



Port Hope Conversion Facility

Licence Renewal
Briefing Guide



Land Acknowledgment

We respectfully acknowledge the lands where Cameco operates. We offer these land acknowledgments to reaffirm our commitment and responsibility to building meaningful relationships and to improving our own understanding of local Indigenous Peoples and their cultures.

Cameco's Port Hope Conversion Facility is in the traditional territory of the Michi Saagiig and Chippewa Nations, collectively known as the Williams Treaties First Nations, which include: Curve Lake, Hiawatha, Alderville, Scugog Island, Rama, Beausoleil, and Georgina Island First Nations.



Gii-izhi-gikendamang aki gaa-izhi-ayaad Cameco. Gii-izhi-gikendamang aki gaa-izhi-ayaad, gii-izhi-ayaad gii-anishinaabeg miinawaa gii-izhi-ayaad gii-anishinaabeg gikendaasowin.

Cameco's Port Hope Conversion Facility gaa-izhi-ayaad aki Michi Saagiig miinawaa Chippewa Nations, gaa-izhi-ayaad Williams Treaties First Nations, gaa-izhi-ayaad: Curve Lake, Hiawatha, Alderville, Scugog Island, Rama, Beausoleil, miinawaa Georgina Island First Nations.

Port Hope Conversion Facility

Licence Renewal Handbook

On September 29, 2025, Port Hope Conversion Facility submitted its application to the Canadian Nuclear Safety Commission (CNSC) to renew its Class 1B Fuel Facility Operating Licence (FFOL) for a period of 20 years.

Port Hope Conversion Facility (PHCF) currently holds a Class 1B Fuel Facility Operating Licence issued by the Canadian Nuclear Safety Commission (CNSC).

The current licence FFOL-3631.0/2027, issued on February 28, 2017, is valid until February 28, 2027.

As an existing Class 1B Fuel Facility Operating Licence holder, Port Hope Conversion Facility is rigorously regulated by Canada's nuclear regulator – the CNSC. The CNSC grants licences for a determined amount of time and licence holders must apply to the CNSC to request the licence be renewed.

This handbook has been developed to provide members of the public with an overview of Port Hope Conversion Facility and information about the licence renewal process.

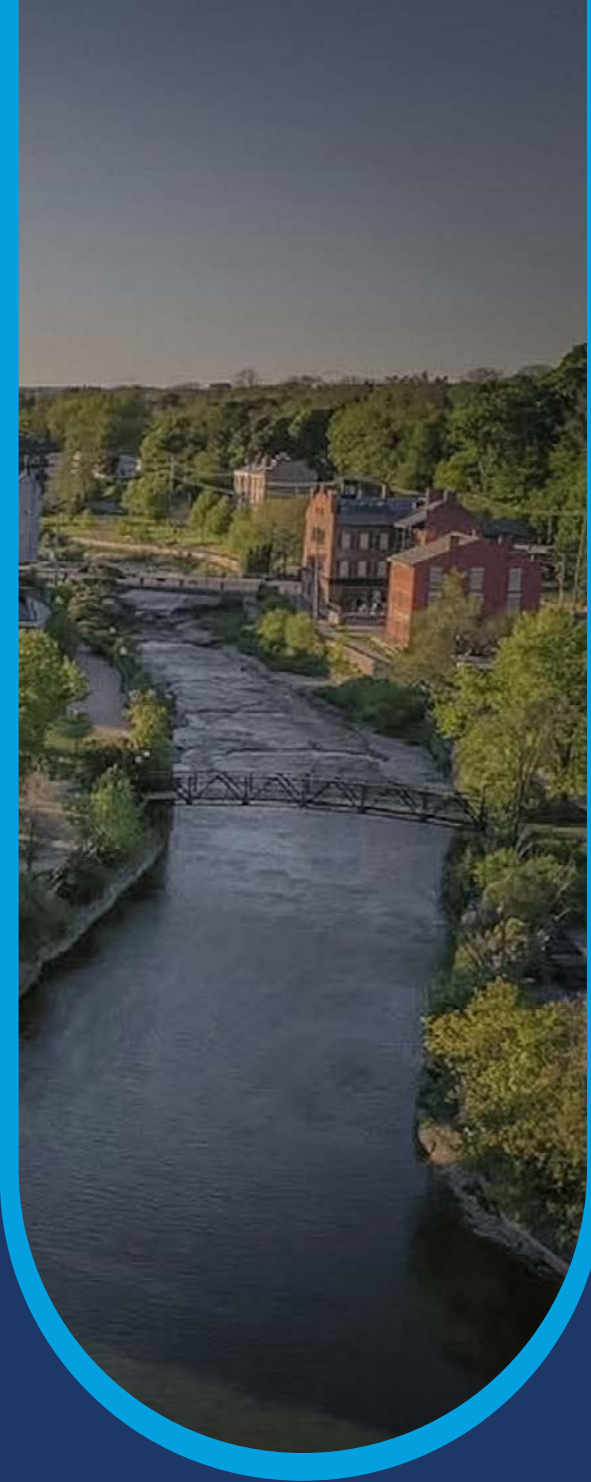
If there's any information you need, please contact us at [905.800.2020](tel:905.800.2020) or cameco_ontario@cameco.com and we will be happy to help you.





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Who We Are

More than half of Ontario's electricity is generated using the fuel products produced by Cameco's Fuel Service Division, right here in Ontario. We operate a refinery in Blind River, a conversion facility in Port Hope, and a fuel manufacturing operation with facilities in Port Hope and Cobourg, Ontario.

Port Hope Conversion Facility

Cameco's Port Hope Conversion Facility is one of only four uranium conversion facilities in the western world.

The facility converts purified uranium trioxide (UO_3) from our Blind River Refinery to either uranium dioxide (UO_2) or to uranium hexafluoride (UF_6). The UO_2 moves through the fuel cycle to Cameco's fuel manufacturing plant, where fuel bundles for CANDU heavy water nuclear reactors are produced. The UF_6 moves on to enrichment facilities for further processing into fuel for light water nuclear reactors.

Cameco Corporation (Cameco) is a major supplier of uranium processing services required to produce nuclear fuel for the generation of **safe, reliable, carbon-free nuclear power.**

Quick Facts about the Port Hope Conversion Facility



Message from the

General Manager

The Port Hope Conversion Facility (PHCF) has a long history of safely producing UO_2 and UF_6 .

Our employees call Port Hope and the surrounding area home, and we take great pride in our work – both in the facility and in the community.



At the PHCF, we convert purified uranium trioxide (UO_3) into two essential products: uranium dioxide (UO_2) to power heavy water reactors, and uranium hexafluoride, (UF_6), which is shipped internationally to enrichment facilities to become fuel for light water reactors around the world.

As Canada looks to secure its long-term energy future, nuclear energy stands out as a reliable and domestically anchored source of electricity. The Port Hope Conversion Facility plays an important role in strengthening energy security, while also supporting efforts to reduce emissions and address climate change.

Have you ever thought about where the electricity comes from when you turn on your light switch or charge your cell phone? In Ontario, more than half of all electricity comes from nuclear energy, and the nuclear fuel that powers those reactors is processed right here in Port Hope.

When you plug in your electric vehicle, you can count on nuclear power for an abundant supply of reliable, safe and emissions-free electricity.

Like all licensed nuclear facilities, we need to renew our operating licence with Canada's nuclear regulator – the Canadian Nuclear Safety Commission (CNSC) once we near the end of the existing licence term. This booklet has been developed to help you understand what we do at PHCF and how you can participate in the licence renewal process. See [page 18](#) in this guide for more information about how you can submit an intervention.

If you have any questions about our operations, feel free to contact us at cameco_ontario@cameco.com, or call [1.905.800.2020](tel:1.905.800.2020).

Message from the General Manager

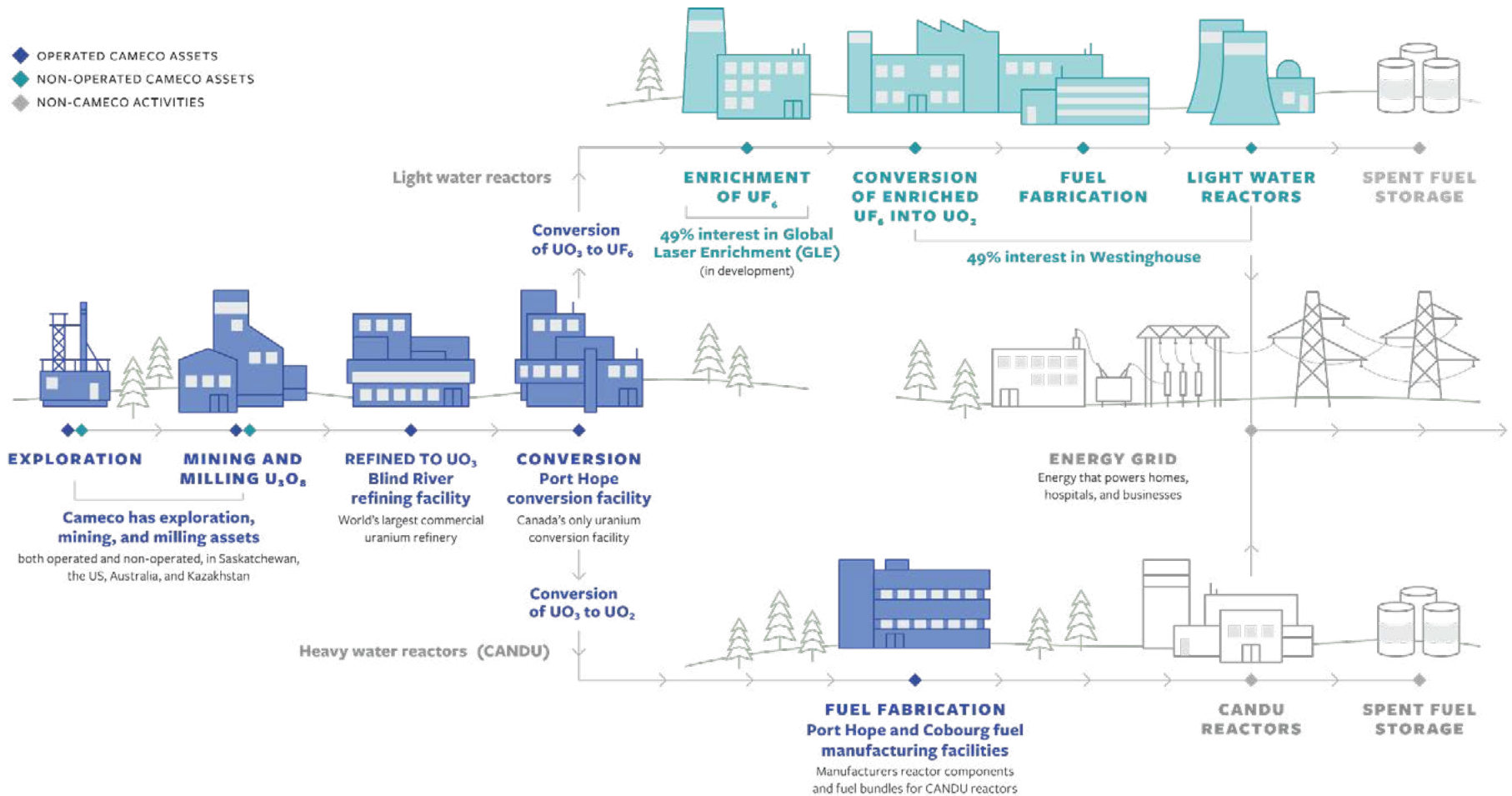
“

Nuclear energy supplies zero-emission, reliable electricity that is powering our homes and businesses, and we're proud of our role in helping to power a secure energy future.

-Dave Ingalls, general manager

The Nuclear Fuel Cycle

- ◆ OPERATED CAMECO ASSETS
- ◆ NON-OPERATED CAMECO ASSETS
- ◆ NON-CAMECO ACTIVITIES



The Benefits of Nuclear

The nuclear industry in Canada is about more than just low carbon energy. Nuclear power is a cornerstone of a secure and reliable energy future, providing dependable baseload power that Canadians, and people around the world can count on. Nuclear is essential to helping the world address the climate crisis, while also supplying life saving medical isotopes, and supporting a strong, resilient Canadian economy.



Secure and Reliable Energy Future

- Nuclear energy secures Canada's energy future by providing reliable, carbon-free, base-load power while being supported by a strong, made-in-Canada nuclear supply chain that spans uranium mining, fuel processing, engineering, construction and long-term operations.
- Nuclear energy is reliable, generating zero-emission energy day and night, no matter what the weather is like.



Nuclear Medicine

- Nuclear medicine saves lives by diagnosing diseases, treating patients and sterilizing medical equipment.
- More than 40% of all single-use medical devices produced globally are sterilized with Cobalt-60, which comes from the power reactors. Without power reactors, there would be no source of cobalt-60.
- Nuclear imaging allows doctors to better see what is happening inside a patient's body.
- Radiation therapy is used to precisely target and destroy cancer cells while sparing nearby healthy tissue.



Climate Change and Air Quality

- Climate change is one of the biggest challenges we face today. Nuclear energy is the most reliable source of large scale, carbon-free energy available.
- Removing coal power plants from Ontario was the equivalent of removing seven million vehicles from the road. Enabling nuclear energy made this possible.



Jobs and the Economy

- Canada's nuclear industry offers a variety of high-value jobs to skilled individuals. In 2024, the Canadian nuclear industry accounted for 89,000 direct and indirect jobs.
- Cameco facilities employ over 750 people in Cobourg and Port Hope.
- Cameco's Northumberland operations also utilize a variety of local suppliers and contractors.

Canada's nuclear industry is regulated by the Canadian Nuclear Safety Commission (CNSC).

The CNSC's mandate is to regulate the use of nuclear energy and materials to protect health, safety, security and the environment; to implement Canada's international commitments on the peaceful use of nuclear energy; and to disseminate objective scientific, technical and regulatory information to the public.

¹ <https://www.cnsccsn.gc.ca/eng/the-commission/>

Canada's Nuclear Regulator

The CNSC is comprised of the Commission and CNSC staff

The Commission is an independent administrative tribunal set up at arm's length from government, with no ties to the nuclear industry. Up to seven permanent Commission members are appointed, and one is designated as President and CEO. The Commission reviews applications for nuclear licences through a Public Commission Hearings and considers relevant information from the public and the recommendations of expert CNSC staff.

CURRENT CNSC COMMISSION MEMBERS

Approximately **1000 scientific, technical, specialized, and professional people make up the CNSC staff**. These personnel are responsible for monitoring compliance with the [Nuclear Safety and Control Act](#), making recommendations to the Commission, enforcing regulations and any licence conditions imposed on the licensee by the Commission.

You can learn more about how Canada's nuclear industry is regulated at nuclearsafety.gc.ca.

Our Current Licence

The Port Hope Conversion Facility holds a Class 1B Fuel Facility Operating (FFOL) Licence issued by the Canadian Nuclear Safety Commission (CNSC).

The current licence FFOL-3631.0/2027, issued on February 28, 2017, is valid until February 28, 2027.

The current licence authorizes Cameco to possess, transfer, use, process, import, package, transport, manage store and dispose of the nuclear substances that are required for, associated with, or arise from the production of UO_2 and UF_6 and possess and use prescribed equipment and prescribed information that are required for, associated with, or arise from the production of UO_2 and UF_6 .

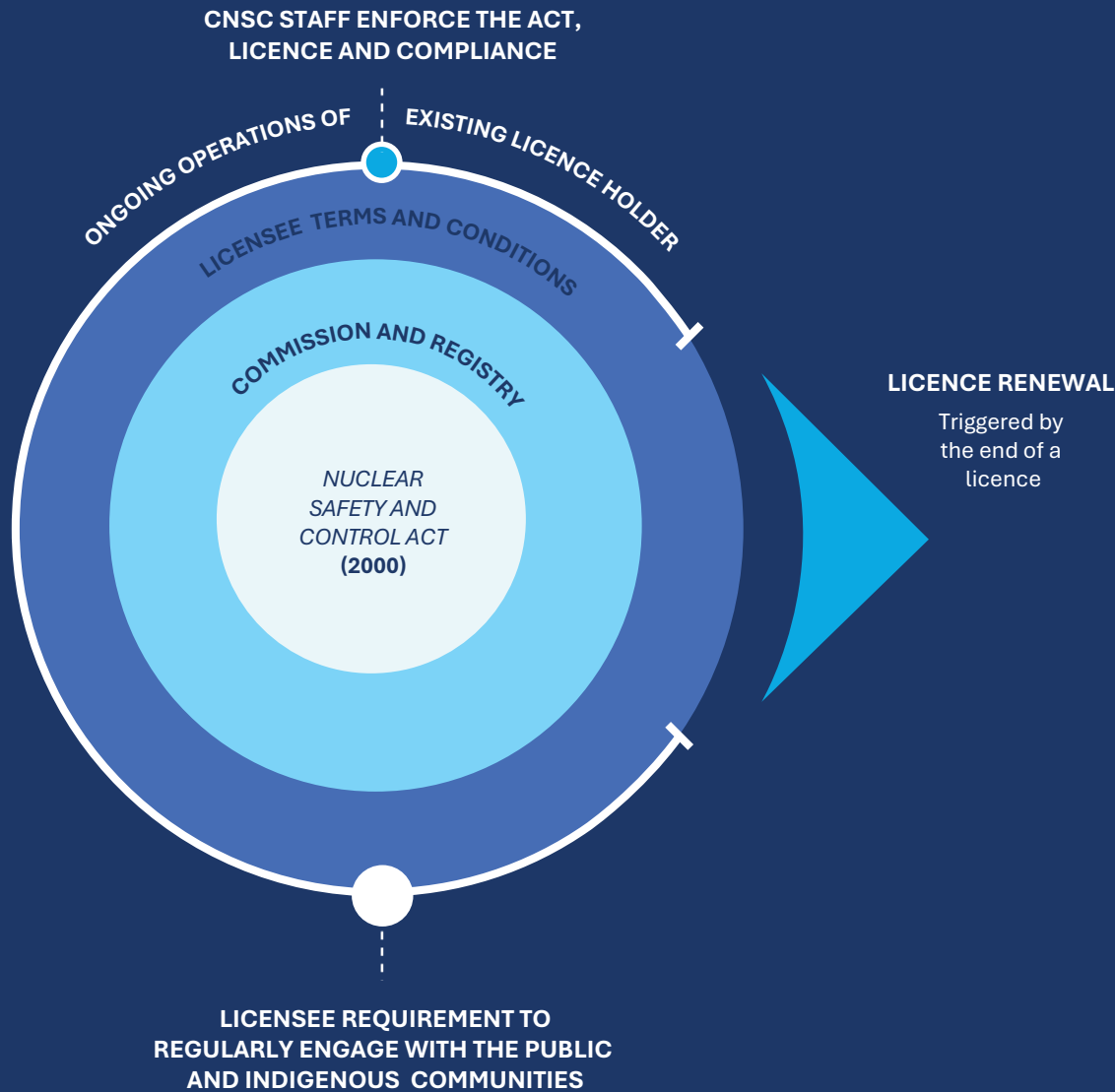
Our Current Licence

The PHCF has a long history of safe operations and has maintained strong operational and safety performance throughout the current licence period. The authorized activities are well understood, supported by established programs, experienced personnel, and a strong safety culture. Throughout this period:

- PHCF's operations have maintained radiation exposures well below regulatory dose limits. Environmental emissions were controlled to levels at a fraction of the release limits.
- The PHCF consistently achieved the highest CNSC rating of Satisfactory in all 14 of the CNSC's Safety and Control Areas (SCAs). More information on these SCAs can be found here: [Safety and Control Areas](#).

2024 public opinion survey results indicate that 91% of respondents support the continuation of Cameco's operations in Port Hope. Long-term tracking consistently shows that the large majority of survey respondents are supportive of Cameco continuing its operations in Port Hope.

Cameco or Other Existing Licence Holder



Licence Renewal Process

1

LICENSEE APPLIES TO CNSC FOR RENEWAL THAT MAY INCLUDE CHANGES

- The CNSC issues a Notice of Public Hearing and sets dates for hearing
- CNSC staff conduct detailed technical review of licence and Participant Funding Program
- CNSC sets out details of its public intervention process and Participant Funding Program

2

COMMISSION HOLDS PUBLIC HEARINGS

- Commission considers written interventions and hears oral presentations
- Public and Indigenous communities submit written interventions and oral presentations
- Hearings are public and live webcast

3

COMMISSION ISSUES DECISION REGARDING LICENCE RENEWAL

- Any associated conditions

4

CNSC STAFF ENFORCE THE ACT, LICENCE AND COMPLIANCE

- Staff ensure licensees comply with 14 safety and control areas regarding health & safety, environmental & radiation protection, waste, transport, security, fire & emergency, fitness for service, operating performance, etc.

*The commission and registry is made up of seven impartial commission members with expertise in nuclear safety and are supported by staff to organize hearings and liaise with the public

As an existing Class 1B Fuel Facility Operating Licence (FFOL) holder, the Port Hope Conversion Facility (PHCF) is subject to stringent regulations and oversight by the Canadian Nuclear Safety Commission (CNSC). Nuclear licences are granted for a set period and licencees must apply to the CNSC to request a licence renewal.

PHCF's current licence (FFOL-3631.0/2027) is valid until February 28, 2027.

On September 29, 2025, the PHCF submitted its application to the CNSC to renew its Class 1B FFOL for a period of 20 years.

What happens next?

CNSC staff will review PHCF's licence renewal application and conduct a technical assessment against the regulatory requirements, make recommendations to the Commission, and verify compliance with the *Nuclear Safety and Control Act*, regulations, and licence conditions.

Public Hearing Process

The CNSC considers licence applications for nuclear facilities via a public hearing process, which is set out in the Canadian Nuclear Safety Commission Rules of Procedure.

The public hearing for a licence application usually takes place over a 90-day period and considers the views, concerns and opinions of interested parties, **Indigenous communities** and **the public**. The public hearings are broadcast live on the CNSC's website.

Following the hearings, the Commission deliberates and makes its decision on the matter. The Record of Decision is made public.

We will update our website with key dates as they become available.

[PUBLIC COMMISSION HEARING](#)

[PHCF LICENCE RENEWAL UPDATES](#)

Participating in the Public Commission Hearing

The Canadian Nuclear Safety Commission's (CNSC) Public Commission Hearings provide an important opportunity for members of the public, Indigenous communities and stakeholders to share relevant information and expertise that may be useful to the Commission in reaching its decision on Cameco's Port Hope Conversion Facility (PHCF) licence renewal application. This is done through the CNSC's Intervenor's process.

Interventions can be made via a written submission or a written submission accompanied by an oral presentation at the hearing.

KEY DATES

Public Intervention Submission Deadline: October 5, 2026

Port Hope Conversion Facility Public Hearing

Dates: November 3 to 5, 2026

Location: TBD by the CNSC

Time and further details will be available in the hearing agenda when made available by the CNSC. We will keep our [website](#) up to date with that information.

The intervention process is for everyone – this includes those who are supportive of the licence renewal and those who have concerns. You don't have to be a scientist or have a technical background. If you have relevant information to share, then this is your opportunity to share it.

Requests to intervene must be filed by October 5, 2026 with the Commission Registry either [online](#), by email at: interventions@cnsccsn.gc.ca or by fax or mail to the details below.

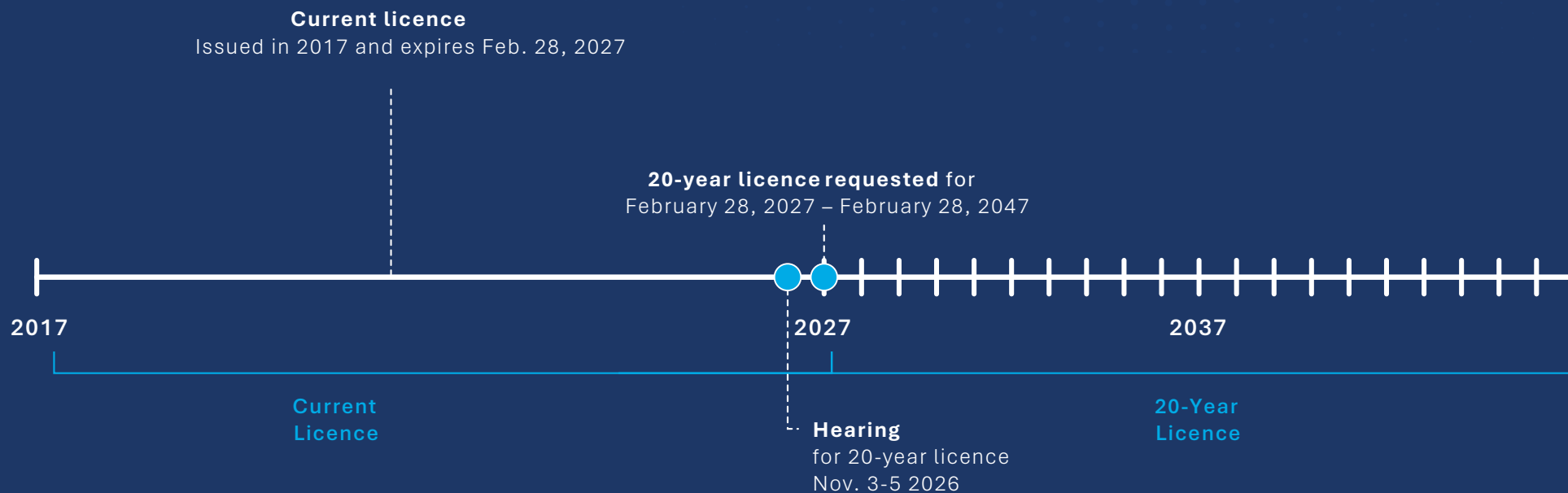
Canadian Nuclear Safety Commission
280 Slater St., P.O. Box 1046, Station B
Ottawa, ON
Canada K1P 5S9

Phone: 613.996.9063

Toll Free: 800.668.5284

Fax: 613.995.5086

PHCF Licence Timeline

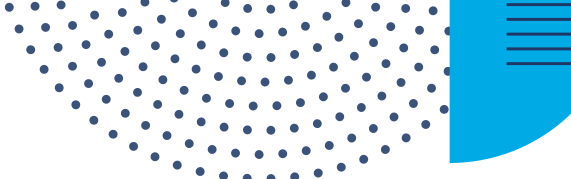


Throughout the 20-year licence period regulatory performance reporting will continue, in addition to the ongoing engagement by the Port Hope Conversion Facility in accordance with our Public Information Program.



What is different in this application?

▶ We are looking to increase the length of the licence term to 20 years.



What is the same in this application?

- Port Hope Conversion Facility (PHCF) will convert uranium trioxide (UO_3) into uranium dioxide (UO_2) for use in heavy water reactors and uranium hexafluoride (UF_6) for use in light water reactors
- All authorized activities will continue to be carried out in alignment with the objectives of PHCF's licensing basis
- There are no changes to management systems, training, radiation protection, safety, environmental, emergency and fire protection, waste management, security, safeguards, or packaging and transport program
- Reporting requirements remain the same
- Release limits and action levels remain the same



Why a 20-year Licence Renewal?

Longer-term licences are being granted to facilities with demonstrated safe operations and consistent regulatory compliance. A 20-year licence period is appropriate for the Port Hope Conversion Facility (PHCF) given its long record of safe operations and regulatory compliance.

Mature management programs are in place, that will protect the health and safety of workers, the public and the environment throughout the proposed 20-year licence term. Authorized activities will continue to be carried out in alignment with the objectives of the licensing basis.

The PHCF's consistent performance during the current licence period demonstrates our commitment to safety and the protection of people and the environment.

Further, regulatory performance reporting will continue, as well as ongoing public and Indigenous engagement through the Public Information and Disclosure Program.

Cameco's request for a 20-year licence reflects confidence in the strength and maturity of the CNSC's regulatory framework, which continually demonstrates rigorous and effective oversight of nuclear facilities across Canada.

What does a 20-year term look like?



A 20-year term is as equally regulated as a 10-year term



Programs are updated to meet new requirements and are submitted to CNSC



Ongoing reporting to Canadian Nuclear Safety Commission (CNSC) and other regulators



Incidents are investigated and reported to the CNSC as required



New regulatory requirements added to the Licence Conditions Handbook between Licence renewals



Significant incidents or safety concerns can be referred to the Commission and Licence may be suspended

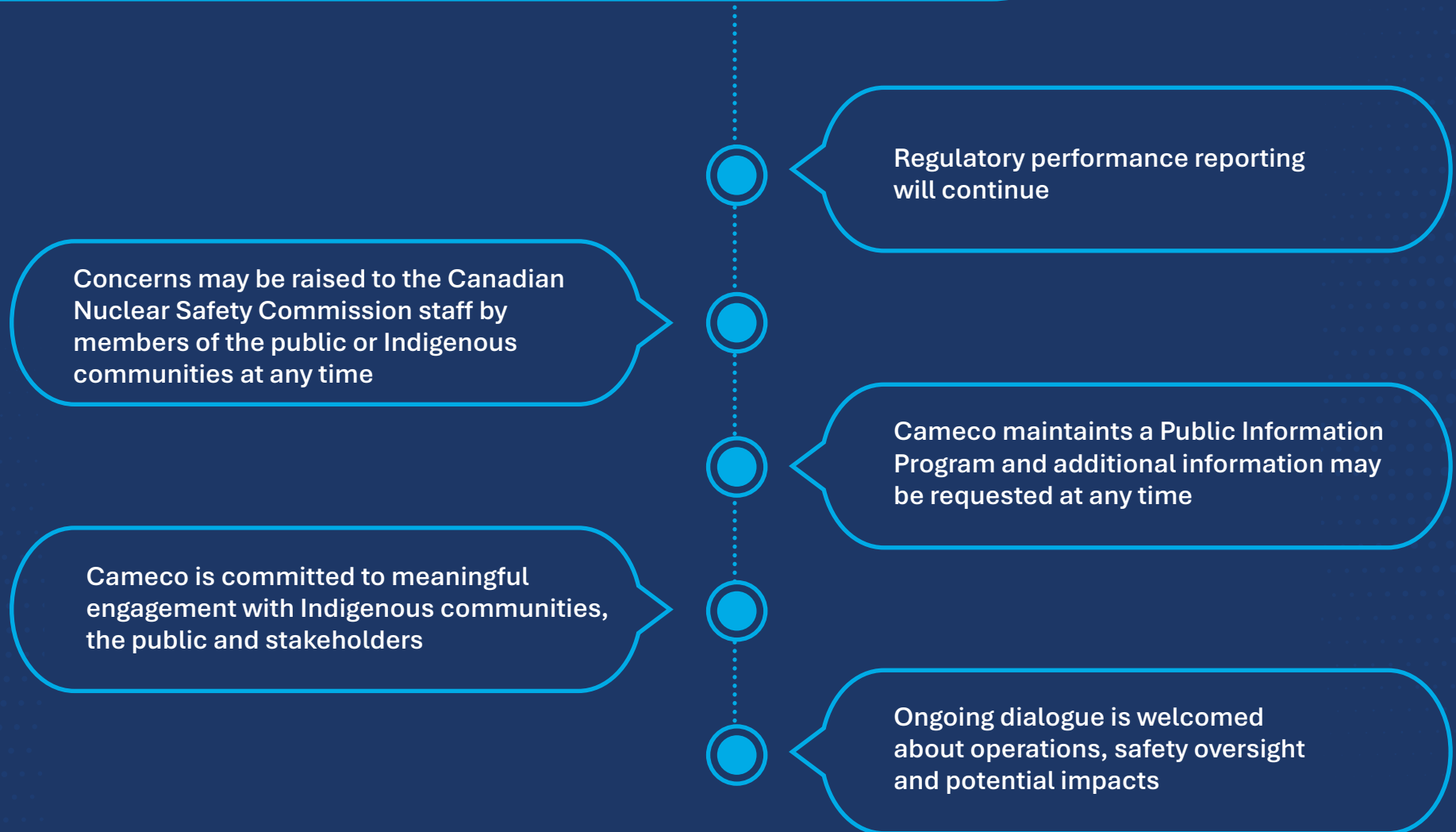


All supporting studies are reviewed against changes in the requirements, new scientific information, and recent operational data every five years (fire, environment, public dose, safety analysis, preliminary decommissioning) and submitted to CNSC



Regulatory performance reporting will continue

Continued Involvement in a 20-year Licence



Responsible and Safe Operations

Safeguarding the health and safety of our employees, members of the public and the environment is our top priority. The Canadian Nuclear Safety Commission (CNSC) evaluates a licensee's performance in 14 Safety and Control Areas (SCAs). Throughout the current licence period, Cameco's Port Hope Conversion Facility has consistently achieved the highest CNSC rating of Satisfactory in all of the 14 [SCAs](#).

91% of Port Hope residents surveyed in 2024 agree that Cameco does everything possible to protect people and the environment.

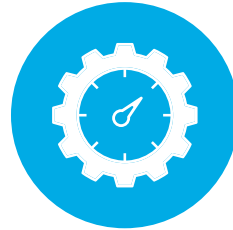
Safety and Control Areas



Management System



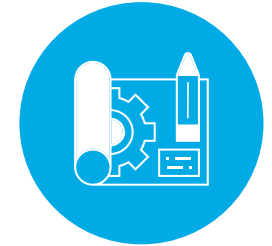
Human Performance Management



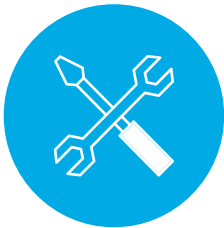
Operating Performance



Safety Analysis



Physical Design



Fitness for Service



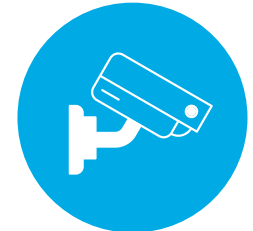
Radiation Protection



Emergency Management & Fire Protection



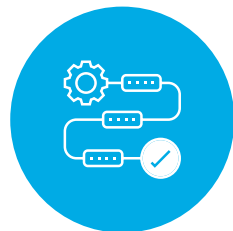
Waste Management



Security



Safeguards and Non-Proliferation



Packaging and Transport



Conventional Health & Safety



Environmental Protection

Our Record of Strong Safety Performance

Safety is our top priority.

We are guided everyday by our commitment to safeguarding the health and safety of our people, communities, and the environment.

Consistent with its vision, values and measures of success, Cameco emphasizes that the health and safety of workers and the public, protection of the environment, and quality of its processes are the highest corporate priorities during all stages of its activities.

Cameco's highest priorities are the health and safety of people and the protection of the environment. We pursue excellence in all that we do through promotion of a strong safety culture and our commitment to the following:

- Preventing injury, ill health and pollution.
- Fulfilling regulatory, contractual and corporate requirements as well as commitments to local communities (defined as compliance obligations).
- Keeping risks at levels as low as reasonably achievable, taking into account economic and societal factors (ALARA).
- Ensuring quality of processes, products and services.
- Continually improving our overall performance.

Port Hope Conversion Facility's (PHCF) programs not only systematically identify, document and manage risks, but also actively engage all workers and managers in building a strong safety culture. Cameco has well-established and mature management systems that lead to continuous improvement, and PHCF has a long history of safe operations.

[PHCF SAFETY REPORT](#)

[ANNUAL COMPLIANCE REPORT](#)



Protection of People

The protection of our workers is one of our top priorities, alongside the protection of the public and the environment. When it comes to our workforce, we put people first through:

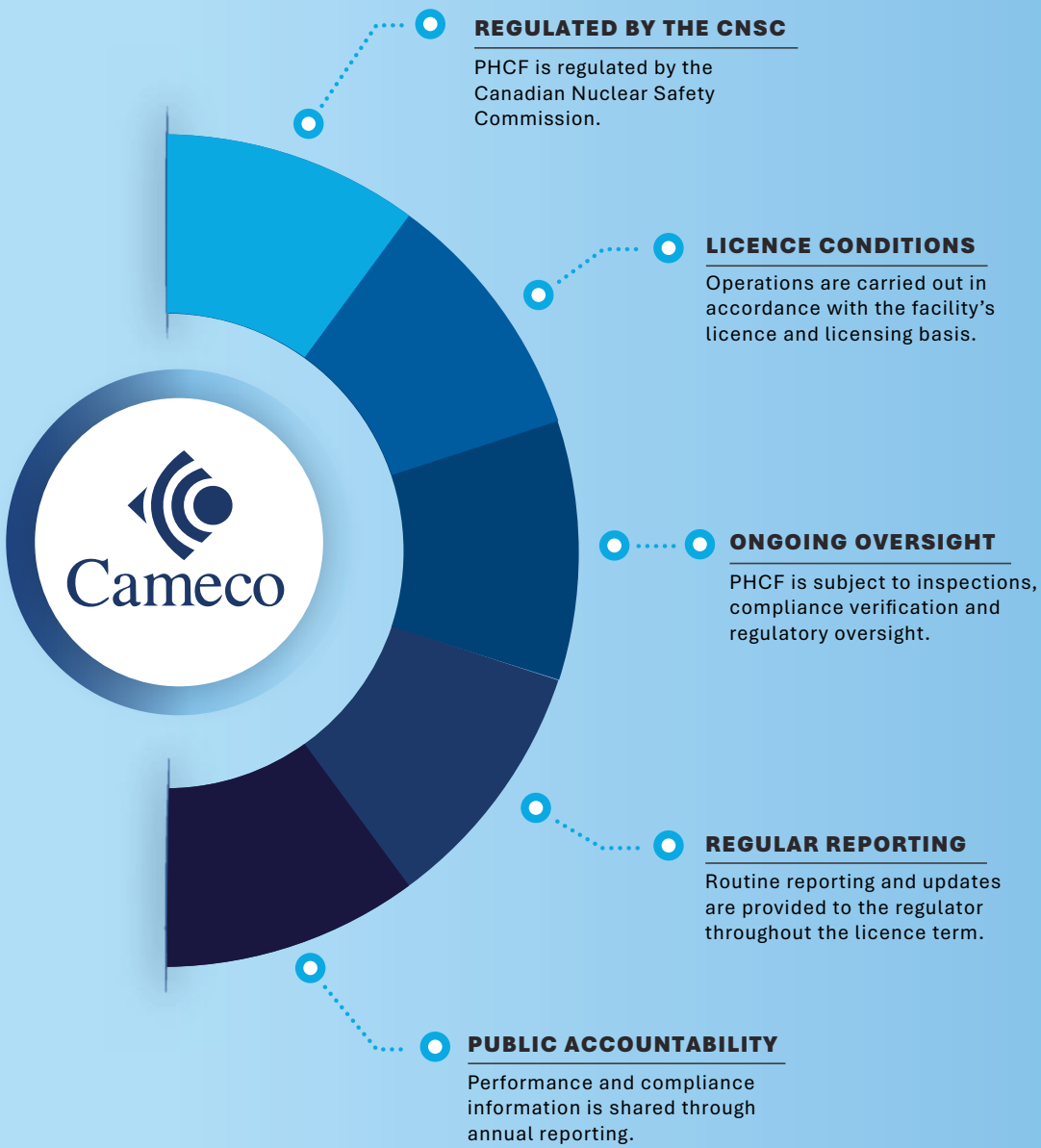
- Comprehensive safety programs that protect every worker
- A highly trained workforce empowered to lead on safety
- Employee-led safety committee that strengthens accountability
- A commitment to continuous improvement across all operations

2025 Training Hours



21,890

Port Hope
Conversion Facility



Regulations

In addition to the Canadian Nuclear Safety Commission, the Port Hope Conversion Facility (PHCF) is regulated by other federal, provincial and municipal authorities, including:

- Ontario Ministry of the Environment, Conservation and Parks (MECP)
- Environment and Climate Change Canada (ECCC)
- Employment and Social Development Canada (ESDC)
- Transport Canada (TC)

PHCF operates in compliance with applicable federal, provincial and municipal regulatory requirements. Additional information on performance and compliance is available in the Annual Compliance Report.

PHCF COMPLIANCE REPORT

Environmental Protection

We understand the value of our surroundings and how important the environment is to all of us. We take great care and pride in our environmental performance.

Port Hope Conversion Facility's (PHCF) Environmental Management program complies with ISO 14001, an internationally recognized standard for environmental management systems. Cameco has corporate certification to the ISO 14001 standard and all of Cameco's operations, including PHCF are in scope of this corporate certification.

This framework assists us in reaching our environmental protection goals and allows us to demonstrate our commitment to sound environmental performance.

The standard calls for annual independent audits and re-certification every three years.

The facility's Environmental Protection Program (EPP) includes the following components:

- sampling of water and air emissions;
- monitoring of ambient air at the perimeter of the facility; and
- additional sampling, including soil, storm water and groundwater monitoring

[PHCF COMPLIANCE REPORT](#)

[PHCF 2025 ENVIRONMENTAL RISK ASSESSMENT](#)

Water Emissions

Municipal water is used in production operations, supporting facilities and fire protection systems at the Port Hope Conversion Facility (PHCF).

Process effluent and other effluent streams are collected and treated on site. This includes but is not limited to: laundry water, laboratory effluent, groundwater, and equipment decontamination effluent.

Site grey water and black water, powerhouse effluent, and condensates are discharged to the municipal sewer system via a combined facility outlet. Daily composite samples are collected at the outlet to the municipal system.

Select storm sewer outlets are sampled twice per year. A summary of water quality results is provided in the annual compliance reporting.

PHCF releases a small amount of uranium to the sanitary sewer system. In 2025, the amount of uranium released by the PHCF was 0.60 kg

Closed Loop Cooling Systems



Independent closed loop cooling systems were commissioned at Port Hope Conversion Facility (PHCF) production facilities between 2022 and 2023, which has improved performance and further reduced the already minimal environmental risk.

The new systems fully service both the UF₆ and UO₂ plants. The old system is permanently inactive, and infrastructure has either been abandoned or decommissioned.

Old System:

- Lake water was pumped from the Port Hope harbour to cool various processes on site before being returned to the harbour
- Water was only used for cooling and was not mixed with any substances

New System:

- Circulates cool water to production facility process areas
- Uses treated municipal water as the water source, eliminating the need for a PHCF surface water intake
- Reduces maintenance challenges associated with system fouling from lake debris and zebra mussels
- Eliminates any potential for substances to get into the lake as there are no outlets to the harbour

Groundwater Monitoring Program

Port Hope Conversion Facility (PHCF) has an extensive groundwater monitoring program in place. Groundwater monitoring locations are sampled on various schedules: monthly, quarterly, annual or biennial.

Results of the groundwater monitoring program, among other items, are summarized and discussed in third-party annual groundwater and surface water review reports.

The PHCF operates a groundwater recovery and treatment system. Contaminated groundwater is recovered from a series of pumping wells for treatment on site via evaporation.

Cumulative Groundwater Pumping Rate

Parameter	Units	Value	2021	2022	2023	2024	2025
Pumping rate	m3/day	Average	59.8	53.3	49.8	49.7	51.0

Air Emissions

The Port Hope Conversion Facility (PHCF) has a comprehensive air monitoring program.

Samples from the site and the community are collected and analyzed for a variety of parameters. The facility's fluoride and uranium emissions have the greatest potential environmental impact and therefore are the primary focus of the ambient air monitoring program. Cameco monitors ambient uranium concentrations in the field using dustfall jars and high volume (hi-vol) air samplers.

The concentration of fluoride emissions from Cameco in the ambient environment are monitored in the field using dustfall, lime candle and vegetation sampling.

Dustfall monitoring is a measurement of deposition rate and is obtained by collecting particulate matter in a container, termed a dustfall jar. The particulate matter is collected over a one-month period and analyzed to determine the uranium deposition rate. There is no regulated standard for uranium content in dustfall. Cameco has established an internal administrative screening level of 10 mg U/m²/30 days that would be indicative of abnormal conditions.

The high volume air-sampling program monitors the concentration of uranium suspended in the air near the facility.

There are four monitoring station locations: Marsh Street at the fence line just south of the UF₆ plant, east of the Port Hope Waterworks, Hayward Street and Shuter Street.

Approximately 40 cubic feet per minute of air is passed through and collects on a filter over a 24-hour period. The regulatory criteria for uranium content in ambient air varies by period and particulate size. Cameco uses TSP (total suspended particulates) hi-vols at the PHCF. The Ambient Air Quality Criteria (AAQC) for U in TSP are 0.3 µg U TSP/m³ (24 hr) and 0.06 µg U in TSP/m³ (annual). These U in TSP criteria are compared against the maximum and average PHCF hi-vol U in TSP results, respectively.

The fluoride content of the collected dust provides information about fluoride in air near the facility. There is no regulated standard for fluoride content in dustfall. However, Cameco has established an internal administrative screening level of 20 mg F/m²/30 days that would be indicative of abnormal conditions.

Hi-Vols - Annual results from all four stations are well below the Ministry of the Environment, Conservation and Parks (MECP) annual average criteria.

Air Emissions

2021 – 2025 Annual Uranium-in-Air Concentration at Hi-Vol Stations ($\mu\text{g U}$ in TSP/m ³)					
Year	Result	Waterworks	Shuter Substation	Marsh Street	Hayward Street
2021	Average	0.001	0.001	0.003	0.002
	Maximum	0.025	0.011	0.071	0.011
2022	Average	0.001	0.001	0.003	0.002
	Maximum	0.017	0.036	0.031	0.015
2023	Average	0.003	0.003	0.062	0.003
	Maximum	0.381	0.409	0.132	0.066
2024	Average	0.001	0.001	0.005	0.003
	Maximum	0.012	0.083	0.238	0.030
2025	Average	0.002	0.001	0.006	0.003
	Maximum	0.067	0.019	0.056	0.030

Average <0.06 $\mu\text{g U}$ in TSP/m³ (annual) AAQC

Maximum <0.3 $\mu\text{g U}$ in TSP/m³ (24 hr) AAQC

Air Emissions

Dustfalls - Annual results from all 7 stations are well below Cameco's internal administrative screening level.

Four dustfall stations are located on the Port Hope Conversion Facility site and three are located in the community (Shuter Street, Mill Street, Marsh Street).

Comparison of Uranium in Dustfall Results (mg U/m ² /30 days)					
Period	2021	2022	2023	2024	2025
First Quarter	0.0	0.0	0.0	0.1	0.1
Second Quarter	0.0	0.1	0.1	0.0	0.2
Third Quarter	0.1	0.2	0.3	0.1	0.2
Fourth Quarter	0.1	0.2	0.3	0.1	0.1
Average	< 0.1	0.1	0.2	0.1	0.2
Cameco Internal Administrative Screening Level = 10 mg U/m ² /30 days					

Air Emissions

Lime Candles - Fluorination rate is an indirect measurement of the gaseous fluoride concentration in the ambient air. An established method for measuring the fluoride concentration in ambient air is to expose lime coated filter papers, commonly called lime candles, for a fixed period of time. The fluoride reacts with the lime and the analysis of the lime candles provides a time-averaged fluoride concentration. Lime candles consist of a 10 cm x 10 cm filter paper that is soaked with a saturated calcium oxide (CaO) solution housed in a louvered shelter sampling station with a hinged top.

Four lime candle stations are located on the Port Hope Conversion Facility site and three are located in the community (Shuter Street, Alexander/Smith Street, Marsh Street).

The lime candles are prepared, deployed, and collected on a specified frequency and are analyzed. The period is normally 30 days; however, shorter terms of weekly periods are also used. These shorter-term results are used to assess impact in a timelier manner, and effect process changes to ensure that the monthly results are in compliance. Monthly and weekly lime candles are operated throughout the year. The MECP Ambient Air Quality Criteria (AAQC) for fluoridation are 40 µg F/100 cm²/30 days from April 1 to October 31 and 80 µg F/100 cm²/30 days from November 1 to March 31. These criteria are based on the protection of foraging animals.

Comparison of Monthly Lime Candle Results by Quarter (µg F/100 cm²/30 days)

Period	2021	2022	2023	2024	2025
First Quarter	3	4	3	3	3
Second Quarter	5	4	3	5	5
Third Quarter	3	4	3	4	5
Fourth Quarter	3	2	4	3	3
Average	3	4	3	4	4

The desirable ambient air quality criteria for lime candles are to protect forage crops consumed by livestock. During the summer growing season April 1 to October 31, the criteria is 40 µg F/100 cm²/30 days, changing to 80 µg F/100 cm²/30 days in winter November 1 to March 31.

Radiation

Radiation is energy in the form of energy waves or energized particles. **Radiation is all around us and is part of our daily lives.** It is both naturally occurring and man-made and it exists in different forms. Radiation can be found in everything from rocks and soil, to your granite countertop, to the banana that you eat.

The uranium that we process on site has naturally occurring radiation. We have over 35 years of experience with safely handling and processing this type of material.

Radiation exposure for our workers and the public is stringently regulated by the Canadian Nuclear Safety Commission (CNSC). The acceptable levels of exposure are set by the CNSC and are based on decades of scientific studies by the International Commission on Radiological Protection. We have an extensive radiation protection program that is guided by the ALARA (as low as reasonably achievable) principle. This means that we do everything possible to minimize radiation exposures of our workers and the public.

For nuclear energy workers like those who work at Port Hope Conversion Facility (PHCF), the acceptable dose of radiation exposure is 50 millisieverts (mSv) per year, or no more than 100 mSv over a five-year period. The CNSC has set the acceptable dose of radiation exposure for a member of the public at 1 mSv.

In 2025, public dose from PHCF's air, water and direct gamma radiation emissions was 0.07 mSv, which is 2% of the regulatory dose limit for a member of the public (1 mSv/year). This is just a fraction of the acceptable limit and is so small that it's considered negligible.



0.07 mSv

PHCF's annual air and direct gamma radiation emissions



0.005 mSv

Dental x-ray (intraoral)



0.02 mSv

Typical cross-Canada flight



0.1 mSv

Typical chest x-ray

Emergency Preparedness

The Port Hope Conversion Facility (PHCF) is required to maintain an emergency preparedness plan and a fire protection program to ensure that licensed activities do not result in an unreasonable risk to the health and safety of persons and the environment.

Emergency Response Team

The PHCF Emergency Response Team (ERT) consists of approximately 65 employees, and includes employees trained in firefighting (NFPA 600), Hazmat (1072), and Confined Space Rescue (NFPA 1006). There are ERT personnel on each security and process crew, as well as on dayshift. There is a minimum of four ERT members, and one incident commander on site always when the facility is operating.



Key Facts:

- 80 hours individual training annually = 5,000 combined training hours each year
- Memorandum of Understanding (MOU) with the Municipality of Port Hope includes joint training exercises, mutual aid and drone technology
- Conduct annual joint training exercises with the Port Hope Police in search and rescue operations and drone management
- Cameco's drone services have supported Port Hope Fire prevention efforts, including the creation of 3D models of the downtown core, as well as capturing images and videos for thorough fire inspections and compliance checks
- In September 2023, Cameco's PHCF welcomed two new fire trucks to the site, Rescue 1 and Pumper 1, both equipped with the latest technology to modernize Cameco's on-site fire response and enhance support for its ERT

Vision in Motion

The Port Hope Conversion Facility (PHCF) is undertaking a major site cleanup and renewal of the facility, known as the Vision in Motion (VIM) Project. The project builds on work now under way through the Port Hope Area Initiative (PHAI) to address historic low-level waste in the Municipality of Port Hope. Significant progress has been made on the project in the current licence period and demonstrates Cameco's commitment to continued operation of the PHCF.

Benefits of VIM

Our VIM plans incorporate feedback from both community members and municipal leaders suggesting we shift PHCF's footprint, where possible, to provide greater public access to the harbour. VIM activities have achieved over a 20 percent reduction to Cameco's footprint.

Other key benefits include:

- Safe clean up and management of legacy waste
- Jobs for the duration of the project
- Long-term viability of the largest industrial employer in the Port Hope area
- Improved operational appearance
- Enhanced public access to waterfront
- Improved environmental performance

Waste Management

The Port Hope Conversion Facility (PHCF) has a focus on reducing the inventory of accumulated radioactive waste and disposing of all eligible materials at the Long-Term Waste Management Facility (LTWMF).

Ongoing waste is generated at the facility as a result of activities authorized by the licence. Solid wastes contaminated by uranium are reprocessed, recycled and re-used to the extent possible. Waste materials that cannot be reprocessed, recycled or re-used are safely stored on site until appropriate disposal options are available.



In the current licence period, PHCF reduced the inventory of drummed waste by 75% through several projects.

The Vision in Motion (VIM) project generated a significant amount of waste in the form of soil and building rubble. These wastes were shipped to the Long Term Waste Management Facility in Port Hope. The PHCF routinely shipped secondary products (fluoride product) to licensed facilities for uranium recovery.

In the current licence period, PHCF incorporated the requirements of the Canadian Standard Association (CSA) standard N292.3-14 *Management of Low- and Intermediate-Level Radioactive Waste*, CSA standard N292.0-14 *General Principles for the Management of Radioactive Waste and Irradiated Fuel* and REGDOC 2.11.1 *Waste Management, Volume I: Management of Radioactive Waste into its waste management program*.



Environmental Risk Assessment

The Port Hope Conversion Facility (PHCF) maintains an Environmental Risk Assessment (ERA) which is updated every five years, or if there is a significant change.

This document is a licence requirement and is conducted in accordance with the Canadian Standard Association (CSA) N288.6, environmental risk assessments at Class I nuclear facilities and Uranium mines and mills.

The purpose of an ERA is to assess the effects of the activity to the environment and identify measures that will effectively address potential adverse effects before they occur. There are two parts to an ERA – an assessment of the impact of the facility’s operations on human health and an assessment of its impact on the environment.

ERA Conclusions

Port Hope Conversion Facility (PHCF) has a sophisticated and thorough environmental monitoring program that will continue to cause no undue effects.

- Overall estimated emissions from PHCF are and will continue to be low
- Radioactive and non-radioactive environmental releases are not expected to significantly impact the aquatic or terrestrial environment
- For human health, there is no undue impacts expected to members of the public
- The ERA is updated every five years, or earlier in the event of a significant change, regardless of the duration of the operating licence



Commitment to Open Communications

Information Sharing

Cameco is committed to sharing timely and accurate information about our operations and activities with the community, stakeholders and Indigenous communities. We believe it is important that these groups are well informed through open communication and opportunities for face-to-face engagement, including at both company-led events like our annual community barbeque, and community-led events such as the Port Hope Fall Fair.

Government

Cameco is in regular communication with the Municipality of Port Hope which includes providing delegations to council which are public. Efforts are also made to keep our local MP and MPP informed of our operations and activities through meetings and facility tours when able.

Get in Touch

If you have questions or you would like a presentation for a group or organization, you can always reach out to us through social media or call us at [905.800.2020](tel:905.800.2020) or email us at cameco_ontario@cameco.com.

We are also active on social media.
Find us on Facebook, X or Instagram.



2024

Public Polling

Residents of Port Hope continue to show strong support for local Cameco operations. According to the 2024 public opinion survey, 91% of residents support Cameco's continued operations in Port Hope.

Cameco has maintained high levels of community support since surveying first began.

[VIEW THE SUMMARY REPORT](#)

The public opinion survey of 303 residents was conducted in July 2024 by a third-party consultant. Cameco conducts public opinion surveys to measure levels of awareness, support and trust in the community and to gauge the effectiveness of its communication and public engagement efforts.

Additional 2024 survey highlights include:

93%

of respondents describe themselves as knowledgeable about Cameco

84%

agree that Cameco has the environmental monitoring in place that protects the health of the Port Hope community

91%

Nine out of ten agree that Port Hope is a safe and healthy place to live, including 67% who "strongly agree."

Public Disclosure Protocol

PUBLIC DISCLOSURE PROTOCOL FOR ONTARIO OPERATIONS

Blind River Refinery, Cameco Fuel Manufacturing Port Hope & Port Hope Conversion Facility

To keep target audiences in communities with an interest in Cameco operations informed, Cameco commits to:

- Maintaining two-way communication channels to address the questions and concerns of people within our target audience in a timely and clear manner.
- Providing information, through regular community engagement, regarding significant operational changes or expansions that require an environmental assessment or require amendments to our facility licences.
- Providing information postings on our website, with timely efforts to post within 24 hours about unusual operational events at our facilities that may have off-site consequences or that would be of interest to our target audience.
- Making timely efforts to provide postings to our website within 24 hours, regarding information related to an environmental event that triggers a notification to the Canadian Nuclear Safety Commission under Section 29 of the General Nuclear Safety and Control Regulations.
- Providing postings to our website, with timely efforts to post within 24 hours, summaries of non-routine environmental incidents that are required to be reported to the Ontario Spills Action Centre.
- Quarterly posting to our website of compliance monitoring and operational performance reports.
- Building capacity among residents of Port Hope and Blind River to understand the environmental, health and safety aspects of uranium conversion and encouraging youth in communities to understand the opportunities for a safe, healthy, and rewarding career.
- Communicating technical aspects of uranium conversion in plain language.
- Regularly reviewing with community leaders and others how and what we communicate to ensure relevant information is reaching each site's target audience.
- Regularly conducting public opinion polling to help assess the effectiveness of the public information programs in Port Hope and Blind River.
- Posting this public disclosure protocol on our website.



Resources

[PHCF LICENCE RENEWAL APPLICATION](#)

[CURRENT CNSC COMMISSION MEMBERS](#)

[PUBLIC COMMISSION HEARINGS](#)

[PHCF LICENCE RENEWAL UPDATES](#)

[SAFETY REPORT](#)

[COMPLIANCE REPORTS](#)

[PUBLIC DISCLOSURE PROTOCOL](#)

[DISCLOSURES](#)

[2024 PUBLIC POLLING SUMMARY](#)



QUESTIONS?

We understand that the work we do here is complex. We're happy to help answer any questions you may have. Please reach out to us at [905.800.2020](tel:905.800.2020) or cameco_ontario@cameco.com.