



Energizing a clean-air world

Delegation to the Municipality of Port Hope **Dale Clark and Doug Jensen**

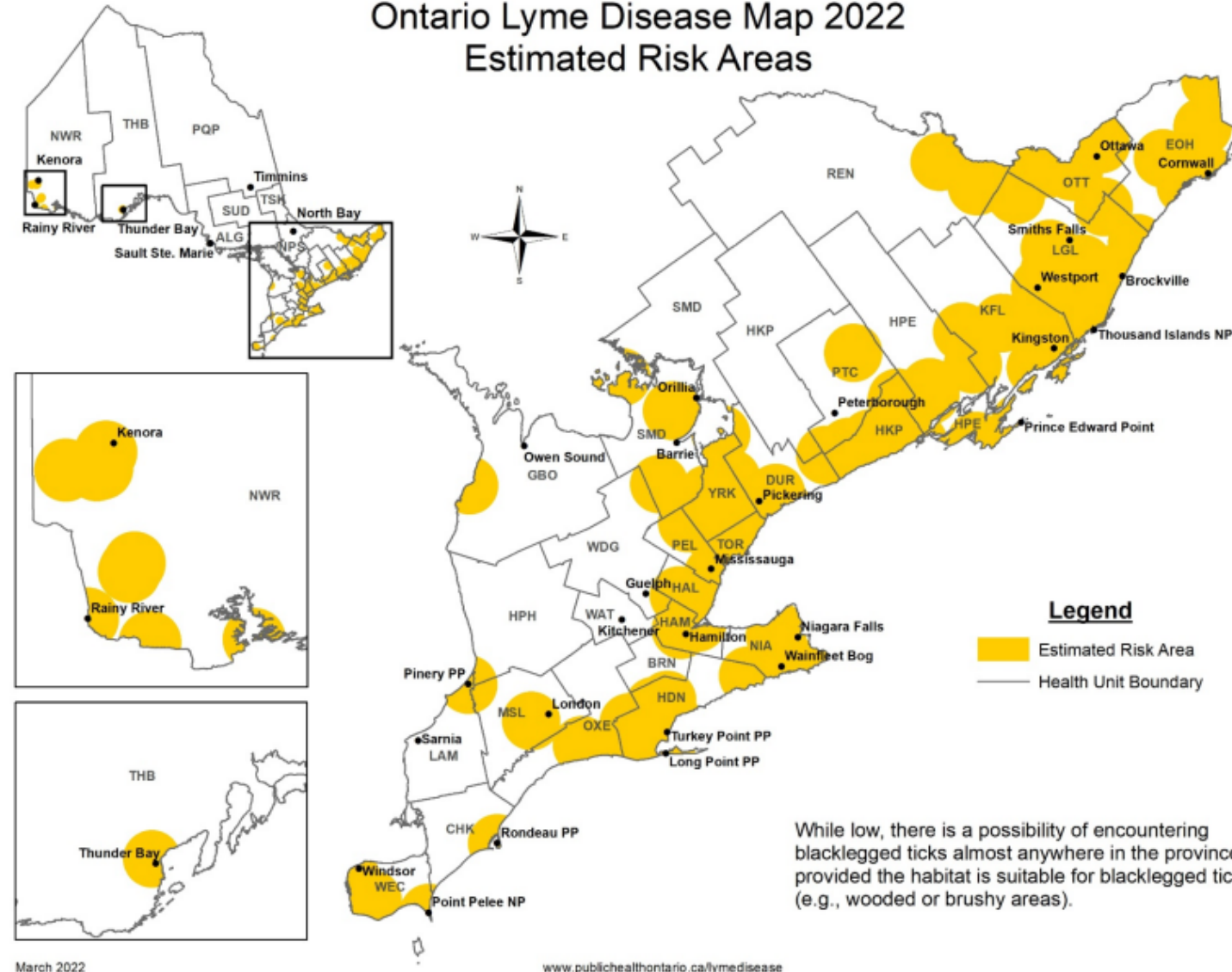
May 17, 2022

A Cameco Safety Moment

- Ticks are out in full force
- Check yourself and pets for ticks – can be very tiny at this time of year
 - Long pants – tucked into socks and high boots are a good idea
- Ticks carry Lyme Disease
- Updated Lyme Disease risk map is now available [Ontario Lyme Disease Map 2022: Estimated Risk Areas](https://publichealthontario.ca) (publichealthontario.ca)



Ontario Lyme Disease Map 2022
Estimated Risk Areas



March 2022

www.publichealthontario.ca/lymedisease

While low, there is a possibility of encountering blacklegged ticks almost anywhere in the province, provided the habitat is suitable for blacklegged ticks (e.g., wooded or brushy areas).

20-Year Licence Renewal

- Licence request
- Key dates
- What we're asking for and why
- What it looks like – protection of people and the environment
- Interventions

Our Licence - CFM

Recap



Cameco Fuel Manufacturing (CFM) currently holds a Class 1B Fuel Facility Licence (FFL) issued by the Canadian Nuclear Safety Commission (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.

The current licence FFL-3641.00/2023 is valid to February 28, 2023.

On October 4, 2021, Cameco Fuel Manufacturing submitted its application to the Canadian Nuclear Safety Commission to renew its Class 1B Fuel Facility Licence for a period of 20 years.

CFM Licence Renewal Key Dates



- Public Commission Hearing
 - November 23-24, 2022
 - Location TBC
- Intervention Deadline
 - October 7, 2022
- Participant Funding Deadline
 - May 6, 2022

Notice of Public Hearing

http://www.nuclearsafety.gc.ca/eng/the-commission/hearings/documents_browse/results.cfm?dt=23-Nov-2022&yr=2022

What is the same in the application?



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CFM will produce uranium pellets and bundles from UO_2

There are no new activities being requested

There are no changes to existing production lines/equipment

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

What is different in the application?



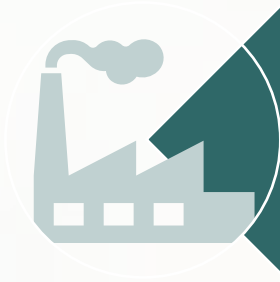
The length of the licence term to 20 years instead of 10



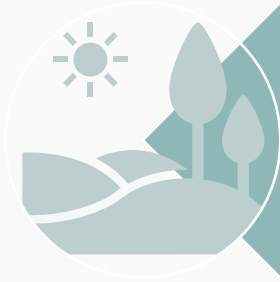
The amount of UO_2 which may be processed in a single year



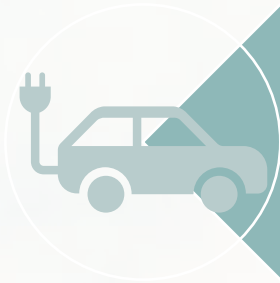
Why are we asking for changes?



As concerns about climate change continue to grow, demand for zero-emission sources of electricity, like nuclear, continue to increase.



CFM is here to play a continued role in energizing a clean air world – we are committed to the protection of people and the environment (this is our number one priority).



Nuclear is essential to decarbonizing the economy – we need an abundant supply of reliable, safe, emissions free electricity.

20-Year Licence Term



The length of
the licence
term to 20
years
instead of 10

Why 20 Years?



A 20-year licence is a commitment to the clean-air energy we need to help combat climate change – which benefits everyone



It also provides added workforce stability for our employees and certainty for our customers



What does a 20-year term look like?



Ongoing reporting to CNSC and other regulators



Ongoing inspections by CNSC and other regulators



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



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



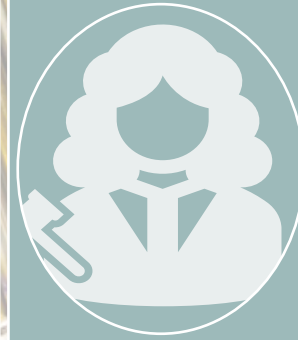
Programs are updated to meet new requirements and are submitted to CNSC



Incidents are investigated and reported to the CNSC as required



Significant incidents or safety concerns can be referred to the Commission and the licensee may have licence suspended



Annual updates to the Commission by CNSC staff

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

Indigenous communities, stakeholders and the public can participate in the annual update to the Commission

Concerns may be raised to CNSC staff by a member of the public at any time

Cameco is committed to meaningful engagement with Indigenous communities, members of the public and stakeholders

Request for Production Increase



The amount of UO_2 which may be processed in a single year

What are the Changes Requested?



Request #1 - Change from a monthly to an annual limit

- Currently, CFM's licence has a **monthly** production limit of 125 megagrams (1 megagram = 1 tonne) UO₂ as pellets.
- We are requesting a slightly revised limit to an **annual** amount of 1,650 tonnes of uranium as UO₂.

Creates consistency across our operations

Cameco's other Ontario operations have annual production limits whereas only CFM is monthly

What are the Changes Requested?



Request #2 - Change in the unit of measurement

- From **megagrams** (1 megagram = 1 tonne) to **tonnes**.

Creates consistency across our operations

Cameco's other Ontario licences (PHCF and BRR) use tonnes uranium as UO_3 , UO_2 and UF_6

What are the Changes Requested?



Request # 3 - Increase in the annual license quantity to match current equipment capacity

- Accounting for the change in unit of measurement, this represents **an increase of approximately 24%**

Allows us to be flexible as needed to meet business demands and a greater security of supply of nuclear fuel

Can increase short-term production should there be a disruption in operations for any reason at any time

Allows us to be able to take on new business opportunities when they arise

What does this look like?

No physical changes to the plant are required

- Existing equipment is capable of operating at this rate

To achieve the requested 1,650 tonnes of uranium as UO_2 CFM would move from operating five days a week (24/5) to seven days a week (24/7)

- We periodically operate on weekends currently

No immediate plans or demand for increased production but licence would then match the plant's capabilities

Safety and Environmental Performance



What does
this all mean
for people
and the
environment?



Safety



Environmental
Protection

Safety Analysis Report (SAR)

Reviewed key inputs and assumptions to determine if there was an impact on conclusions made in the SAR

- No change to equipment or operating parameters
- No change to emissions control systems
- No change to quantity of UO₂ material or finished product stored onsite
- Increase in number of operating days
- Increase in number of workers to support additional operating days
- No expected change in rates of discharges from the facility
- Due to increase in operating days – total annual loadings to air and water would slightly increase

Environmental Protection



Release Limits

- No changes to the release limits

Action Levels

- No changes required

Increased Uranium Loadings

- The number of operating days is the changing variable to achieve production at the equipment capability
- Operations at 7 days/week (excluding planned shutdowns) would increase operating days by ~25% annually
- Operating in the same manner for 25% more days would increase annual uranium loadings (all of the material released throughout the year added together) by 25%

Dose to the Public

- The dose to the public is expected to remain around 0.37 mSv/yr – well below the allowable limit of 1 mSv/yr

Environmental Impact

- The projected environmental emissions meet current action levels and release limits

Environmental Protection

What increased production would mean for air and liquid emissions



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- Current emissions are about 1 cup of uranium to air and water combined annually



- Possible emissions (highest case) are about 1 and 1/3 cups of uranium to air and water combined annually

Conclusions

Operating at current rates 7 days a week would result in an increase in annual loadings to current emissions release points

- This increase remains within current limits and action levels and all provincial and federal requirements

There is no change to the risk analysis for the site

There is no impact on the conclusions of the Environmental Risk Assessment

Current programs and policies will ensure the ongoing safety and health of people and the environment

Interventions

Participating in the Licence Renewal Process



CNSC's Public Commission Hearings provide an important opportunity for interested parties to share relevant information and/or expertise that may be useful to the Commission in making their decision.



Intervention process is owned by the CNSC.



It is for everyone. You don't have to be a scientist or have a technical background.



Written or written and oral presentation. Can be a couple of sentences or a couple of pages.

Interventions

- As our host community, it is important for the CNSC to hear from the Municipality of Port Hope
- Requests to intervene can be made through the CNSC website or by email to the Registry:
 - <http://www.nuclearsafety.gc.ca/eng/the-commission/intervention/>
 - interventions@cnscccsn.gc.ca

Communications

Keeping the Community Informed



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- Committed to open and transparent communications with Indigenous communities, members of the public and stakeholders
- Dedicated licensing area on our website: [20 Year Licence Renewal - Cameco Fuel Manufacturing - Business - Cameco Fuel Services](#)
- Tours (COVID restrictions)
- Social Media
- Energize Newsletter (to all Port Hope addresses)



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Questions?

