



Nuclear Energy Canada Inc.

# COMMUNITY NEWSLETTER

PROUDLY SUPPORTING OUR COMMUNITY

SPRING 2019

1025 Lansdowne Avenue, Toronto, ON

## INSIDE THIS ISSUE:

- 1 Progressive Aboriginal Relations
- 1 Western Technical Commercial School's FIRST Robotics Team
- 2 Annual Compliance Report
- 3 Our People
- 3 Independent Environmental Monitoring Results
- 4 Did You Know?
- 4 Talk To Us

## Progressive Aboriginal Relations

In 2017, BWXT in Canada joined the Canadian Council of Aboriginal Business (CCAB), committing to building and sustaining positive relationships with Indigenous communities in the areas in which BWXT operates in Canada.



We are participating in the CCAB's Progressive Aboriginal Relations (PAR) certification program and most recently completed Phase 1 of the program as evaluated by an independent third-party PAR verifier.



## Western Technical School's FIRST Robotics Team

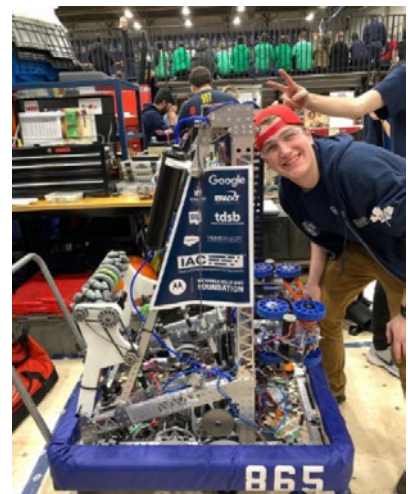
Since 2018, BWXT Nuclear Energy Canada Inc. (BWXT NEC) has been a financial supporter of the WARP7 FIRST Robotics Team 865 at Western Technical Commercial School in Toronto. Employees at BWXT NEC have been working with the team to build a relationship and mentor the students on the importance of safety.

Team 865 finished off as finalists at the event and they currently sit in 14th place in Ontario. Way to go Team 865!

BWXT also supports Western Technical Commercial School by providing a bursary award for one student from their graduating class who is continuing post-secondary education in the STEM (Science, Technology, Engineering and Math) field.

In April 2018, the team competed at the World Championships in Detroit and finished 6th place out of 3,500 teams from around the world.

Most recently, Team 865 competed at the Humber College District Event. The team demonstrated resilience and persistence throughout the event and persevered to have Astro (their robot for 2019) fully function on day two of the event.



Mitchell, pictured above with Astro, Team 865's 2019 robot.

## YOU'RE INVITED TO BWXT NEC'S FREE COMMUNITY BBQ!

June 11<sup>th</sup> from 5:00 - 7:00 p.m.

1025 Lansdowne Avenue

Enjoy hot dogs, hamburgers, freezies and more! Speak with BWXT NEC subject matter experts and learn about our operations, safety and community involvement.



## Annual Compliance Report Available

BWXT NEC's 2018 Annual Compliance Report was submitted to Canada's nuclear regulator, the Canadian Nuclear Safety Commission (CNSC), on March 29, 2019. The purpose of this report is to demonstrate that BWXT NEC has successfully met the requirements of the Nuclear Safety and Control Act and its Class 1B Nuclear Fuel Facility Operating Licence. BWXT NEC holds a 10-year licence, which expires December 31, 2020.

The report, which is reviewed by CNSC staff, provides the CNSC with information related to BWXT NEC's performance in 14 Safety and

Control Areas (SCAs). The 14 SCAs are management system, human performance management, operating performance, safety analysis, physical design, fitness for service, radiation protection, conventional health and safety, environmental protection, emergency management and fire protection, waste management, security, safeguards and non-proliferation, packaging and transport.

The report is available to members of the public on BWXT NEC's website at [nec.bwxt.com/safety](http://nec.bwxt.com/safety). For any questions about the Annual Compliance Report please contact [questions@bwxt.com](mailto:questions@bwxt.com) or 1.855.696.9588.

## 2018 Air Results

Air and water emissions are routinely measured for the presence of uranium. BWXT NEC performs both continuous in-stack sampling and boundary air monitoring. Boundary samples are drawn at five positions around the Toronto facility perimeter using high-volume air samplers. The filters run 24/7 and are collected from the monitors every week and sent to a lab for analysis. New filters are then inserted into the air samplers so the air along the boundary is being tested continually throughout the year. The results show the Toronto facility has virtually no emissions.

Toronto Air (Boundary)	2017	2018
Number of boundary samples taken	260	260
Number of samples > action level (0.08 µg/m³)	0	0
Average concentration (µg/m³)	0.000	0.000
Highest value recorded (µg/m³)	0.008	0.003

BWXT NEC samples its stacks daily for the presence of uranium.

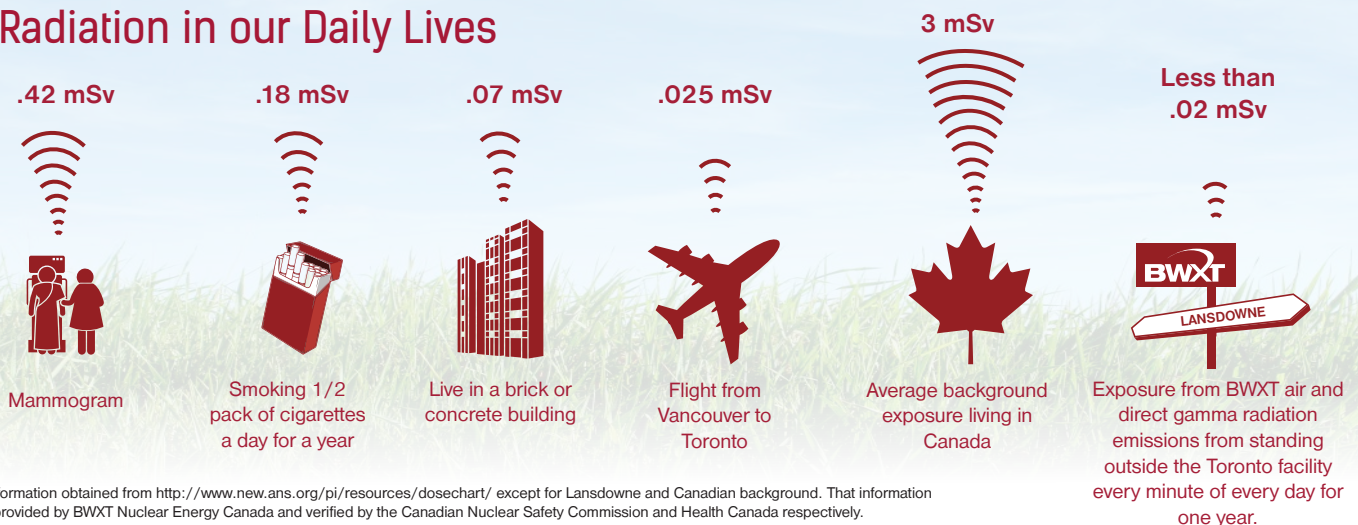
## 2018 Water Results

Water at BWXT NEC is used in the production process and to clean protective clothing, walls, floors and other janitorial functions. The water is first 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 regulatory requirements to be released.

In 2018, BWXT NEC emitted 0.94 kilograms of uranium to the sewers in the one-year period – which is the equivalent to less than two standard 500 mL water bottles. The release limit for uranium water emissions is 9,000 kg/year.

Toronto Water	2017	2018
Number of samples exceeding 6 ppm batch release action level	0	0
Average uranium concentration at point of release (ppm)	1.12	0.72
Highest uranium concentration at point of release (ppm)	2.56	2.95
Total discharge to sewer (kg uranium)	0.94	0.94

## Radiation in our Daily Lives



\*Information obtained from <http://www.new.ans.org/pi/resources/dosechart/> except for Lansdowne and Canadian background. That information is provided by BWXT Nuclear Energy Canada and verified by the Canadian Nuclear Safety Commission and Health Canada respectively.

## Our People

Meet Michael Rhatigan, Manufacturing Process Engineer, from our BWXT Toronto facility.

Michael has a Bachelor's Degree with Honours in Mechanical Engineering, a specialist Diploma in Lean Manufacturing and Quality Systems with Honors, and is Green Belt certified in Six Sigma.

Michael is originally from a small town in the midlands of Ireland called Lanesborough, which has a population of only 2,000 people!



## We're Hiring!

At BWXT NEC we have multiple job postings at our facilities in disciplines such as engineering, project management and quality.

BWXT NEC is a subsidiary of BWXT Canada Ltd. with more than 60 years of extensive experience and innovation in the supply of nuclear fuel and fuel channel components, services, equipment and parts for the CANDU® nuclear power industry. This includes designing and supplying highly reliable nuclear equipment to fuel, inspect and refurbish reactors.

BWXT NEC employs approximately 400 skilled employees at three locations in Ontario: Peterborough, Toronto and Arnprior. Working for BWXT means being part of a team focused on safety, technology, innovation and operational excellence. Current job openings are posted online at [bwxt.com/careers](http://bwxt.com/careers).

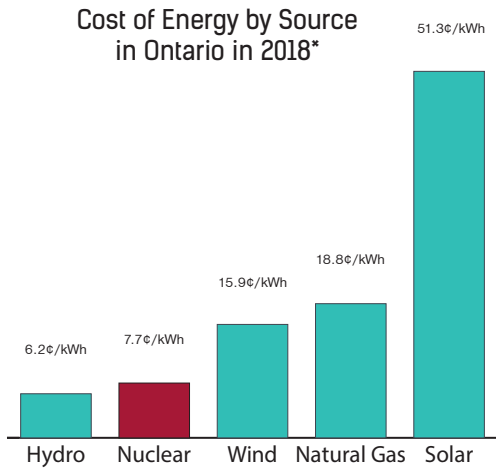
## CNSC Publishes 2018 Independent Environmental Monitoring Results

In addition to BWXT NEC having an environmental monitoring program to demonstrate that the public and the environment are protected from emissions related to our facility's nuclear activities, the Canadian Nuclear Safety Commission (CNSC) has also implemented its Independent Environmental Monitoring Program (IEMP) to verify that the public and the environment around licensed nuclear facilities are safe. The IEMP program is separate from, but complementary to, the CNSC's ongoing compliance verification program. The IEMP involves taking samples from public areas around the facilities, and measuring and analyzing the amount of radiological and hazardous substances in those samples. CNSC staff then collect the samples and send them to the CNSC's laboratory for testing and analysis.

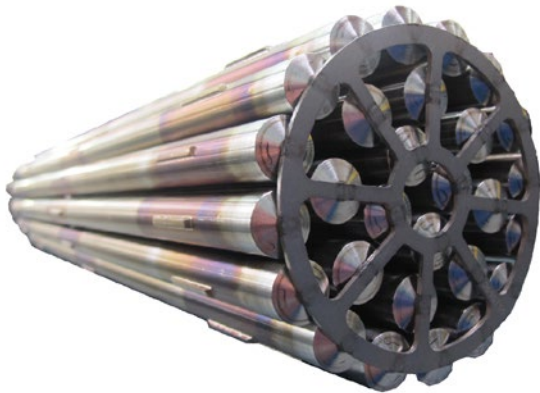
The IEMP results from 2014, 2016 and 2018 indicate that the public and the environment around the BWXT site are protected and there are no expected health impacts. These results are consistent with the results submitted by BWXT and the conclusions of available health studies for uranium processing facilities – demonstrating that the licensee's environmental protection program protects the health and safety of people and the environment. The CNSC is planning to conduct IEMP sampling in Peterborough and Toronto this spring/summer. For more information about IEMP or to see the full report, visit [www.nuclearsafety.gc.ca](http://www.nuclearsafety.gc.ca).

# Did You Know?

Nuclear energy remains the second most affordable electricity source in Ontario next to hydroelectric power.



The fuel produced at BWXT goes on to supply approximately 25% of Ontario’s electricity.



Nuclear medicine uses radiation to diagnose and determine the stages of various diseases, including cancer.

Over 1.5 million diagnostic scans are performed each year in Canada.



BWXT is working to create new innovative products to meet the demand for critical diagnostic imaging. Check out the BWXT website ([www.bwxt.com](http://www.bwxt.com)) and YouTube channel to learn more about what we’re doing to diagnose and treat complex conditions like cancer and heart disease.



\*<https://www.oeb.ca/sites/default/files/RPP-Supply-Cost-Report-20180501-20190430-correction.pdf>

## TALK TO US

We Want to Hear From You!

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