSv/hr)		Location #	Area	Result (μSv/hr)	
13	Kitting	0.2		37	PP2 Powder Rec. N.	1.2	
14	S Stacking	1.3		38	Powder Receipt	0.3	
15	Stacking	0.1		39	U <sub>3</sub> O <sub>8</sub> 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	0.9		42	N End Cap	0.1	
19	Grinding	0.8		43	E Offices	0.0	
20	N Grinding	0.6		44	S End Plate	0.0	
21	S Wall	0.0		45	End Plate	0.0	
22	S Furnace	0.4		46	N End Plate	0.0	
23	Furnace	0.6		47	W Offices	0.0	
24	PP2 South	6.1		48	S Inspection	0.1	
25	SE Wall	0.1		49	Inspection	0.1	
26	E Wall Furnace	0.3		50	N Inspection	0.6	
27	NE Wall	0.4		51	W Inspection	0.0	
28	N Corridor	0.2		52	Strapping Bay	0.3	
29	Ceramics Lab	0.2		53	Packing	0.2	
30	R7#1 East Wall	2.2		54	Fuel Storage Area	6.2	
31	PP2 West Wall	0.2		55	Graphite East	0.2	
32	S Pressing	0.5		56	BMS Loading	0.7	
33	N Pressing	0.6		57	PP2 Receiving	5.0	
34	Pangborn	1.1		58	PP2 Press R53-1	0.9	
35	S. Waste Treat	1.1		59	PP2 East Wall	0.5	
36	N. Waste Treat	0.5					



## 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		4		
Medical Diagnostic Injuries	0	1	0		1		
Medical Treatment Injuries	0	0	0		0		
Lost Time Injuries	0	0	0		0		
Lost Time Injury Frequency	0.0	0.0	0.0		0.0		
Lost Time Injury Severity	0.0	0.0	0.0		0.0		

There were no lost time incidents that occurred in the third quarter. The Total Recordable Injury Rate (TRIR) for January through September 2025 is 1.01 for the Port Hope facility.

#### Health and Safety Activities

- Communications: The third quarter safety meetings were held each month with a different topic including Return to Work, WHIMIS and Spills Awareness, and ISO 14001. 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 third quarter, the four identified in-scope positions for documenting the SAT Analysis and Design were completed. Work continued on the development of work instructions for Health Physics Lab Technician and Waste Treatment Operator. A Training Change Request site / form was implemented allowing CFM personnel to request changes to training courses and / or training pertaining to their direct reports.
- Safety Awareness Activities: In the third quarter, a safety contest was held to complete a word search and crossword to raise awareness regarding returning to work after shutdown.



- **JHSC:** In the third quarter, the JHSC highlighted team member health and wellness through a 3-week promotion. This included distributed information on topics such as illness prevention, the benefits of good sleep, yoga, and exercise. The committee attended a 2-day training course on federal workplace committees which was facilitated by WSPS. This training was not only for new committee members, but also a good refresher for long term members.
- Safety & Industrial Hygiene: The JHSC participated in ergonomic risk
  assessments performed on the sintering furnaces, bundle wash, and PP3.
  Members will be part of the assessment report review to look at recommendations
  provided by the ergonomist. Sound level assessments are being performed as part
  of a noise level mitigation project on the BMS. The focus is on high levels of
  sound from extraction units..



#### 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 (previously represented by location #12). Dose to the public was reevaluated in the third quarter due to the installation of the shield wall which lowered the dose to the critical receptor to background levels. The alternate receptor, from the 2021 Derived Release Limit (DRL), with the highest dose rate results above background is represented by location #2. Therefore, public dose for both location #12 and location #2 will be provided until the DRL has been updated, which is scheduled to be completed in 2026.

Calculation to public dose 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 third quarter of 2024 to the third quarter of 2025 for both locations is provided in Table 13. The total dose to the critical receptor (location #12) for a member of the public from air, liquid emissions and gamma levels for the quarter is calculated to be 0.012 mSv, which is lower than previous quarters except the first and second quarter of 2025. The component with the largest impact to total dose in the third quarter was from air emissions through building ventilation (0.012 mSv). The total dose to the alternate receptor (location #2) for a member of the public from air, liquid and gamma dose for the quarter is 0.033 mSv with gamma dose the main contributor (0.022 mSv).



Table 13

Public Dose by Quarter (mSv/quarter)								
DRL Component	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025			
Air (stacks)	0.000	0.000	0.000	0.000	0.000			
Air (building ventilation)	0.008	0.006	0.006	0.007	0.012			
Liquid	0.000	0.000	0.000	0.000	0.000			
Gamma (Location 12)	0.087	0.007	0.000	0.000	0.000			
Gamma (Location 2)	0.016	0.033	0.000	0.016	0.022			
Total dose to Critical Receptor (location #12)	0.095	0.014	0.006	0.007	0.012			
Total dose to Alternate Receptor (location #2)	0.024	0.039	0.006	0.023	0.033			

## **Gamma Monitoring**

The perimeter gamma DRL 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 for alternate receptors 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 third quarter.

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



Table 14

Third Qua	Third Quarter 2025 Gamma Monitoring Results (μSv/hr)						
Location	Action Level	Dose Rate					
1	0.2	0.00					
2	0.2	0.04					
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 third quarter 2024 to the third quarter of 2025 are provided in Table 15. The monitoring results for location 2 (closest location to the alternate receptor) from the third quarter in 2024 to the third quarter of 2025 are provided in Table 16. Results have been corrected to consider background gamma levels by subtracting  $0.08~\mu Sv/hr$ . The dose rate for the third quarter of 2025 at location 12 is lower than previous quarters except the first and second quarter of 2025. The dose rate for the third quarter of 2025 at location 2 is higher than previous quarters except the fourth quarter of 2024.



Table 15

Gamma Monitoring Results at Critical Receptor by Quarter (μSv/hr)							
Period	Regulatory Limit (DRL)	Action Level	DRL Contribution Location 12				
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				
Q3 2025	1.35	1.0	0.00				

Table 16

Gamma Monitoring Results at Alternate Receptor by Quarter (μSv/hr)							
Period	Regulatory Limit (DRL)	Action Level	DRL Contribution Location 2				
Q3 2024	0.46	0.2	0.03				
Q4 2024	0.46	0.2	0.06				
Q1 2025	0.46	0.2	0.00				
Q2 2025	0.46	0.2	0.03				
Q3 2025	0.46	0.2	0.04				

#### 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 17 provides the average and maximum uranium concentration for all stacks in  $\mu g/m^3$  from the third quarter of 2024 to the third quarter of 2025. The overall average concentrations in  $\mu g/m^3$  measured in stack emissions in the third 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 18



provides the average and maximum uranium results for all stacks in g/hr from the third quarter of 2024 to the third quarter of 2025. The results reported in g/hr show that stack emissions from the Pangborn North Dust Collector were the highest emitter again in the third quarter.

Table 17

	Daily Stack Emissions by Quarter (μg/m³)								
Source	Action Level	Avg. / Max.	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 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 0.1	0.0 0.1	0.0	0.0 0.1		
BMS Extraction	2.0	Avg. Max.	0.0	0.0	0.0 0.1	0.0	0.0 0.1		
Hoffman Vacuum	2.0	Avg. Max.	0.0	0.0	0.0	0.0	0.0		
Pangborn North Dust Collector	2.0	Avg. Max.	0.0	0.0	0.0 0.1	0.0	0.1 0.4		
Pangborn South Dust Collector	2.0	Avg. Max.	0.0	0.0	0.0 0.2	0.0	0.0 0.1		
DeVilbiss Mist Collector	2.0	Avg. Max.	0.1	0.1	0.1 0.3	0.0	0.0 0.1		
Furnace Burn-off	2.0	Avg. Max.	0.0	0.0	0.0	0.0	0.0 0.1		
Overall	2.0	Avg. Max.	0.0	0.0 0.4	0.0	0.0	0.0 0.4		



Table 18

	Daily Stack Emissions by Quarter (g/hr)								
Source	Release Limit	Avg. / Max.	Q3 2024	Q4 2024	Q1 2025	Q2 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 0.0001	0.0000 0.0005	0.0000 0.0001	0.0000 0.0002	0.0000 0.0002		
Waste Treatment Area Absolute	1.2	Avg. Max.	0.0000 0.0002	0.0001 0.0003	0.0000 0.0002	0.0001 0.0003	0.0001 0.0004		
BMS Extraction	1.2	Avg. Max.	0.0000 0.0003	0.0000 0.0004	0.0000 0.0001	0.0000 0.0001	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 0.0008	0.0001 0.0011	0.0000 0.0003	0.0001 0.0007	0.0003 0.0012		
Pangborn South Dust Collector	1.2	Avg. Max.	0.0001 0.0005	0.0001 0.0005	0.0001 0.0016	0.0001 0.0003	0.0001 0.0005		
DeVilbiss Mist Collector	1.2	Avg. Max.	0.0005 0.0010	0.0006 0.0012	0.0006 0.0015	0.0001 0.0007	0.0001 0.0004		
Furnace Burn-off	1.2	Avg. Max.	0.0000 0.0003	0.0001 0.0009	0.0001 0.0005	0.0001 0.0004	0.0001 0.0008		
Overall	1.2	Avg. Max.	0.0001 0.0010	0.0001 0.0012	0.0001 0.0016	0.0001 0.0007	0.0001 0.0012		

## **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 third 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 0.48 kg (0.44 kg from the Furnace Hall and 0.04 kg from the PP2 area).



Table 19 provides the average and maximum uranium concentration emitted through the building ventilation system in g/hr from the third quarter of 2024 to the third quarter of 2025.

The table demonstrates that the PP2 area has much lower emissions through building ventilation than the Furnace Hall. The average and maximum emissions for the Furnace Hall were higher than previous quarters.

Table 19

Building Ventilation Rates by Quarter (g/hr)								
Parameter	Action Level	Measure	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025	
	1.0	Average	0.14	0.10	0.10	0.11	0.20	
Uranium Emissions from Furnace Hall		Maximum	0.53	0.48	0.24	0.59	0.87	
Irom Furnace Han		Minimum	0.03	0.03	0.03	0.02	0.05	
Uranium Emissions		Average	0.01	0.01	0.01	0.01	0.02	
from PP2 Area	0.4	Maximum	0.05	0.04	0.02	0.03	0.06	
		Minimum	0.00	0.00	0.00	0.00	0.01	

## **Liquid Emissions**

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

Table 20 provides the average and maximum uranium concentration for a single composite sample from the third quarter of 2024 to the third quarter of 2025. Also provided in the table is the minimum and maximum pH measured in the samples. The discharge in the third quarter is lower than or equal to previous quarters.



Table 20

Sanitary Sewer Emissions by Quarter								
Parameter	Action Level (mg/L)	Measure	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 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	0.03	0.03	0.01	
all (all maits)	6.5	Minimum	7.4	7.4	7.2	7.5	7.5	
pH (pH units)	9.0	Maximum	8.2	8.0	7.9	7.7	8.0	
Volume of water	-	$(m^3)$	5197	4111	4831	3556	4278	
Estimated Discharge	-	(kg)	0.05	0.04	0.07	0.04	0.03	

## **Ambient Air Monitoring**

High volume air samples are collected in the four corners of the CFM property. Table 21 shows the quarterly average and maximum results for all four locations from the third quarter of 2024 to the third quarter of 2025. The maximum result occurred in the South West location.

Table 21

Overall Uranium-in-Air Concentration at Hi-Vol Stations by Quarter (µg/m³)							
Parameter	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025		
Average	0.0002	0.0004	0.0002	0.0003	0.0003		
Maximum	0.0006	0.0054	0.0009	0.0010	0.0008		

Table 22 provides the quarterly average and maximum uranium-in-air concentrations for all locations from the third quarter of 2024 to the third quarter of 2025.



Table 22

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	0.0002			
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			
02 2025	Average	0.0002	0.0003	0.0003	0.0003			
Q3 2025	Maximum	0.0004	0.0007	0.0006	0.0008			



## 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.

In the third quarter of 2025, CFM completed the processing of the first trailer repatriated from 158 Dorset Street (Port Hope Conversion Facility (PHCF) Site 2. 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. In the third quarter CFM also initiated the processing of filters stored in a trailer.

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



## 5.0 Public Information Program

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

## Public Engagement

During the quarter, Cameco was a production sponsor of the world premiere of Rez Gas at the Capitol Theatre.

Cameco sponsored the Port Hope Business Chamber's annual golf tournament on Sept. 11.

From September 12 to 14, Cameco staffed a booth at the Port Hope Agricultural Fair. Cameco's booth featured information on local operations and activities. Cameco leaders and subject matter experts were on hand to answer questions throughout the Fair.

On September 17, Cameco participated in the Level Up! Career Fair held in Grafton.

On September 21, Cameco held a Cameco 101 in partnership with the Friends of the Port Hope Public Library. The event was held at the Capitol Theatre and was open to members of the public. Cameco promoted the event through social media ads, posters to local businesses, at the Fall Fair and in the Energize newsletter.

Cameco sponsored the Big Brothers & Big Sisters golf tournament held on September 23.

CFM's full scale planned emergency exercise was held on September 23. Cameco notified the community of the exercise via social media and close neighbours received door knockers. Cameco performs planned emergency exercises and holds regular consultations with local emergency services as part of our commitment to the continuous improvement of our emergency planning and preparedness program.

Due to mail disruptions, the fall issue of Energize could not be mailed out, however, it was made available online and promoted on Cameco's Ontario social media channels. The issue featured information about Cameco's upcoming Cameco 101 presentation at the Capitol Theatre, Cameco's commitment to safety at its facilities and in the Port Hope community and its support for the Rez Gas production at the Capitol Theatre.

Cameco provided free advertising to local charitable organizations with its sponsorship of MyFM's Community Partner Program. Throughout the quarter, the Cultivate Festival, Habitat for Humanity, and the Northumberland Diverse Peoples Coalition all benefitted from this sponsorship by received free advertising spots.

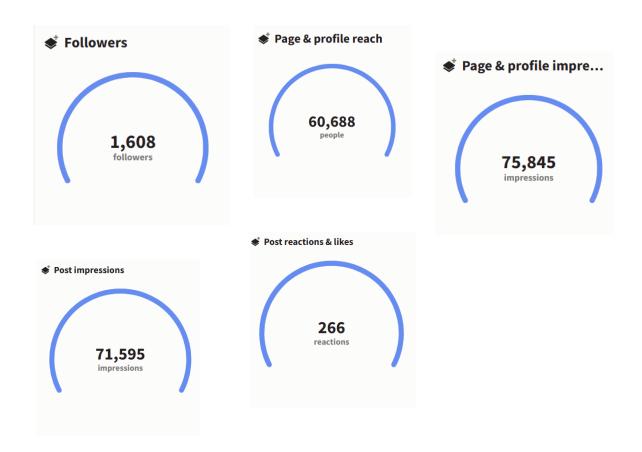


## Public Disclosure

There were no public disclosures during the third quarter <u>Environment & Safety |</u> Cameco.

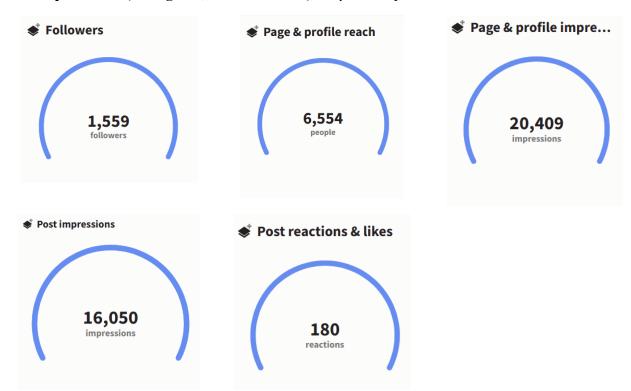
## **Social Media**

Facebook: July 1 to September 30, 2025





## Other platforms (Instagram, X & YouTube): July 1 to September 30, 2025



## All Platforms: July 1 to September 30, 2025













## **Top Performing Posts**





We're at Level Up! in Grafton today and tomorrow (Sept. 17 & 18). Stop by our

28 likes and reactions



You're invited to join Cameco and Friends of the Port Hope Public Library on Sunday,

28 likes and reactions



The National Day for Truth and Reconciliation honours the children who

23 likes and reactions

## Top posts



The National Day for Truth and Reconciliation honours the children who

25 likes



We're at the Port Hope Agricultural Fair this weekend! Visit our booth to learn how

**17** likes



On June 13, Cameco hosted our annual Charity Golf Tournament in Port Hope at

16 likes

## Top tweets



At the Port Hope Conversion Facility (PHCF), our Emergency Response Team

18.18% engagement rate



The latest edition of our Port Hope Energize newsletter is here! Due to mail

13.89% engagement rate



Join Cameco and Friends of the Port Hope Public Library on Sunday, September 21

12.5% engagement rate



#### **Summary**

Cameco Ontario's 95 posts (combined across Facebook, Instagram, X and YouTube):

- Facebook: 33 postsInstagram: 33 posts
- X: 29 posts

These posts covered information such as:

- Cameco's latest Energize issue including stories about Cameco's Emergency Response Team, the sponsorship of *Rez Gas*, a world-premiere musical at the Capitol Theatre and information about the Cameco 101 presentation.
- Community engagement activities
  - Port Hope Fall Fair
  - Grafton Skilled Trades Fair
- Community investment activities, including:
  - o A behind-the-scenes tour of Hub HQ, the future site of the new Youth Wellness Hub Northumberland (YWHN) location in Port Hope
  - Photos from Cameco's Charity Golf Tournament in Port Hope at the Dalewood Golf Club, where \$34,000 was raised to support Cameco's Fund for Mental Health
- Career opportunities
- CFM's Full-Scale planned full-scale exercise

#### Website

Fall issue of Energize

• Energize - Fall 2025 | Cameco Fuel Services

Information about the Cameco 101 community presentation

Learn about Cameco's local operations on Sept. 21 | Cameco Fuel Services

2025 Q2 CFM Compliance Report

• Media Library | Cameco Fuel Services

Information about Cameco's sponsorship of Rez Gas

<u>Cameco proud sponsor of Rez Gas, an expression of Indigenous joy | Cameco Fuel Services</u>



## Media Analysis

Cameco received media coverage for its planned emergency exercise:

 Video - Photo Gallery - Cameco Fuel Manufacturing Conducts Full-Scale Emergency Exercise - Today's Northumberland - Your Source For What's Happening Locally and Beyond

Cameco received an event listing for its Cameco 101 presentation:

• The Northumberland 48 | 93.3 myFM

## **Communication Products**

Fall Issue of Energize:

• Energize - Fall 2025 | Cameco Fuel Services



Join Friends of the Port Hope Public Library and Cameco for a free *Cameco 101* Community Presentation

Poster and social media promotions for the Cameco 101 community presentation.





Information board at the Port Hope Fall Fair.





# Cameco's fuel manufacturing consists of two facilities:



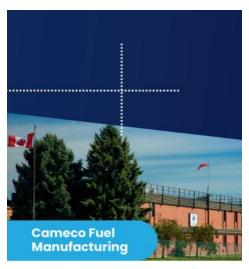
A metal fabrication facility in Cobourg, which produces fuel bundle and reactor components.

A fuel manufacturing facility in Port Hope, where natural uranium dioxide (UO2) powder is pressed into pellets, fitted into zirconium tubes and assembled into CANDU reactor fuel bundles.

Cameco has safely manufactured over 1.75 million fuel bundles.

Door knocker to communicate CFM's planned emergency exercise to neighbours.



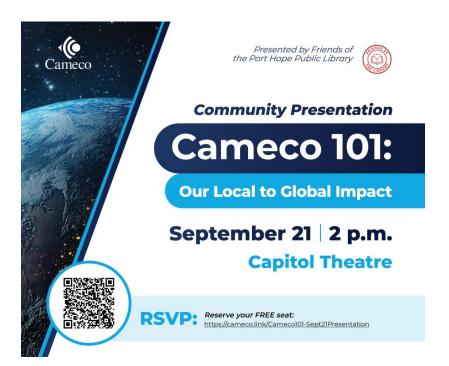


## **Notice to our Neighbours**



Social media campaign to promote Cameco 101 Presentation at the Capitol Theatre in Port Hope.







## 6.0 Indigenous Engagement

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

On July 19 Cameco sponsored the MSIFN Pow Wow and on August 7, Cameco sponsored the CLFN Pow Wow.

On Aug 19, Cameco and CLFN met. The meeting focused on the license renewal process and application preparations for PHCF. Cameco provided a presentation on PHCF's Emergency Response Team (ERT).

On August 26, Cameco and MSIFN met to discuss the license application process for PHCF and Cameco provided a presentation on the ERT and planned upcoming activities with MSIFN.

On August 29th, Cameco hosted members from CLFN and MSIFN for the world premiere of RezGas at the Capitol Performing Arts Centre in Port Hope. Cameco provided production support to RezGas, a musical co-written by a member of Alderville First Nation.

On September 8th, an invitation was sent to Alderville, Curve Lake, Mississaugas of Scugog Island and Hiawatha First Nations to attend 'Cameco 101', a community presentation in Port Hope on September 21.

The second quarter 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 September 8th.



## 7.0 Other Matters of Regulatory Interest

There were no processing activities of enriched material conducted on site in the third 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 third 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.

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.