



Nuclear Energy Canada Inc.

# COMMUNITY NEWSLETTER

PROUDLY SUPPORTING OUR COMMUNITY

SUMMER 2020

1025 Lansdowne Avenue, Toronto, ON

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## ABOUT US

At BWXT NEC in Toronto, we make ceramic pellets from natural uranium powder. After pressing, baking, grinding and inspecting the pellets, we send them to our Peterborough facility where they are placed in fuel bundles for CANDU® power stations in Ontario.

Both our Peterborough and Toronto facilities are licensed by Canada's nuclear regulator, the Canadian Nuclear Safety Commission (CNSC).

Approximately 60 people work for BWXT NEC in Toronto in high-value manufacturing positions, engineering and operations support. This team produces the fuel to power one in four homes and businesses in Ontario with zero-emissions, affordable electricity!



## Dedicated Social Media Channels



BWXT Nuclear Energy Canada Inc. (BWXT NEC) is launching its own dedicated social media profiles to better connect with its communities in Toronto, Peterborough and Arnprior.

**We will post more information on our website ([www.nec.bwxt.com](http://www.nec.bwxt.com)) soon!**

## Facebook Live Event

As you may have read in our spring newsletter, we cancelled our annual summer community BBQ because of the COVID-19 pandemic. This was a hard decision for the BWXT NEC team as we look forward to this important community event each year. The annual community BBQ gives our team the opportunity to meet with our neighbours to answer questions and address concerns. We are able to have one-on-one conversations, review emissions from Annual Compliance Reports and discuss ways BWXT NEC can improve its public information program. We have chosen to host a virtual event in lieu of the BBQ. We present you with BWXT NEC's first ever Facebook Live:



Please join us for BWXT NEC's  
**Facebook Live**

**Monday, October 26th from 6:00 p.m. – 8:00 p.m.**

Join our Facebook Live to learn more about BWXT NEC's operations, licence renewal, safety, emissions, emergency preparedness and more.

BWXT NEC subject matter experts will be available to answer your questions and if you wish to submit questions in advance, please email us at [questions@bwxt.com](mailto:questions@bwxt.com).

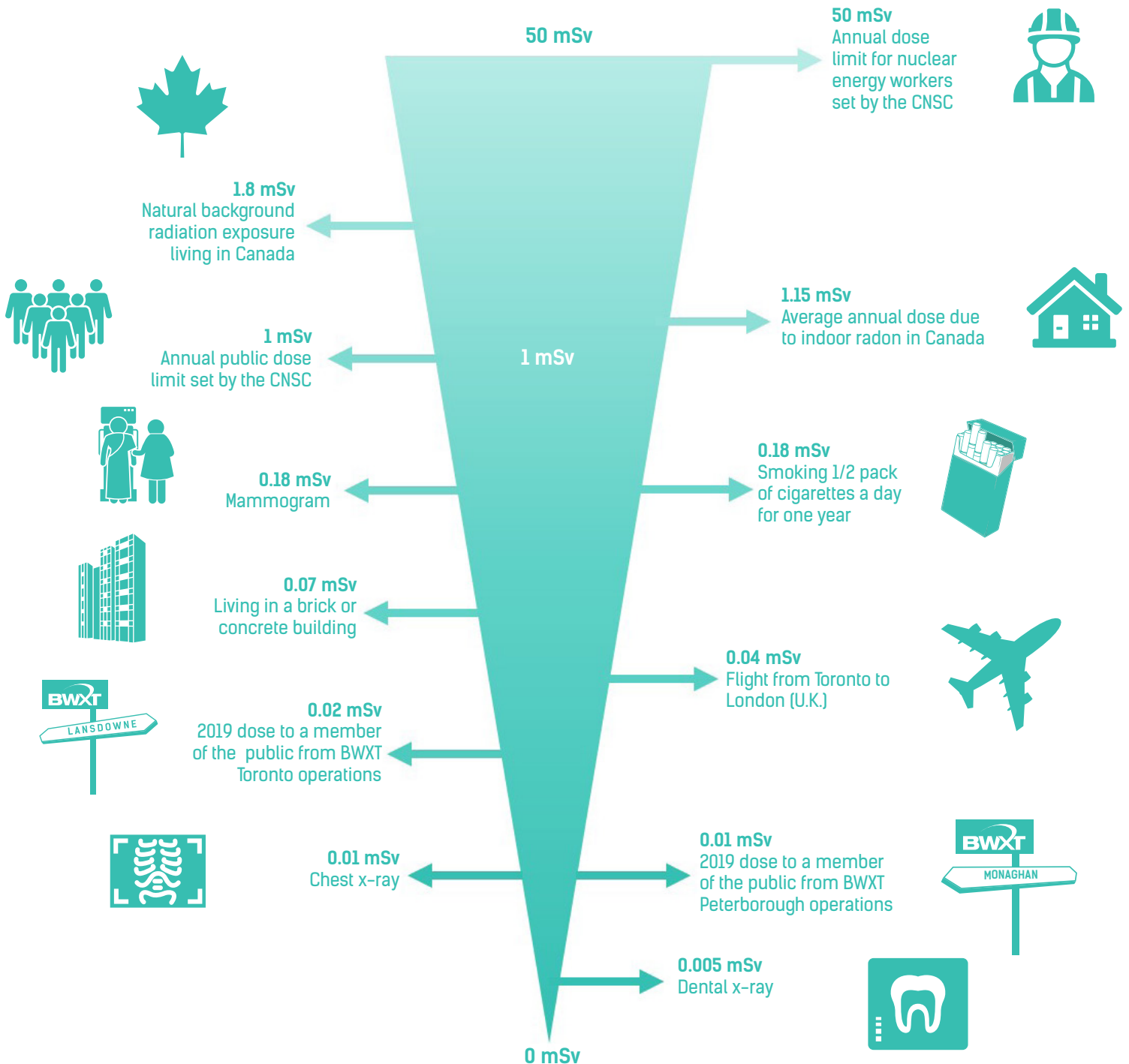
More information about this event will be posted on our public information website ([www.nec.bwxt.com](http://www.nec.bwxt.com)) soon!



# Radiation in Our Daily Lives

Radiation is energy in the form of waves or particles, and it doesn't just come from nuclear energy. Radiation is all around us and we're exposed to both natural and man-made sources of radiation daily. There are two types of radiation, ionizing (natural sources and man-made sources such as x-ray machines and nuclear power plants) and non-ionizing (e.g. microwaves, radio waves and television signals).

The CNSC regulates the nuclear industry to limit the radiation that employees and members of the public receive. BWXT NEC has a comprehensive radiation protection program and is guided by the principles of ALARA (as low as reasonably achievable). The small amount of our emissions does not pose a risk to the public, environment or our employees.



Radiation in our Daily Lives infographic information obtained from: <https://www.nuclearsafety.gc.ca/cnsconline/doses/eng/index.cfm>, <https://ans.org/pi/resources/dosechart/> and <http://nuclearsafety.gc.ca/eng/resources/radiation/introduction-to-radiation/radiation-doses.cfm> except for Peterborough and Toronto BWXT data which we have added. The additional information is provided by BWXT Nuclear Energy Canada and verified by the Canadian Nuclear Safety Commission and Health Canada respectively.

# Uranium Emissions

## What is uranium? Are uranium emissions from the Toronto facility safe?

Uranium is a naturally occurring, weakly radioactive element which is present at low levels in the environment and occurs naturally in soil and rocks, the water we drink and air we breathe. The amount of uranium BWXT emits is an insignificant source next to the levels that already exist naturally in the environment. BWXT NEC's Toronto location emits about 1% of the regulatory limit set for emissions. To put this into further context, the public in Canada is exposed to 1.8 millisievert (mSv) of natural background radiation and our Toronto facility emits 0.02 mSv.

See Radiation in Our Daily Lives infographic on page 2 for more information.



## Do you use yellow cake or enriched uranium at BWXT NEC?

At BWXT NEC in Toronto, we make ceramic pellets from natural uranium powder. We do not use yellow cake and we are not licensed to use or possess enriched uranium. Our Toronto facility receives natural uranium oxide powder from Cameco Corporation, in Port Hope. After pressing, baking, grinding to precision size and inspecting the pellets, we send them to our facility in Peterborough, where they are placed into fuel bundles for CANDU® power stations.

## How do you monitor uranium emissions from your Toronto facility?

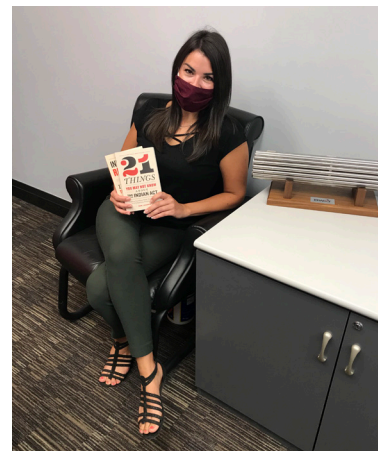
We perform continuous in-stack sampling and boundary air monitoring for uranium. The in-stack samples are analyzed daily and verified externally by an outside laboratory. The boundary air samples are high volume air samples drawn at five positions around the facility perimeter. Waste water is held in storage tanks in the facility, treated to remove uranium dioxide, tested and only released in batches once the test results confirm it meets release requirements. Water is used to clean protective clothing, floors, equipment and in other janitorial functions in the facility. We also conduct annual soil tests both onsite and in the surrounding community to ensure we meet or exceed regulatory environmental standards. Soil sampling is done as part of a defence-in-depth approach as one of the measures taken to verify that emissions continue to be low. This defence-in-depth includes minimization of sources of airborne dust within the facility, ventilation and multi-stage filtration to remove particulate, continuous exhaust air monitoring in the stack, high volume air sampling at the perimeter of the facility, and soil sampling.

In addition to BWXT NEC's monitoring programs, the CNSC also has its Independent Environmental Monitoring Program (IEMP) to verify that the public and the environment around licensed nuclear facilities are safe. The results are available on the CNSC's website and indicate that the public and environment around BWXT NEC's sites in Toronto and Peterborough are protected and there are no expected health impacts.

# Progressive Aboriginal Relations

BWXT Canadian operations joined the Canadian Council for Aboriginal Businesses (CCAB) in 2017 and is participating in their Progressive Aboriginal Relations (PAR) program. BWXT developed an internal PAR Working Group to meet to discuss ways to build and sustain positive relationships with Indigenous communities in areas where BWXT operates. The group meets every six weeks and is comprised of employees from a variety of departments and sites in Canada.

Our PAR Working Group recently completed Phase 2 of the PAR program and has been working on providing cultural awareness training resources for employees. The group is planning on purchasing a series of books written by Bob Joseph for each site in Canada to have available for the working group and for employees to read. The group is also exploring other methods and ways to share information related to the history of Indigenous Peoples with employees.



## Revised CNSC Notice on BWXT NEC's Licence Renewal

On July 29th, 2020, the Canadian Nuclear Safety Commission (CNSC) published a revised notice of continuation of public hearing on their website. The original notice from April 6th, 2020, noted a Commission direction for CNSC staff to conduct soil resampling for beryllium at properties near BWXT NEC's Peterborough facility, with a focus on Prince of Wales Public School. The Commission also requested CNSC staff complete an analysis to determine if there is any risk to the environment or public and to identify the source of the beryllium.

CNSC staff requested an extension of two months to complete the resampling and analyses due to the COVID-19 pandemic. The Commission granted CNSC staff an extension to complete both items by October 30th, 2020. Once the Commission receives this information from CNSC staff, they will then deliberate on BWXT NEC's licence renewal. Results will be made available to the public on the CNSC's website.

During the licence renewal hearing in Toronto and Peterborough in March, 2020, BWXT NEC committed to conducting its own beryllium soil sampling using an independent laboratory. The sampling was recently conducted and results are available on our website at [www.nec.bwxt.com](http://www.nec.bwxt.com).

The CNSC's revised notice can be found at [www.nuclearsafety.gc.ca/](http://www.nuclearsafety.gc.ca/) or on [www.nec.bwxt.com](http://www.nec.bwxt.com). If you have any questions, comments or concerns, please contact us at [questions@bwxt.com](mailto:questions@bwxt.com) or 1.855.696.9588.



## TELL US WHAT YOU THINK!

You're invited to take a short online survey at [www.bwxtsurvey.ca](http://www.bwxtsurvey.ca).

Fill out the survey for your chance to win a \$500.00 VISA gift card!

**Survey will run from October 15th to November 20th, 2020.**

If you have any questions, please contact us at [questions@bwxt.com](mailto:questions@bwxt.com) or 1.855.696.9588.

This survey is being conducted on behalf of BWXT NEC by Ipsos, an independent research firm.

## TALK TO US

We Want to Hear From You!

Phone: 855-696-9588  
Email: [questions@bwxt.com](mailto:questions@bwxt.com)  
Online: [nec.bwxt.com](http://nec.bwxt.com)

BWXT Nuclear Energy Canada Inc.  
1025 Lansdowne Avenue  
Toronto, ON M6H 4H2

BWXT Nuclear Energy Canada Inc.  
1160 Monaghan Road  
Peterborough, ON K9J 0A8

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