Nuclear Energy Canada Inc.

1025 Lansdowne Avenue
Toronto, Ontario Canada

MID-TERM LICENCE UPDATE

FFL-3621.00/2030

The information contained in this report provides a comprehensive summary of BWXT NEC's operational performance and major activities over the preceding five-year licensing period. It further outlines anticipated activities and objectives for the forthcoming five years and is intended to inform and facilitate public engagement in advance of the mid-term licence review for the Toronto facility (Licence No. FFL-3621.00/2030).

Revision	Description	Prepared by Date	Approved by Date
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Signing Authority Contact Information:

Vera Carter, EHS Manager & Nuclear Licensing Manager

1160 Monaghan Road

Peterborough, ON K9J 0A8

Phone number: 1(855) 696-9588

Email: questions@bwxt.com

Submitted To:

J. Amalraj, CNSC Project Officer on 2/24/2026

1 EXECUTIVE SUMMARY

BWXT Nuclear Energy Canada (BWXT NEC) is a leading supplier of nuclear fuel and services to the Canada Deuterium Uranium (CANDU®) industry. BWXT NEC produces nuclear fuel bundles used by the CANDU fleet to generate clean electricity that powers homes, business, and the Canadian economy. BWXT NEC operates in three plant locations: Arnprior, Toronto and Peterborough, Ontario. The Toronto facility operates under a ten-year Class IB Nuclear Fuel Facility Licence (FFL-3621.00/2030) issued by the Canadian Nuclear Safety Commission (CNSC) and effective January 1, 2021. This licence authorizes BWXT NEC to operate and modify its nuclear fuel facility to produce natural and depleted uranium dioxide (UO_2) pellets in Toronto at 1025 Lansdowne Ave.

This mid-term licence update is intended to provide a comprehensive overview of the Toronto facility's performance during the first half of the current ten-year licence period. It also provides an outline of the outlook and planned initiatives for the remainder of the licence term. Since the beginning of the current licence period, BWXT NEC Toronto has consistently demonstrated compliance with all regulatory requirements and has operated in a manner that protects workers, the public, and the environment.

Performance results confirm that the Toronto facility is being operated safely and responsibly. Operations have remained stable, with safety analysis and physical design programs supporting the reliability of structures, systems, and components. Worker protection has been assured through the effective application of radiation protection and conventional health and safety programs, supported by a strong nuclear safety culture that prioritizes prevention and continuous improvement, with performance consistently well within regulatory expectations. Environmental monitoring results continue to demonstrate that emissions from the facility remain well below regulatory limits.

Looking ahead, BWXT NEC is committed to continually strengthen its management system, further refine its programs, and enhance its practices across all safety and control areas. Planned initiatives include investments in equipment upgrades, continued emphasis on training and human performance, and proactive engagement with the community. In addition to maintaining a strong focus on health and safety, protecting employees, the public, and the environment, the Toronto facility also prioritizes environmental stewardship, continually working to conserve natural resources, prevent pollution, and minimize waste, reflecting BWXT NEC's commitment to responsible and sustainable operations. These efforts help to ensure the safe, reliable, and environmentally responsible operation of the Toronto facility for the duration of the current licence period and beyond.

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2 INTRODUCTION

The purpose of this mid-term licence update is to demonstrate that BWXT Nuclear Energy Canada (BWXT NEC) has successfully met the requirements of the *Nuclear Safety and Control Act (NSCA)*, the associated regulations, and the current Class IB Nuclear Fuel Facility Licence issued by the Canadian Nuclear Safety Commission (CNSC) on January 1, 2021, and expiring December 31, 2030. This report provides an overview of the facility's performance to date and outlines planned initiatives and priorities for the remainder of the licence term.

As part of the 2020 licence renewal, the Canadian Nuclear Safety Commission (CNSC) required BWXT NEC to provide a comprehensive mid-term update on its licensed activities at the Toronto and Peterborough facilities. This update supports ongoing regulatory oversight and public transparency during the 10-year licence term.

BWXT Nuclear Energy Canada Inc. (BWXT NEC) is a key supplier of nuclear fuel and related services for the CANDU® industry. BWXT NEC operates in three plant locations: Arnprior, Toronto and Peterborough, Ontario. Together, these sites support the safe and reliable production of nuclear fuel bundles and associated services, while maintaining compliance with Canadian regulatory requirements and international standards.

The facility is located in a residential area with some industrial and commercial buildings in west-central Toronto (Figure 1Figure 1: BWXT NEC Toronto). Currently, several high-rise apartment buildings are under construction immediately west of the facility and are set for occupancy early in 2026.

The facility consists of two separate buildings, which are identified as Building 7 and Building 9. Building 7 houses uranium dioxide pellet manufacturing on the first, second and third floors and office space on the fourth floor. Building 9 is a warehouse used for the storage of uranium dioxide as miscellaneous scrap awaiting reprocessing or shipment for disposal, compaction of waste, and decontamination activities.

Figure 1: BWXT NEC Toronto

2.1 Processes and Materials

The facility processes natural and depleted UO_2 powder into fuel pellets. Specifically, UO_2 powder is received in standard steel drums and the powder is compressed into "slugs" and granulated to a free-flowing powder. This powder is pressed into a pellet shape and the sintered pellets are ground to the required diameter, inspected and wrapped for shipment to the Peterborough facility. BWXT NEC also may periodically ship natural uranium pellets to the United States of America for use in Boiling Water (BWR) commercial power reactors, although no such shipments were made in the reporting period. See **Error! Reference source not found.** for the process.

Uranium Dioxide
Fuel Pellet Fabrication Flow

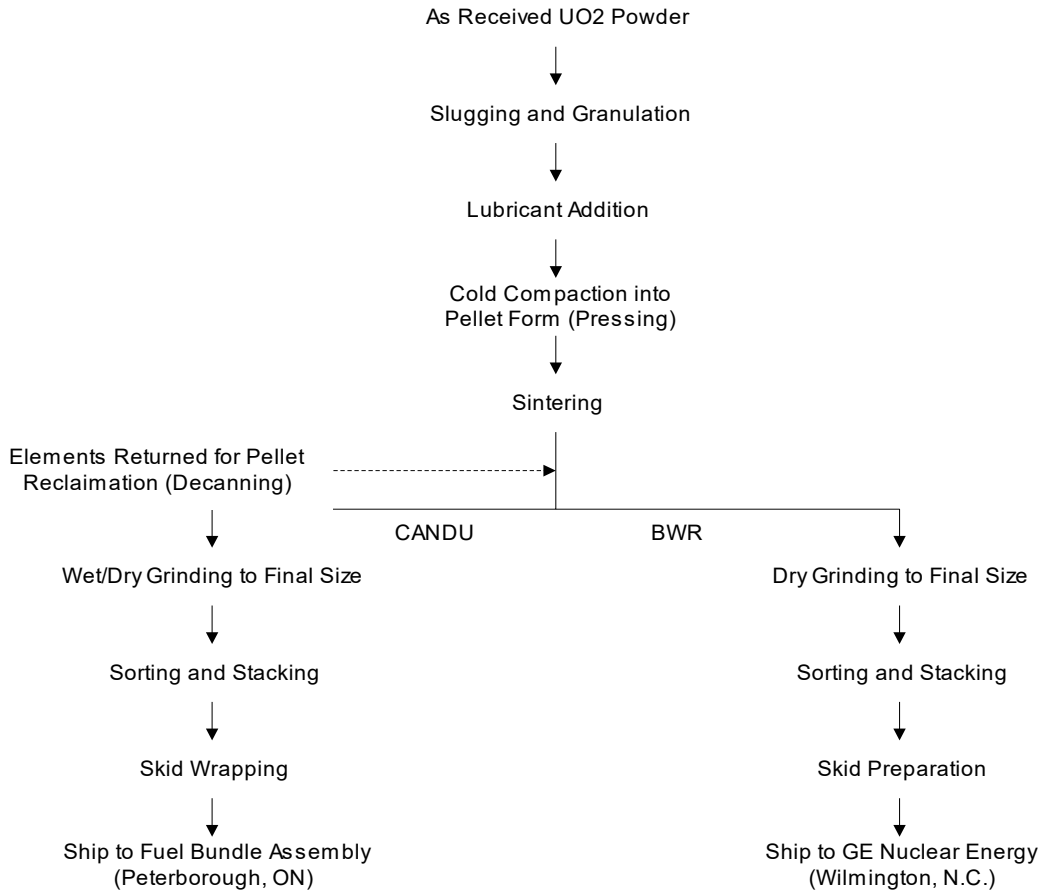

Figure 2: Uranium Fuel Pellet Manufacturing Process

BWXT NEC is federally regulated for health and safety. The federal health and safety legislation is the *Canada Labour Code Part II* and the *Canada Occupational Health and Safety Regulations*. The *Canada Labour Code* is enforced by Employment and Social Development Canada. The purpose of Part II of the *Canada Labour Code* is to prevent accidents and injury to health arising out of, linked with, or occurring in the course of employment. BWXT NEC is additionally regulated environmentally through municipal sewer use bylaws and provincially by the Ontario Ministry of the Environment, Conservation and Parks (MECP). The BWXT NEC facility is also regulated federally by Transport Canada.

BWXT NEC is committed to the establishment and continuous improvement of a healthy nuclear safety culture. Safety culture refers to the core values and behaviours resulting from a collective commitment by our Company's leaders and individuals to emphasize safety, quality, ethics, and security over competing goals to ensure protection of people and the environment. The Environment, Health and Safety (EHS) Mission Statement defines it as a top business priority to continuously improve our EHS systems to protect fellow employees, the environment, and our communities against known and potential environmental, health and safety hazards. The BWXT NEC management team reviews, prioritizes, and controls workplace hazards and ensures compliance with the pertinent regulatory requirements, applicable codes, and company policies.

The primary radiological hazard from uranium is the inhalation of UO_2 particles. A lesser radiological hazard exists in the form of low-level external gamma and beta radiation exposure to employees. BWXT NEC employs multiple layers of protection to mitigate these hazards, including engineered ventilation and containment systems, strict administrative controls, use of personal protective equipment and a comprehensive radiation protection program. Measurements are performed for various parameters to confirm hazards are mitigated. Measurements for airborne and surface traces of uranium are an indicator of process containment efficiency. Urine samples provided by employees are used to indicate if inhalation may have occurred. Whole body, skin, eye, and extremity dose measurements are conducted to demonstrate compliance with the dose limits specified in the *Radiation Protection Regulations* and the ALARA principle. Within the current licence period, all measurement results for employees were below regulatory limits and Action Levels.

Air and water emissions are routinely monitored as part of BWXT NEC's environmental protection program. Within the current licence period, all measured releases have remained very low, representing only a small fraction of regulatory limits and remained below Action Levels. The monitoring program ensures ongoing compliance with regulatory requirements and adherence to the ALARA principle.

Table 1 defines the acronyms used in this report.

Table 1: Definition of Acronyms

Acronym	Definition
ALARA	As Low As Reasonably Achievable
ATS	Action Tracking System
BWXT NEC	BWXT Nuclear Energy Canada Inc.
CANDU®	CANadian Deuterium Uranium
CCIB	Canadian Council for Indigenous Business
CCME	Canadian Council of Ministers of the Environment

Acronym	Definition
CLC	Community Liaison Committee
CNSC	Canadian Nuclear Safety Commission
CSA	Canadian Standards Association
CTS	Critical-to-Safety
DIV	Design Information Verification
dpm	Disintegrations per minute – unit of measure for radioactivity 1 dpm = 0.017 disintegrations per second
EASR	Environmental Activity and Sector Registry
EHS	Environment, Health and Safety
EMO	Emergency Management Organization
ERT	Emergency Response Team
FHA	Fire Hazards Analysis
HWIN	Hazardous Waste Information Network
ICL	Internal Control Limit
IAEA	International Atomic Energy Agency
IEMP	Independent Environmental Monitoring Program
MECP	Ministry of the Environment, Conservation and Parks
MP	Member of Parliament
MPP	Member of Provincial Parliament
mSv	millisievert – unit of measure for radiation dose 1 mSv = 0.001 Sv = 1,000 µSv
NEW	Nuclear Energy Worker
OPEX	Operating Experience
PAIR	Partnership Accreditation in Indigenous Relations
PDP	Preliminary Decommissioning Plan
PIT	Physical Inventory Taking
PIV	Physical Inventory Verification
POI	Point of impingement
ppm	Parts per million
RPRA	Resource Productivity and Recovery Authority
SCA	Safety and Control Area
SSC	Systems, structures and components

Acronym	Definition
STOP	Safety Training and Observation Program
TEDE	Total Effective Dose Equivalent
TLD	Thermoluminescent Dosimeter
UO_2	Uranium Dioxide
µSv	microSievert – unit of measure for radiation dose 1 µSv = 0.001 mSv = 0.000001 Sv
WSC	Workplace Safety Committee

3 SAFETY AND CONTROL AREAS

3.1 Operating Performance

The "Operating Performance" Safety and Control Area (SCA) covers an overall review of the licensed activities.

BWXT NEC has successfully implemented and maintained a program for safe operation of the facility that reflects the facility safety analysis. BWXT NEC has established essential documentation (as specified by the Business Management System) including procedures describing the program or system process and work instructions outlining the steps required to complete an individual or set of tasks. This includes the written work instructions for handling of radioactive materials by workers to ensure activities are conducted in a manner that is protective of workers, the public and the environment; as well as full and accurate records to show the acquisition of nuclear substances, inventory of all radioactive nuclear substances and the disposition of all nuclear substances acquired for use or processed by BWXT NEC.

BWXT NEC has demonstrated reliable and consistent operational performance. The Toronto facility has continued to operate in a manner that supports the company mission to continuously improve EHS systems to protect fellow employees, the environment, and communities against known and potential environmental, health and safety hazards. Operating performance is monitored with key performance indicators and program goals. Reporting of EHS-related concerns is encouraged through a rewards program. These are assigned and tracked to completion in the Gensuite® software system and is used as a measure of employee engagement. In accordance with EHS program requirements, internal audits and self-assessments are conducted routinely to assess conformance to internal and external requirements.

Throughout the licence period, BWXT NEC management team continued to review, prioritize, and control workplace hazards and ensure compliance with the pertinent regulatory requirements, applicable codes, and company policies. Facility operations continued routinely and safely. Fuel pellets were assembled into CANDU® reactor fuel bundles and were then safely shipped to customers. Plant personnel followed procedures satisfactorily, as reflected in internal and external audits, self-assessments, radiation surveys, contamination monitoring, air sampling measurements and other safety inspections. There were no Action Level exceedances during the licensing period to date. During the licensing period there were no significant modifications made to the facility.

The President of BWXT NEC is responsible for all activities within the company. The various functional groups, such as EHS, Quality and Communications report directly or indirectly to the President. Senior management accountability for the effectiveness of the management systems is defined. The Director, EHS & Regulatory Affairs is responsible for the overall EHS program. The

current company organization structure is shown in Figure 3 below, there have been a few changes in both personnel and structure during the licensing period.

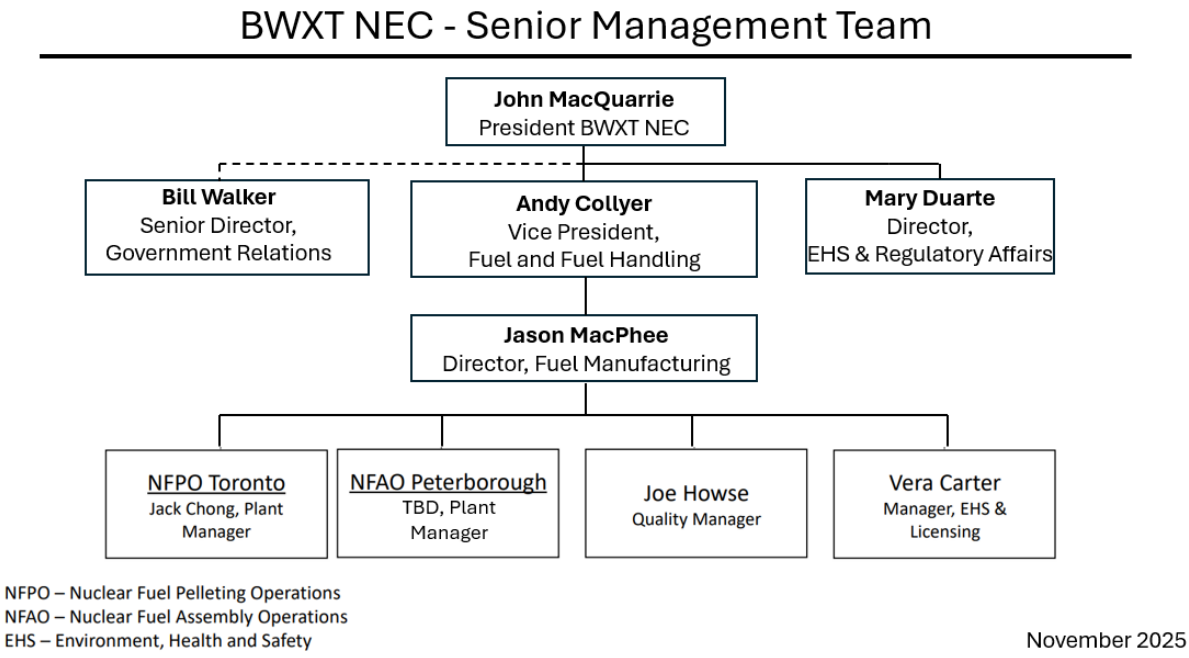

Figure 3: BWXT NEC Organization Structure

BWXT NEC Toronto maintains four EHS related committees that review activities including proposed changes to ensure safe plant operations. They are:

- Health and Safety Policy Committee – comprised of unionized workers and management to contribute to making the company as safe as possible by promoting health and safety awareness and making recommendations to workers and management regarding policies and procedures for safe working practices.
- Workplace Safety Committee (WSC) – comprised of unionized workers and management to prevent accidents and occupational illness by promoting health and safety awareness, and making recommendations to workers and management regarding safe work practices and monitoring health and safety issues until resolved.
- As Low As Reasonably Achievable (ALARA) Committee – comprised of unionized workers and management to continuously improve the radiation safety program and implement ALARA practices where practical to ensure that radiation doses are as low as reasonably achievable.
- Ergonomics Committee – comprised of unionized workers and management to develop, monitor, and administer the ergonomic procedure and recognize, reduce and where possible eliminate physical and cognitive ergonomic risk factors.

3.1.1 Possession and Processing

Throughout the current licensing period, all licensed possession and processing limits have been maintained within the approved bounds. Production data is proprietary and is provided on an annual basis to the CNSC.

Production shutdowns were scheduled throughout each year during the current licensing period, for engineering projects, equipment maintenance and continuous improvements. Annual shutdowns will continue to be planned each year to allow for essential maintenance and operational improvements throughout the remainder of the licensing term.

3.1.2 Regulatory Inspections

Excluding safeguards related inspections, which are described in section 3.13 of this report, the Toronto facility was subject to a range of regulatory inspections by multiple authorities. Key activities included:

- **2021:** 1 inspection by the City of Toronto (water effluent), 1 inspection by CNSC (management system and operational performance)
- **2022:** 4 inspections by CNSC (environmental protection, fitness for service, comprehensive inspection, hazardous materials and transport), 1 inspection by the City of Toronto (water effluent), 1 inspection by MECP (subject waste generation)
- **2023:** 4 inspections by CNSC (radiation protection, security, training, and waste management), 1 inspection by TSSA (elevating devices)
- **2024:** 2 inspections by CNSC (fire protection program, and public information and disclosure program), 1 inspection by TSSA (pressure vessels)
- **2025:** 3 inspections by CNSC (environmental protection, safeguards, and safety analysis and fitness for service), 1 inspection by Transport Canada, 1 inspection by the City of Toronto (water effluent)

All inspections confirmed compliance with regulatory requirements. All corrective actions related to non-compliances are submitted to the regulator and tracked to closure. The Toronto facility will continue to support transparent and effective oversight throughout the remainder of the licence period.

3.2 Management System

Throughout the current licence period, BWXT NEC has maintained a strong management system consistent with the requirements of the Nuclear Safety and Control Act, applicable regulations, and internal governance processes. The system provides the framework which establishes the processes and programs required to ensure that the organization achieves its safety objectives and continuously monitors its performance against these objectives, as well as fostering a healthy nuclear safety culture.

The management system is comprised of the following core program elements:

1. Organization and Responsibilities
2. Personnel Capability
3. Use of Experience
4. Work Planning Control

5. Work Processes Control
6. Verification
7. Problem Identification and Resolution
8. Corrective Action
9. Change Control
10. Document Control and Records
11. Audits
12. Management Self-Assessment
13. Management Program Review
14. Supply Chain

During the current licence term, no significant gaps were identified in the management system, and minor findings through audits or assessments, were logged in Gensuite® and tracked until closure. The system has proven effective in integrating health, safety, environment, and quality requirements into daily operations. BWXT NEC will continue to strengthen the management system by leveraging operating experience and enhancing integration across sites.

BWXT NEC is committed to maintaining a strong safety nuclear culture and clearly states the expected safety culture behavior. BWXT NEC's commitment to a strong nuclear safety culture is measured by tools such as employee concerns, incident investigations, audits and self-assessments, use of experience and corrective action program metrics that measure the effects of safety culture improvements. External agencies such as the CNSC audit BWXT NEC operations against Canadian Standards Association (CSA) standards, which include safety culture requirements (e.g., CSA N286, *Management system requirements for nuclear facilities*).

In the licensing period, there were no major program changes. Where required, revised documents were submitted to CNSC staff in accordance with the requirements in the Licence Conditions Handbook.

3.2.1 Licensed Activity Related Self-Assessments

The Self-Assessment program governs a proactive process for self-critical, candid, and objective evaluation of performance by a functional area measuring their process performance against internal procedures, expectations, and goals established from business plans or external benchmarking standards.

Throughout the current licensing period, BWXT NEC Toronto has continued to conduct licensed activity self assessments as part of its broader management system. These assessments are performed to identify opportunities for continual improvement and to confirm that work meets the requirements of the management system.

During the first half of our current licence period, BWXT NEC carried out a number of targeted internal reviews addressing areas such as radiological protection requirements, waste handling practices, and environmental monitoring. Each self-assessment confirmed that licensed activities were being conducted safely and in accordance with both regulatory standards and company expectations. Findings were minor in nature and were addressed through corrective actions assigned in Gensuite® and tracked until closure.

Looking ahead, BWXT NEC will continue to integrate self-assessments into its routine oversight process, with a focus on verifying the effectiveness of safety controls, identifying opportunities for improvement, and reinforcing the organization's nuclear safety culture. Future self-assessment will also take into account evolving regulatory guidance and lessons learned from CNSC inspections, ensuring that BWXT NEC continues to meet requirements and aligns with the best practices of the nuclear industry.

3.2.2 Licensed Activity Internal Audits

Internal auditing is an independent, objective activity designed to add value and continuously improve programs. During the first half of the current licence period, BWXT NEC Toronto has maintained a structured program of internal audits to verify compliance with the Nuclear Safety and Control Act, associated regulations, CNSC licence conditions, and internal management system requirements. These audits are conducted according to a planned annual schedule and are designed to assess the effectiveness of key programs such as radiation protection, environmental monitoring, waste management, conventional health and safety, training, and emergency preparedness.

Results from internal audits confirmed that licensed activities are being carried out safety and in accordance with both regulatory and company requirements. Non-conformances or opportunities for improvement identified through the audits were logged and tracked to closure in the Gensuite® program. As part of the audit process, previous audit findings and self-assessment results are also reviewed to ensure that all corrective actions have been closed and that improvements are effectively implemented. In 2024, BWXT NEC also enhanced its audit process by introducing a requirement that opportunities for improvement identified in subsequent audits, are elevated to non-conformance status to ensure the opportunities for improvement are properly assessed and integrated into applicable programs.

Looking forward BWXT NEC will continue to use the internal audit program as a key tool for oversight and continuous improvement. Future audits will place increased emphasis on lessons learned and integration of emerging regulatory guidance, helping to ensure management system remains strong and effective for the remainder of the licence term and beyond.

3.2.3 Management Reviews

Management reviews for EHS program elements are conducted annually before the end of April to review the previous calendar year activities. Throughout the licence period, BWXT NEC has continued to conduct annual EHS management reviews. These reviews provide senior leadership with an overall assessment of the effectiveness of the management system and licensed activities, ensuring that programs remain aligned with regulatory requirements, company expectations, and the organizations commitment to health and safety.

The reviews conducted to date have confirmed that the management system is functioning effectively, with licensed activities being conducted safely and in compliance with all applicable requirements. Action items that are identified during reviews are logged in Gensuite® and get tracked to closure, supporting continuous improvement and accountability.

In 2024, the scope of the management review was expanded to include BWXT NEC's Arnprior facility. This improvement has strengthened oversight by ensuring that Operating Experience (OPEX), performance data, and corrective actions are considered across all NEC operations.

Looking forward, BWXT NEC will continue to conduct annual management reviews as a key part of its governance and oversight process. These reviews will remain focused on evaluating system

effectiveness, driving continuous improvement, and maintaining alignment with regulatory requirements.

3.3 Human Performance Management

The "Human Performance Management" Safety and Control Area covers activities that enable effective human performance, through the development and implementation of processes that ensure that BWXT NEC staff members are sufficient in numbers in all relevant job areas, and have the necessary knowledge, skills, and tools in place to safely carry out their duties.

Since the beginning of the current licence term, BWXT NEC Toronto has continued to maintain a strong Human Performance Management program that supports safe, consistent, and high-quality operations. Several improvements have been implemented during this period, some of which include:

- Implementation of a Foreign Material Awareness training course.
- A review and update of training requirements for the members of the Emergency Organization.
- Role-specific SAT courses implemented for Transportation of Dangerous Goods.

BWXT NEC has also continued to promote awareness of human factors principles and the importance of communication, procedural adherence, and visible leadership engagement to promote accountability and reinforce safety expectations. Regular performance reviews (Safety Training Observation (STOP) Audits, inspections, etc.) and consistent management presence in the workplace have further supported strong human performance and accountability. The Toronto site has consistently demonstrated strong human performance practices and has met all regulatory expectations during this licence term. The Toronto facility is staffed with a sufficient number of qualified workers as well as the minimum number of responsible people to carry on the licensed activities safely and in accordance with the *Nuclear Safety and Control Act* and associated regulations. EHS and other staff are available after business hours as needed through cell phones

Looking ahead to the second half of the licence term, BWXT NEC is committed to building on this foundation by implementing program improvements such as refining and standardizing supervisor training, to keep consistency across all sites. Additional improvements will include continued review of job planning processes, continued use of performance metrics to identify trends in human error, and the ongoing reinforcement of a nuclear safety culture that promotes open communication and proactive identification of issues or problems. These initiatives will ensure that BWXT NEC continues to sustain and improve its strong human performance standards through the remainder of the licence period.

3.4 Safety Analysis

The "Safety Analysis" Safety and Control Area covers the maintenance of the safety analysis which supports the overall safety case for the facility. The safety analysis is a systematic evaluation of the potential hazards associated with the conduct of an activity or facility and considers the effectiveness of preventative measures and strategies in reducing the effects of such hazards. The safety analyses utilize a combination of What-if Analysis, Hazards and Operability and Quantitative Risk Analysis and documents a systematic evaluation of hazards associated with the licensed facility.

BWXT NEC has consistently maintained compliance with the Nuclear Safety and Control Act and associated regulations, as evidenced by the comprehensive Annual Compliance Reports submitted to the CNSC. Modifications to the facility are made in accordance with the business-wide Change

Control program, which requires review of EHS parameters for new or modified facilities, processes, and new or relocated machinery, apparatus and equipment. Under this process, a proposed modification is screened for potential impact on the facility safety analysis. Where screening identifies a potential impact, a more detailed review of the proposed modification is conducted to identify if the change impacts a safety system, or the basis of the safety assessment (e.g., materials, quantities, locations, etc.). Third-party reviews and regulatory submissions are conducted as required. In this way, impacts on the safety analysis are identified and the safety analysis is validated and updated, where necessary.

During the licensing period, the five-year update of the safety analysis report was made in 2024. The report concludes that the engineered and administrative controls provide protection over a broad range of operating conditions that both restricts the likelihood of events and adequately protects the public and environment. The updated safety analysis report considered the storage location for completed skids, this area was modified and is currently in process of being fire separated from adjacent areas to reduce the inventory of material available to fire originating in adjacent areas. Looking ahead, the safety analysis report is scheduled for a routine five-year update in 2029.

3.5 Physical Design

The "Physical Design″ Safety and Control Area relates to activities that impact on the ability of Systems, Structures and Components (SSC) to meet and maintain their design basis, given new information arising over time and taking into account changes in the external environment.

Changes made to the physical facility, equipment, processes, procedures, or practices that could adversely affect product quality, employee health and safety, the environment, or the public as a result of the operation are assessed through the Change Control program. Changes to the design basis are identified and assessed by key stakeholders through this program, including third-party reviews as required. Adequate mitigations are applied including modification of the proposed change, up to rejection of the proposed change.

During the licensing period, there were no modifications to the physical facility that altered the design basis and no significant facility changes. Looking ahead, design improvements are planned to support ongoing equipment reliability and facility safety. These include the replacement of the metal shells for Furnaces 5 and 6 and updates to their associated safety interlocks. In addition, post-indicating valves are planned for installation on the sprinkler system, this will allow for safe and timely shutdown of the sprinkler system in the event it is used.

3.6 Fitness for Service

The "Fitness for Service″ Safety and Control Area covers activities that impact on the physical condition of SSCs to ensure that they remain effective over time. This includes programs that ensure all equipment is available to perform its intended function when called upon to do so.

BWXT NEC maintains a comprehensive Fitness for Service program to ensure that all systems, structures, and components (SSCs) important to safety remain capable of performing their intended functions throughout their operational life. Toronto has a Critical to Safety (CTS) program in place. The program includes a clear identification and control of items that are considered CTS. CTS items are those hardware items that directly ensure the safety of workers, protection of the environment, or regulatory compliance in the following three categories:

- Equipment and infrastructure identified as Safeguard Measures in the Facility Safety Analysis Reports;
- Respiratory personal protective equipment; and

- Instrumentation generating data to demonstrate Regulatory Compliance.

The facility is using an asset management and preventative maintenance software system. Maintenance Connection®, a web-based maintenance management software for work order and asset management. Maintenance Connection assists BWXT NEC in efficiently managing preventative maintenance tasks as well as to control and identify maintenance on CTS and Critical-to-Quality assets and components. Preventative maintenance tasks on CTS equipment are designated in this system as described in the business wide *Enterprise Asset Management Program Procedure*.

All CTS tasks issued from 2021-2025 period are closed. In the first half of the licensing period, 99% of CTS tasks issued were completed within 14 days of the target completion date.

Preventative maintenance is considered during the assessment of changes as part of the business-wide Change Control program. Additionally, in the event of a near miss, incident, injury, inspection or suggestion, the preventative maintenance program for related equipment is reviewed as applicable. Throughout the first half of the licensing period, a few of the improvements that were implemented include:

- New tasks for inspecting and cleaning the zinc dispensing tank as well as inspecting the Mist Eliminator filters and cleaning the water level sensors to prevent zinc buildup.
- Vibration analysis added to the preventative maintenance program on exhaust systems.
- Waste compactor maintenance was updated to include a visual check on compactor oil levels and seals with part numbers to replace if necessary.

The preventative maintenance program is periodically assessed through self-assessments and internal audits. There have been no issues identified during the licence term that would indicate any significant degradation in fitness for service or that would challenge the safe operation of the facility.

Looking ahead to the second half of the licence term, BWXT NEC Toronto will continue to maintain and monitor its Fitness for Service Program to ensure all systems, structures, and components important to safety remain in reliable condition. BWXT NEC remains committed to continuous improvement through proactive maintenance planning, review of inspection results, and identification of opportunities to enhance equipment reliability and program effectiveness.

3.7 Radiation Protection

The "Radiation Protection" Safety and Control Area covers the implementation of the Radiation Protection Program, in accordance with the *Radiation Protection Regulations*. BWXT NEC has a well-established and effectively implemented Radiation Protection Program, which includes a commitment to ALARA and continuous improvement. The program addresses the radiation hazards associated with UO_2. This program ensures that surface/airborne contamination and radiation doses to employees and the public are monitored and controlled. The Director, EHS & Regulatory Affairs, has oversight of BWXT NEC's Radiation Protection Program.

The Radiation Protection Program in Toronto continues to be implemented effectively and has demonstrated sustained control of worker and public doses well below regulatory limits. Monitoring is achieved using thermoluminescent dosimeters (TLDs) to assess whole-body, skin, extremity, and eye doses, as well as routine urinalysis sampling conducted to evaluate potential internal exposures to workers. Results are provided by an external dosimetry service provider and are reviewed by EHS personnel, with performance oversight by the ALARA Committee to identify dose reduction opportunities and verify the continued effectiveness of the program controls.

Protective measures are incorporated into work planning and execution through the application of the hierarchy of controls, including engineered barriers, contamination control practices, and ventilation systems; administrative controls such as Radiation Safety Instructions, training, and procedural requirements; and personal protective equipment, including respiratory protection where required. Adherence to the principles of time, distance, and shielding is maintained throughout all radiological operations. These measures ensure that doses remain ALARA and confirm the continued effectiveness of the Radiation Protection Program.

Environmental monitoring continues to demonstrate that radiological emissions and direct radiation from the facility operations remain low, with minimal impact on the surrounding public. Routine sampling in community locations, dose monitoring, and continuous boundary monitoring at the perimeter further reinforce transparency and confidence in the effectiveness of the Radiation Protection Program.

Looking ahead to the second half of the licence term, BWXT NEC Toronto will continue to strengthen its Radiation Protection Program through additional shielding projects, the automation of dose result inputs from the external dosimetry provider into the internal radiation database to reduce manual data entry and potential for human error, and an update to the methodology for assessing public dose. These initiatives further demonstrate BWXT's ongoing commitment to radiation safety excellence and the continual application of the ALARA principles.

3.7.1 ALARA Committee Performance

The ALARA Committee at BWXT NEC Toronto continues to play a key role in the oversight and continuous improvement of the Radiation Protection Program. The committee provides a structured forum for reviewing radiological performance, identifying opportunities for dose reduction, and ensuring that operational practices remain consistent with the ALARA principle.

The Committee is comprised of representation from union employees and management employees to ensure that radiological considerations are integrated into licensed activities and applicable work processes. Meetings are held quarterly to review dose trends, contamination monitoring results, internal audit findings, and events, near misses, or employee concerns. Additional meetings are scheduled as required.

Since the start of the current licence term, the ALARA Committee has achieved meaningful progress in several key areas. These include shielding projects, improved TLD compliance (>99%), and a local ventilation project. The ALARA Committee also conducted reviews for machines and processes to identify possible improvements for keeping doses ALARA, as well as investigating portable air sampling in locations with no fixed air samplers.

Looking ahead, BWXT NEC Toronto plans to further strengthen the ALARA program through continued training and program enhancements. Ongoing training for ALARA Committee members will ensure they remain knowledgeable and effective in supporting radiological safety initiatives across the site. A project to install shielding over the windows on the third floor grinding room was completed in 2025, and in 2026 additional shielding will be installed on the second-floor windows. These shielding projects help to minimize dose to the anticipated occupants of a new apartment complex being constructed across from the site on Lansdowne Ave.

3.7.2 Radiation Protection Training Program and Effectiveness

BWXT NEC maintains a comprehensive Radiation Protection Training Program designed to ensure that employees and contractors entering classified areas, understand radiological hazards, applicable controls, and the requirements of the Radiation Protection Program. The program is developed in accordance with the Systematic Approach to Training (SAT) methodology, ensuring

that training is competency-based, evaluated for effectiveness, and continuously improved. Training is delivered through a combination of classroom instruction, on the job training, and online learning with periodic refresher sessions to ensure that employee knowledge remains current and that the workers can apply ALARA effectively in their daily operations.

BWXT NEC has consistently maintained and refined its radiation protection training content to ensure the program remains effective and aligned with operational needs. Training materials are regularly reviewed and updated to reflect procedural changes, feedback from internal audits, OPEX, and observations from CNSC inspections. The Toronto site has recently trained additional employees to fulfill the Radiation Technician role for emergency responses.

Refresher training is completed at defined intervals, and worker performance and comprehensions are verified through testing and practical assessments. Program effectiveness is verified through periodic audits to confirm that workers are performing radiological tasks safely and in line with procedures. Additional oversight is maintained through the Radiation Safety Instruction process for non-routine activities, which helps to ensure the appropriate radiological controls are considered during job planning. Ongoing communication and reinforcement of key topics are also provided through regular safety talks and meetings.

Training program content will continue to be reviewed and refined throughout the remainder of the licence term and beyond, to reflect operating experience, regulatory expectations, and feedback from workers and the ALARA Committee. During the second half of the licence term, BWXT NEC will maintain its focus on strengthening radiological safety culture through continued education and engagement. Emphasis will be placed on ensuring training remains current and practical, with additional opportunities for hands on learning and ongoing reinforcement of key principles to support safe work performance and ALARA performance at the site.

3.7.3 Radiation Device and Instrumentation Performance

BWXT NEC maintains a well-established program to ensure radiation detection and monitoring equipment are properly maintained, calibrated, and suitable for their intended use. Radiation detection equipment calibrations are conducted within 12 months of the previous calibration as required by regulation. Throughout the current licensing period, the radiation calibration program has remained effective, with no changes made to its structure or implementation. Routine performance checks, preventative maintenance, and timely servicing continue to support reliable radiological monitoring to ensure safe working conditions. BWXT NEC Toronto will continue to maintain this program and conduct periodic audits and self-assessments to confirm its continued effectiveness and compliance with regulatory expectations.

3.7.4 Contamination Control Data

When radioactive material is handled in a non-sealed container, there is the potential for it to be spread onto other surfaces. This is known as radioactive contamination. Radioactive contamination refers to small amounts of nuclear substances on surfaces or within the air, where its presence is unintended or undesirable.

BWXT NEC Toronto maintains an effective contamination monitoring and control program to ensure radioactive contamination remains within acceptable limits. Contamination monitoring results for the current licensing period are summarized in Table 2, which includes data from all monitored areas. The number of surface contamination samples exceeding the Internal Control Levels have remained low. Surface contamination results are reviewed by EHS staff and discussed at WSC Meetings. Overall, 98.8% of swipes were within Internal Control Levels, indicative of effective contamination control measures and cleaning schedules. In the event a sample exceeds the Internal Control Level,

the surface is cleaned and re-swiped. Ongoing trends in sample exceedances are logged into Gensuite® and investigated, with follow up actions recorded and tracked to completion.

Moving forward, BWXT NEC will continue to monitor contamination trends closely, assess the effectiveness of existing cleaning practices, and identify opportunities for further improvement to maintain strong contamination control performance across all operational areas.

Table 2: Summary of Surface Contamination

Surface Contamination			
Classification and Area Description	**Internal Control Level**	**2021-2025**	
		Number of Samples	**Number Samples Exceeding Internal Control Level (%)**
R3 – Powder Preparation, Pressing, Grinding, Laboratory	22,000 dpm /100 cm^2	2322	4 (0.2%)
R2 – Sintering, Sorting & Stacking, Laboratory	2,200 dpm /100 cm^2	2595	44 (1.7%)
Active – Plant Washrooms, Laundry Room	2,200 dpm /100 cm^2	603	9 (1.5%)
Unclassified	220 dpm /100 cm^2	2680	45 (1.7%)

3.7.5 Air Monitoring

As part of a well-established and implemented industrial hygiene program, BWXT NEC conducts air monitoring to ensure that airborne concentrations of uranium are effectively controlled in the workplace and that radiological exposures to workers are maintained As Low As Reasonably Achievable (ALARA). Breathing air is sampled for measurement of uranium content. Workstation air monitoring is a key performance indicator that speaks to effective administrative and engineered controls. A respiratory protection program is in place. Non-routine work functions, such as machine maintenance, modifications, etc. are controlled by Radiation Safety Instructions. These processes specify protective measures, including those to reduce exposure to airborne UO_2. This may or may not include air monitoring and/or respirator use.

Each process workstation is monitored continuously during routine operations for airborne UO_2 and samples are counted in-house. Results for the current licensing period (2021-2025) are summarized in Table 3. More than 5,200 work samples were collected annually, with only a very small number of results exceeding internal control limits each year. All results remained below regulatory Action Levels. Any exceedances of internal control limits are promptly investigated and documented in Gensuite®, with corrective actions implemented as required and tracked to completion. Overall, the monitoring data confirm that airborne UO_2 remains well controlled.

Throughout the remainder of the licence term and beyond, the air-monitoring program will continue to be periodically reviewed and optimized to ensure continued compliance, data integrity, and overall program robustness in alignment with the ALARA principle.

Table 3: Workstation Air Monitoring Summary

Workstation Air Monitoring	2021	2022	2023	2024	2025
Number of Workstations Sampled	21	21	21	21	21
Total Number of Samples Collected	5250	5271	5271	5313	5292
Total Number of Samples Exceeding Internal Control Level (area specific)	4	2	5	4	8
Total Number of Samples Exceeding Action Level (area specific)	0	0	0	0	0
Average Concentration (dpm/m^3)	7.6	7.6	9.2	7.5	7.7
Maximum Value Recorded (dpm/m^3)	368	248	306	202	231

3.7.6 Facility Radiological Conditions

Radiation fields from use and storage of radioactive materials may result in external radiation doses to workers. To ensure that radiation dose rates are ALARA, routine gamma radiation surveys are conducted periodically using calibrated portable handheld radiation detectors. Measured dose rates are compared to targets for areas based on area classification and occupancy.

Overall, radiological conditions have remained stable throughout the licence period, with measured dose rates remaining within historical ranges and regulatory expectations. The results from 2021 to 2025 are summarized in Table 4. Variability due to the timing of the surveys is a factor in the results, as production levels and movement of materials vary over the course of a day. The facility will continue to maintain and periodically audit the radiological survey program to ensure accuracy, consistency and continued improvement for the remainder of the licence term.

Table 4: Routine Dose Rate Survey Summary

Dose Rates	2021	2022	2023	2024	2025
Total Number of Locations Surveyed	160	160	160	160	160
Average Dose Rate (µSv/h) on Shop Floor	2.8	3.1	3.9	3.8	3.8
Average Dose Rate (µSv/h) in Storage Areas	5.2	6.4	12.5	8.7	7.7

3.7.7 Urinalysis Results

The presence of uranium in the urine is an indication of recent inhalation of UO_2 dust or the systemic clearance of an established thorax burden. At BWXT NEC, urinalysis is used as a screening tool to initiate further review of internal dose control measures and practices but is not used to estimate internal dose. Internal dose is estimated based on workstation air monitoring (refer to section 3.7.9).

All employees working where exposed UO_2 material is processed submit urine samples for uranyl ion analysis weekly or monthly, depending on the work area. Samples are analyzed by an external laboratory for uranium content using Inductively Coupled Plasma - Mass Spectrometry with a minimum detectable concentration of 0.1 µg U/L. Results are compared to Internal Control Levels (ICLs) and Action Levels and entered and retained in an electronic database.

Urinalysis results from 2021 through 2025 are summarized in Table 5: Urinalysis Results Summary Table 5. During this period all results were well under the Action Level, with only two ICL exceedances in 6550 samples. Any exceedances of internal control limits are promptly investigated and documented in Gensuite®, with corrective actions implemented as required. These results demonstrate that internal dose controls and contamination prevention measures remain effective.

Looking forward, BWXT NEC will continue to maintain the urinalysis program as an important screening tool used to verify the effectiveness of internal exposure controls. The program will continue to promptly identify changes in internal exposure potential and initiate further review or corrective action where necessary.

Table 5: Urinalysis Results Summary

Urinalysis	2021	2022	2023	2024	2025
Number of urine samples analyzed	1499	1332	1320	1146	1253
Number of samples above Internal Control Level (5 µg U/L)	0	0	1	1	0
Number of samples above Action Level (10 µg U/L)	0	0	0	0	0
Maximum result (µg U/L)	2.7	2.7	5.1	5.1	3.5

3.7.8 Radiation Doses

BWXT NEC Toronto maintains a TLD program for whole body, skin, eye, and extremity monitoring, ensuring compliance with regulatory dose limits and supporting the ALARA principle. Regulatory dose limits are listed in Table 6 and Table 7 for reference. Dosimetry data collected throughout the current licence term demonstrate that employee exposures have remained well below established limits, reflecting the ongoing effectiveness of radiological controls and safety practices. These results are consistently reviewed to identify trends, support continuous improvement, and verify that the radiation protection program remains effective. Detailed dosimetry results for employees are presented in the subsequent subsections.

Table 6: Regulatory Effective Dose Limits

Effective Dose Limits		
Person	**Period**	**Effective Dose (mSv)**
NEW, including a pregnant NEW who has yet to disclose pregnancy status	(a) One-year dosimetry period (b) Five-year dosimetry period	50 100
Pregnant NEW	Balance of the pregnancy	4
A person who is not a NEW (i.e., a member of the public)	One calendar year	1

Table 7: Regulatory Equivalent Dose Limits

Equivalent Dose Limits			
Organ or Tissue	**Person**	**Period**	**Equivalent Dose (mSv)**
Lens of an eye	(a) NEW (b) Any other person	One-year dosimetry period One calendar year	50 15
Skin	(a) NEW (b) Any other person	One-year dosimetry period One calendar year	500 50
Hands and feet	(a) NEW (b) Any other person	One-year dosimetry period One calendar year	500 50

3.7.9 Total Effective Dose Equivalent

BWXT NEC monitors the Total Effective Dose Equivalent (TEDE) for employees through the TLD program to ensure that individual exposures remain well below regulatory limits and aligned with the ALARA principle. The TEDE is a combination of the measured TLD external whole-body dose and calculated internal dose based on workstation air monitoring. Results from the current licence term are summarized in Table 8.

*November 2025 TLDs are pending dose estimation and therefore the numbers shown in the following tables and figures are preliminary estimates.

Table 8: Total Effective Dose Equivalent Distribution

Calendar Year	Total # Individuals	Total # of Individuals in Dose Range (mSv)							
		0 - 1	1 - 5	5 - 10	10 - 20	20 - 50	50 - 100	100 - 200	200 - 500
2025	39	15*	23*	1*	0	0	0	0	0
2024	40	20	19	1	0	0	0	0	0
2023	40	16	23	1	0	0	0	0	0
2022	42	19	22	1	0	0	0	0	0
2021	53	27	24	2	0	0	0	0	0

TEDE by workgroup over the course of the licensed term is listed in Table 9. The average dose results include zero measurements.

Table 9: Total Effective Dose Equivalent Summary

	Year	All Workgroups (TEDE)	Operators External Dose Only	Operators Internal Dose Only	Staff (TEDE)
Maximum (mSv)	2025	5.42*	4.12*	2.04	1.16*
	2024	6.72	4.57	2.15	0.00
	2023	5.13	3.87	1.82	0.28
	2022	5.17	4.01	1.38	0.22
	2021	5.72	5.21	1.43	0.56
Average (mSv/person)	2025	1.70*	1.40*	0.93	0.11*
	2024	1.34	1.02**	0.83	0.00
	2023	1.64	1.32	0.92	0.05
	2022	1.39	1.29	0.58	0.06
	2021	1.62	1.46	0.65	0.07

**Data correction from 2024's annual compliance report.

As shown in Figure 4, both the maximum and average TEDE values for workers have remained well below regulatory limits for the duration of the current licence term. Although a small upward trend is observed for the average TEDE, these values continue to reflect a strong level of dose control. The slight increase in average dose can be attributed to increases in reworked material, staffing challenges, and troubleshooting and maintenance on automated process equipment.

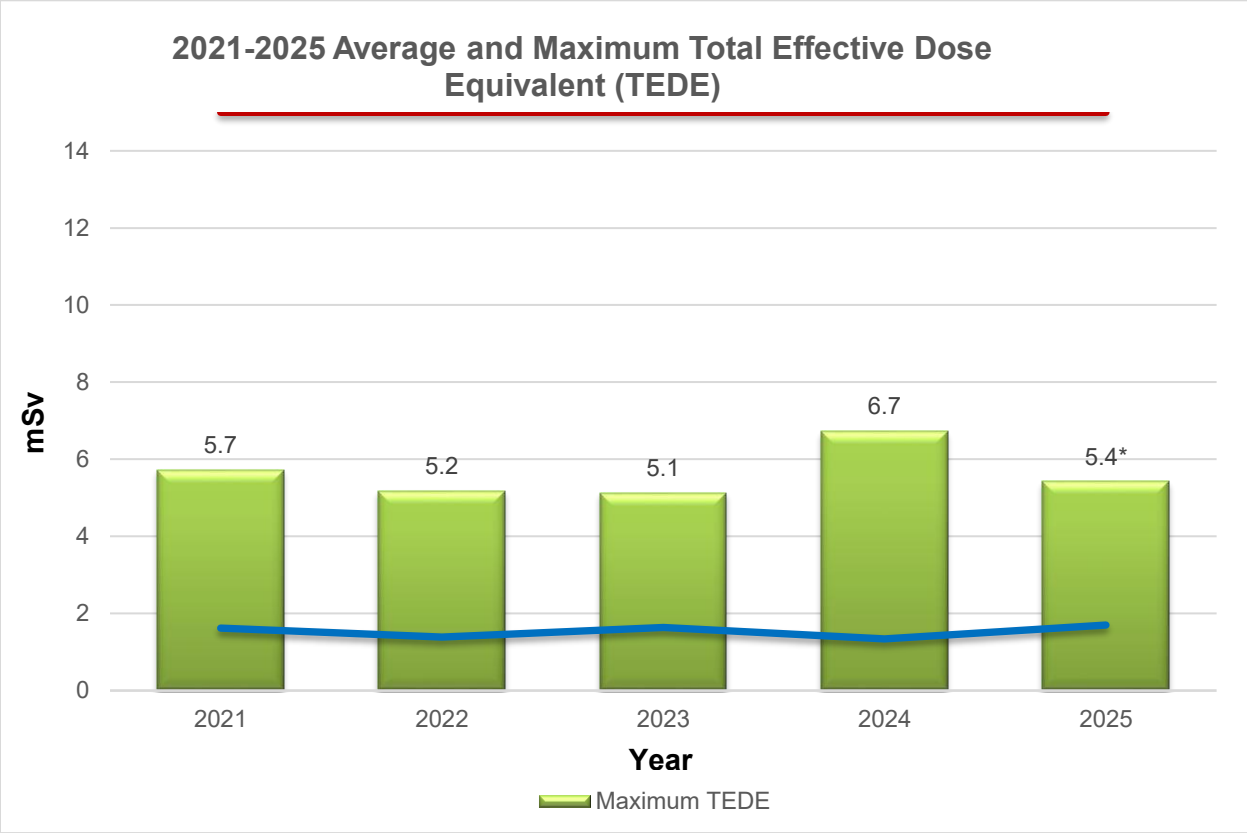

Figure 4: 2021-2025 Maximum and Annual Total Effective Dose Equivalent

BWXT NEC continues to review TEDE data to identify trends and potential contributing factors, ensuring that work practices, shielding, and planning continue to work to minimize exposure. BWXT NEC remains committed to ongoing dose reduction efforts and to sustaining the effectiveness of its radiation protection program through continuous improvement, such as the automation of dose uploads into the radiation database.

3.7.10 Equivalent Skin Dose

BWXT NEC monitors equivalent skin dose through the use of the shallow dose component of whole-body thermoluminescent dosimeters (TLDs). This approach provides an effective measure of potential skin exposure resulting from routine radiological operations. Table 10 provides a summary of equivalent skin dosimetry measurements with monitored workers grouped in various ranges of exposure. Equivalent skin dose by work group is summarized in Table 11. The average annual skin dose trend for all monitored individuals over the course of the licensing period, is shown in Figure 5. Skin doses have remained relatively stable, with no significant increase or decrease in the average dose.

Throughout the current licence term, all recorded skin doses have remained well below regulatory limits and internal Action Levels. Minor variations between years are consistent with changes in production activities. No adverse trends were identified, and the results confirm that the established radiological controls and the emphasis of ALARA, continue to limit equivalent skin dose exposures.

BWXT NEC will continue to review and trend equivalent skin dose data to verify the effectiveness of radiation protection measures and to identify opportunities for further exposure reduction through process improvements or shielding opportunities.

*November 2025 TLDs are pending dose estimation and therefore the numbers shown in the following tables and figures are preliminary estimates.

Table 10: Skin Radiation Dose Equivalent Distribution

Calendar Year	Total # Individuals	Total # of Individuals in Dose Range (mSv)							
		0 - 1	1 - 5	5 - 10	10 - 20	20 - 50	50 - 100	100 - 200	200 - 500
2025	39	11*	4*	10*	8*	6*	0	0	0
2024	40	14	5	10	6	4	0	0	0
2023	40	12	7	10	7	4	0	0	0
2022	42	15	11	7	7	2	0	0	0
2021	53	2	8	7	7	9	0	0	0

Table 11: Skin Radiation Dose Equivalent Summary

	Year	All Workgroups	Operators	Staff
Maximum (mSv)	2025	29.61*	29.61*	1.16*
	2024	32.64	32.64	0.88
	2023	27.54	27.54	1.05
	2022	28.69	28.69	1.29
	2021	37.19	37.19	1.89
Average (mSv/person)	2025	8.62*	11.96*	0.11*
	2024	6.59	9.00	0.25
	2023	7.34	10.05	0.19
	2022	5.83	7.82	0.23
	2021	7.86	10.08	0.21

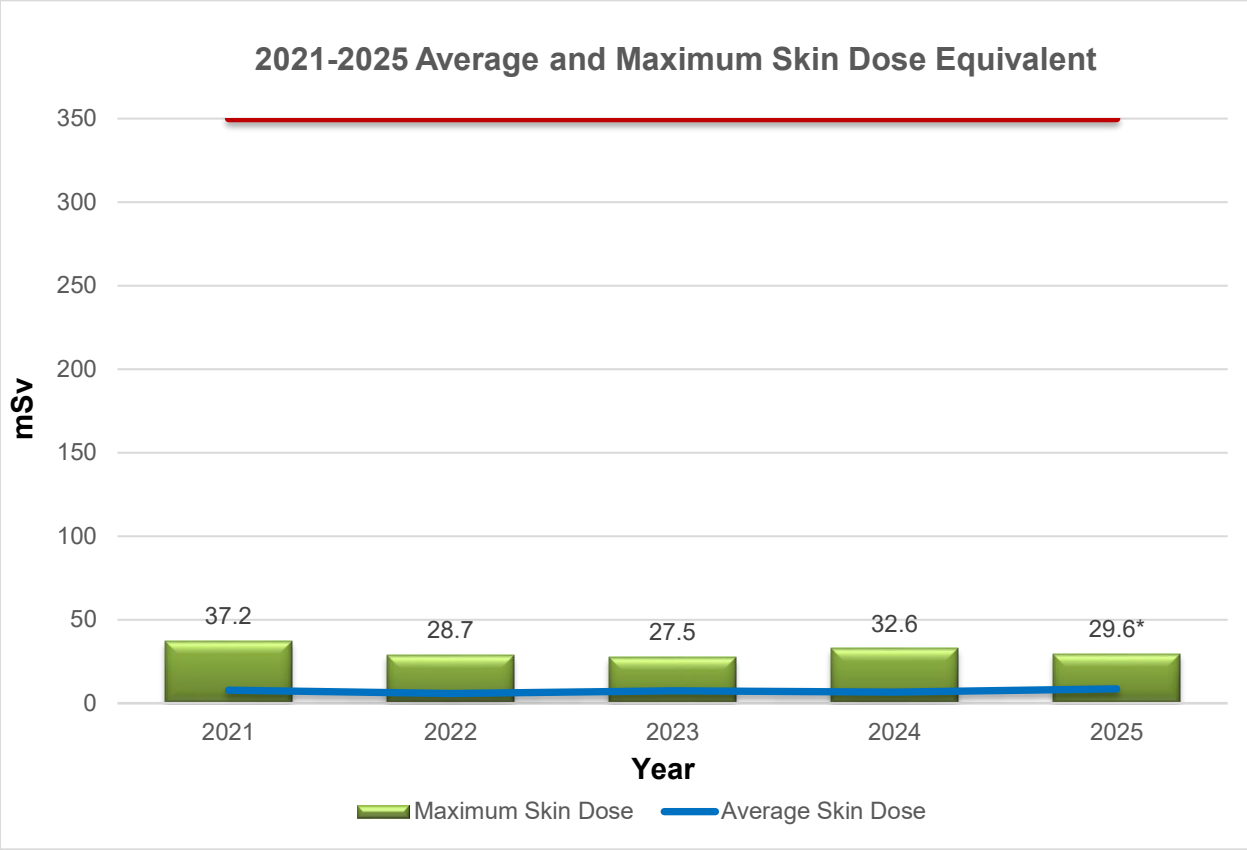

Figure 5: 2021-2025 Maximum and Average Skin Dose Equivalent

3.7.11 Equivalent Extremity Dose

BWXT NEC monitors extremity dose via TLD rings. These rings are worn on certain individual's hands for a one-week period each quarter to measure extremity dose. A scaling factor is calculated based on hours worked in the quarter and is provided to the dosimetry service provider each monitoring period. The dosimetry service provider applies the scaling factor to the measured dose to estimate the exposure for the quarter.

During the licence term, an extremity study was started in the second quarter of 2023 and continued until the end of 2023. Workers wore their extremity rings full time. Table 12 provides a summary of equivalent extremity dosimetry measurements with monitored workers grouped in various ranges of exposure. Equivalent extremity dose by work group is summarized in Table 13. Staff do not routinely participate in the extremity monitoring program since there is minimal direct handling of product. The average annual extremity dose trend for all monitored individuals over the licence term, is shown in Figure 6. Extremity doses have remained significantly below regulatory limits and internal Action Levels.

Moving forward, BWXT NEC will continue to maintain the extremity program and review dose data trends, while also looking to improve the program by enabling automatic upload of extremity dose results to the radiation database.

Table 12: Total Extremity Dose Equivalent Distribution

Calendar Year	Total # Individuals	Total # of Individuals in Dose Range (mSv)							
		0 - 1	1 - 5	5 - 10	10 - 20	20 - 50	50 - 100	100 - 200	200 - 500
2025	28	0	4	3	11	8	2	0	0
2024	29	2	0	5	11	10	1	0	0
2023	29	0	5	6	10	7	1	0	0
2022	31	1	5	5	7	10	3	0	0
2021	38	5	9	2	6	10	6	0	0

Table 13: Extremity Dose Equivalent Summary

	Year	All Workgroups	Operators	Staff
Maximum (mSv)	2025	62.08	62.08	N/A
	2024	62.09	62.09	N/A
	2023	53.43	53.43	N/A
	2022	68.59	68.59	N/A
	2021	66.06	66.06	N/A
Average (mSv/person)	2025	21.57	21.57	N/A
	2024	20.12	20.12	N/A
	2023	15.94	15.94	N/A
	2022	21.06	21.06	N/A
	2021	22.23	22.23	N/A

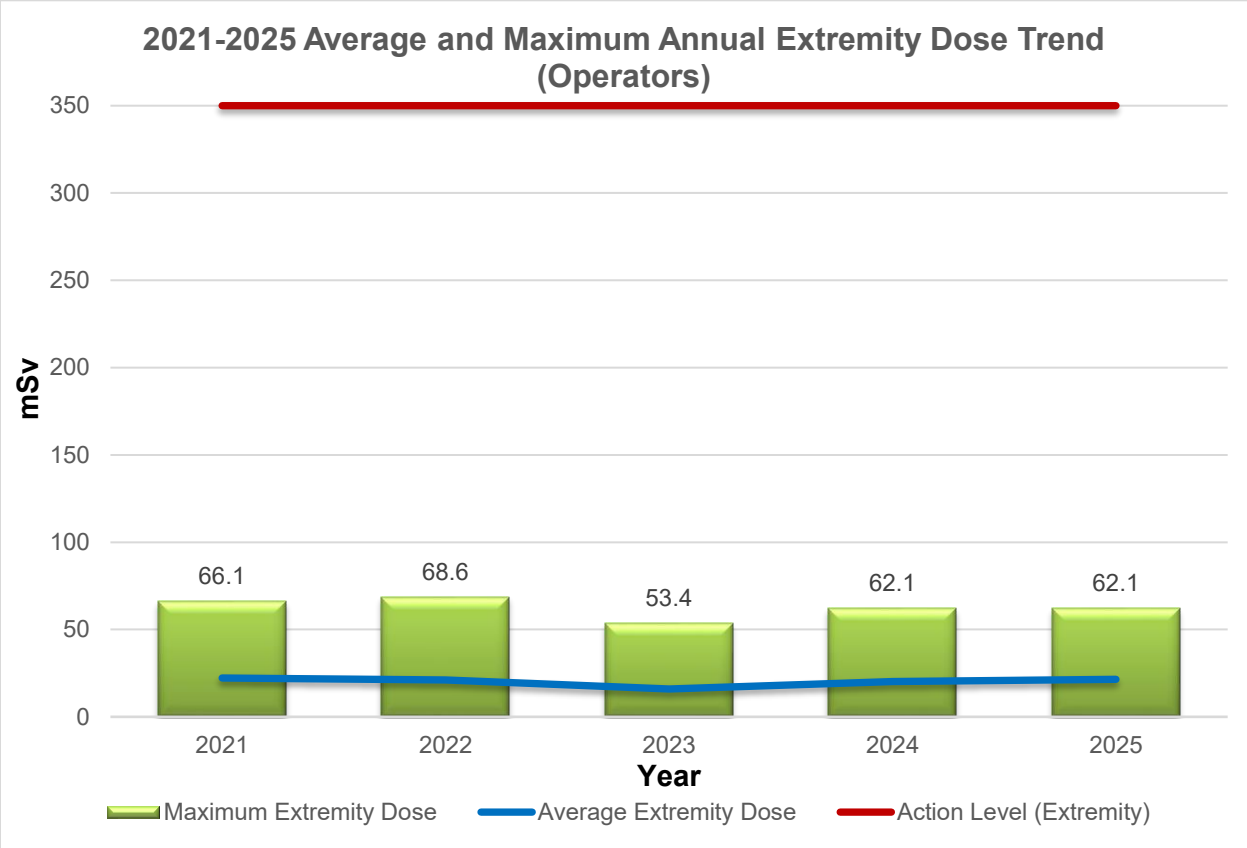

Figure 6: 2021-2025 Maximum and Average Extremity Dose

3.7.12 Equivalent Lens of an Eye Dose

BWXT NEC Toronto monitors the equivalent dose to the lens of the eye using the whole body TLD. The dosimetry provider calculates the eye dose Hp(3), using the results from the multiple elements within the TLD. Throughout the current licensing period, lens of eye doses have remained well below the applicable regulatory limits, demonstrating the continued effectiveness of existing controls and the radiation protection program. The regulatory limit for a Nuclear Energy Worker (NEW) is 50 mSv, shown in Table 7. Currently there is no Action Level in place at Toronto for eye lens dose. An Internal Control Level was set at 4.25 mSv/quarter.

Looking forward, BWXT NEC remains committed to evaluating new monitoring technologies and incorporating program refinements to continue to support the ALARA principles and maintain exposures within regulatory limits.

3.7.13 Total Estimated Doses to Members of the Public

Total effective radiation dose equivalent to members of the public are specified in the *Radiation Protection Regulations* and listed in Table 6. It is a calculated value, measured in mSv, which takes into account the absorbed dose to all organs of the body, the relative harm level of the radiation, and the sensitivities of each organ to radiation.

To ensure compliance with this regulation, BWXT NEC has established Derived Release Limits (DRLs) for uranium emissions to the environment. The facility DRLs account for the realistic exposure pathways as described in the facility Radiation Protection Program to restrict dose to a

member of the public to 1 mSv (1,000 µSv) per year, which is the regulatory dose limit. The DRLs assume that a member of the public occupies the BWXT NEC facility perimeter continuously (24 hours per day, 365 days per year). Note: Liquid effluent is not included in the calculation of public dose as the effluent is discharged directly to city sewer systems (following treatment as described in Section 3.9.6) and is not used for drinking. The estimated effective dose as a result of air releases is calculated through direct correlation with the facility DRLs.

In addition, the contribution from gamma radiation emissions to the nearest member of the public is calculated from the net sum of the nearest environmental TLD results from all monitoring periods. The calculation assumes that a member of the public occupies the nearest residence for 66% of their time for the entire year.

The estimated doses to members of the public from licensed activities remain a fraction of the regulatory limit of 1 mSv (1000 µSv) per year as shown in Table 14. It was noted that the public dose increased in 2024. In response, BWXT NEC Toronto undertook a review of storage locations, production practices, background locations, and measurement variability to better understand the increase. BWXT NEC Toronto continues to monitor public dose and implement measures to ensure doses remain as low as reasonably achievable. Recommendations from the review included the deployment of additional background TLDs, additional perimeter surveys to identify higher dose areas, and shielding projects.

BWXT NEC Toronto recognizes that the new constructed apartment complex on Lansdowne Avenue is now the critical receptor location when assessing public dose. BWXT NEC Toronto has reviewed its methodology for assessing public dose and will be implementing enhancements in 2026, including the use of additional background badges and updated dose assessment approaches to ensure continued protection of the public.

In order to minimize dose, a project involving the shielding of windows in the Grinding Room on the third floor was completed in 2025, with additional shielding of second floor windows in locations where pellets are stored in 2026.

Table 14: Estimated Radiation Doses to Members of the Public

Year	Estimated Annual Public Dose (µSv)	% of Public Dose Limit (1,000 µSv = 1 mSv)
2025	109.1	10.9%
2024	137.8	13.8%
2023	40.2	4%
2022	17.3	2%
2021	17.3	2%

3.8 Conventional Health and Safety

The "Conventional Health and Safety" Safety and Control Area covers the implementation of a program to manage non-radiological workplace safety hazards and to protect personnel and equipment.

BWXT NEC has a well-established integrated management system for Environment, Health and Safety (EHS) Program excellence. This is ensured through the effective implementation of program elements. BWXT NEC has an established *EHS Mission Statement* that is reviewed and signed annually by the President of BWXT NEC. BWXT NEC's objective is to eliminate or minimize as low

as reasonably achievable both known and potential environmental, safety and health hazards which could impact our employees and the communities in which they live. EHS is a shared responsibility, top business priority and is continually improved. Over the licence term, the facility has demonstrated strong performance in the Conventional Health and Safety SCA, with zero lost-time accidents in 2021, 2023, 2024, and 2025 for the Toronto site.

In 2025, a significant safety initiative was launched to install additional guarding and fall protection rails around the sintering furnaces, this project will continue over the next couple of years.

Looking ahead, BWXT NEC will maintain its focus on strengthening conventional hazard management throughout the remainder of the licence term and beyond. Continuous improvement is achieved through several review processes, including site inspections, reported safety concerns, and near miss and incident investigations. The effectiveness of the overall program is reviewed throughout the year and evaluated in the annual management review (section 3.2.3), to ensure the conventional health and safety program continues to support BWXT's commitment to protecting personnel, contractors and the community in which we operate.

3.8.1 Workplace Safety Committee

The Workplace Safety Committee at BWXT NEC Toronto continues to play a central role in promoting a safe work environment and supporting the Conventional Health and Safety program. The committee has routinely met throughout the licence term, achieving quorums for all meetings held between 2021-2025. During this period the WSC established numerous safety goals and successfully achieved all of them, reflecting a strong commitment to proactive risk management and continuous improvement.

The committee actively participates and conducts workplace inspections, hazard identification, incident reviews, safety awareness initiatives, helping to ensure compliance with regulatory requirements and internal policies and procedures. The WSC also helps to facilitate communication between employees and management regarding safety concerns, contributing to ongoing improvements in workplace safety practices,

Looking ahead, the WSC will continue to set and monitor safety goals, maintain active engagement with employees, and support ongoing initiatives to further strengthen the conventional health and safety culture throughout the remainder of the licence term.

3.8.2 Injuries and Illnesses

BWXT NEC Toronto maintains a comprehensive program to track and mange workplace injuries and illnesses, in compliance with reporting requirements. As summarized in Table 15, there were no reportable injuries or illness in 2021, 2023, 2024 and 2025. During 2022, there were fourteen cases related to COVID-19 potential workplace exposures. This record reflects the effectiveness of ongoing hazard management, training, and safety awareness initiatives across the facility.

Looking forward, BWXT NEC will continue to focus on proactive injury prevention, maintaining thorough reporting and follow-up processes, and continuing to support a strong nuclear safety culture to ensure that workplace health and safety performance remains strong throughout the remainder of the licence term.

Table 15: Lost Time Injuries

2021	2022	2023	2024	2025
0	14	0	0	0

3.9 Environmental Protection

The "Environmental Protection" Safety and Control Area covers programs that monitor and control all releases of nuclear and hazardous substances into the environment, as well as their effects on the environment as a result of licensed activities.

Throughout the current licence term, BWXT NEC has maintained an effective environmental protection program, which identifies and controls environmental aspects and drives continuous improvement to enhance performance and minimize risk to employees and the public. The facility has a well-established environmental management system to ensure effective monitoring programs are in place to achieve environmental goals and regulatory compliance.

Moving forward, BWXT NEC Toronto will continue to maintain a strong environmental protection program through ongoing monitoring, program reviews, and continual improvement initiatives to ensure sustained compliance and protection of the environment throughout the remainder of the licence term.

3.9.1 Environmental Risk Assessment

BWXT NEC Toronto maintains an up-to-date Environmental Risk Assessment (ERA) to evaluate the potential effects of site operations on the environment and the public. The ERA was updated in 2023 in accordance with CSA N288.6-22, *Environmental Management of Nuclear Facilities* and was subsequently revised in February 2025 to address comments from CNSC staff. The ERA concluded that emissions from the facility were very low and no adverse effects to human health and environment are expected.

The ERA assessed radiological exposures, non-radiological exposures, and noise. Radiological dose to members of the public was assessed to be well below applicable regulatory limits. The emissions of non-radioactive contaminants from the facility were below the MECP Point of Impingement (POI) standards; and water releases are also assessed to be minimal. Noise associated with facility operations was assessed and determined to pose no adverse effect to human health or the environment.

The next scheduled five-year update will occur later in the current licence term to ensure the ERA continues to reflect site conditions and operational changes.

The ERA is available on BWXT NEC's public information website: www.nec.bwxt.com.

3.9.2 Environmental Management System

BWXT NEC Toronto maintains an Environmental Management System (EMS) to ensure environmental protection is effectively integrated into all aspects of site operations. In 2021 the EMS was updated to align with current compliance obligations following the renewal of the facility's licence and associated Licence Conditions Handbook. In 2023, additional updates were made to clarify program goals related to waste minimization and the reduction of emissions and effluents. Minor procedural revisions were also implemented during the licence term, including updates to reflect the Ministry of the Environment, Conservation and Parks (MECP) transition from the Hazardous Waste Information Network (HWIN) to the Resource Productivity and Recovery Authority (RPRA) program.

Looking forward, the EMS continues to be routinely audited, assessed, and reviewed to ensure ongoing compliance and continual improvement. BWXT NEC Toronto is currently working on updates to the EMS to align with the most recent version of REGDOC-2.9.2, *Environmental Protection: Environmental Principles, Assessments, and Protection Measures,* with completion of these updates expected by the end of 2025.

3.9.3 Effluent and Environmental Monitoring Programs

The effluent and environmental monitoring programs at the Toronto facility are designed to validate that both radiological and non-radiological released to air, water, and soil remain well controlled and well below regulatory thresholds. BWXT NEC's effluent and environmental monitoring program is comprised of the following components:

1. Air effluent
2. High-volume ambient air
3. Water effluent
4. Soil sampling

BWXT NEC has established CNSC accepted Action Levels for various environmental parameters. Action Levels are set below regulatory limits; however, they are CNSC reportable events. Accordingly, BWXT NEC has established Internal Control Levels for various environmental parameters that are set even lower than Action Levels to act as an early warning system. Internal Control Level exceedances trigger an internal investigation and corrective actions; however, they are not CNSC reportable events. Throughout the first half of the licensing period, there were no Action Level or regulatory limits exceeded, there was one reportable event in 2021 related to water effluent. Effluent water was released to sewer after it had been treated, but before it had been sampled, this water was subsequently confirmed to meet release criteria. An investigation and corrective actions were taken for this reportable event. In 2021, BWXT NEC also reported pH values outside the Action Level range in 2020 and prior, this information was included in the 2020 annual compliance report. Although measurements were outside the Action Level, all pH measurements did meet the Toronto Sewer By-law criteria.

Moving forward, BWXT NEC Toronto will maintain and refine these monitoring programs to ensure sustained compliance and environmental protection for the remainder of the licence term and beyond.

3.9.3.1 Independent Environmental Monitoring Program

The CNSC's Independent Environmental Monitoring Program (IEMP) conducts periodic sampling of air and soil in the vicinity of the Toronto facility to independently verify that operations do not pose a risk to the public or the environment. The most recent sampling campaign was completed in 2025 focused on uranium, with results confirming that all levels of radioactivity and hazardous substances were below available guidelines and laboratory screening levels, and consistent with background levels. These findings continue to demonstrate that the facility's operations have no adverse impact on the surrounding environment or the health of the public. Results from the IEMP are publicly available on the CNSC's website, ensuring transparency and public access to independent environmental data.

3.9.4 Environmental Protection Program Performance

Throughout the current licence period, the Environmental Protection Program at the Toronto facility has continued to perform effectively, ensuring compliance with regulatory requirements and maintaining protection of the environment and public. The site has continued to establish annual environmental goals to drive continual improvement, several of which have been successfully completed during this period. Notable achievements include the diversion of 100kg of radioactive waste, the installation of light sensors throughout the plant, and the installation of a plant sewer outlet sampling device.

Looking forward, BWXT NEC Toronto will continue to establish and monitor new environmental goals each year, maintaining focus on waste reduction, sustainable operations, and continued improvement of environmental performance through ongoing assessments and audits.

3.9.5 Air Effluent Monitoring

BWXT NEC Toronto has a valid Environmental Compliance Approval (ECA) issued by the Ministry of Environment, Conservation and Parks (MECP) for air emissions. The site maintains emission summary and dispersion modelling reports and acoustic assessment reports that demonstrate compliance with relevant legislation. An annual summary report is submitted to the MECP. Monitoring of airborne emissions is not required by the MECP. Due to the additional regulation by the CNSC, uranium stack emissions are monitored and compared to CNSC Action Levels.

The facility performs continuous in-stack and facility perimeter air sampling for uranium. In-stack sampling is conducted by drawing a sample of air across a filter capable of trapping uranium dust. The samples are analyzed in-house daily and verified externally by an independent laboratory. Facility perimeter samples are high volume air samples drawn at five positions strategically located outside around the facility perimeter. Facility perimeter samples are analyzed externally by an independent laboratory. In both cases the external independent laboratory tests the filter papers by delayed neutron activation analysis. The minimum detection limit is 0.01 µg uranium. Results are compared to the previous results, and to relevant Internal Control Levels and Action Levels. Measured uranium air emissions are included in the estimated dose to members of the public through direct correlation with facility DRLs. Details are provided in section 3.7.13.

Airborne emissions from the Toronto facility have continued to be effectively controlled and maintained well below the licensed release limits and internal Action Levels. Routine air effluent monitoring and analysis were conducted in accordance with the site's Environmental Protection Program, with the results summarized in Table 16. Uranium air releases continue to remain low and well below the Action Level of 1 µg/m^3. The facility perimeter air quality results are summarized in Table 16: Air Effluent Sampling Summary 2021-2025, and presented in Figure 7. The average and maximum facility perimeter air quality monitor results are trended over five years in Figure 8 and consist of very low uranium in air concentrations and well below the Action Level of 1.00 µg/m^3.

The facility will continue to maintain its robust monitoring and control measures and will review the program periodically to ensure it remains aligned with regulatory expectations and best management practices.

Table 16: Air Effluent Sampling Summary 2021-2025

Uranium in Air Effluent					
Stack Description	**Emission Contaminant**	**Total Number of Samples**	**Action Level ($\mu g/m^3$) (# Samples Exceeding Level)**	**Highest Value Recorded ($\mu g/m^3$)**	**Average Value Recorded ($\mu g/m^3$)**
Rotoclone	Uranium	1255	1.0 (0)	0.322	0.013
6H-68	Uranium	1255	1.0 (0)	0.461	0.010
4H-48	Uranium	1255	1.0 (0)	0.125	0.009
Furnace #1	Uranium	1255	1.0 (0)	0.490	0.026
Furnace #2/4	Uranium	1255	1.0 (0)	0.395	0.036
Furnace #5/6	Uranium	1255	1.0 (0)	0.257	0.027

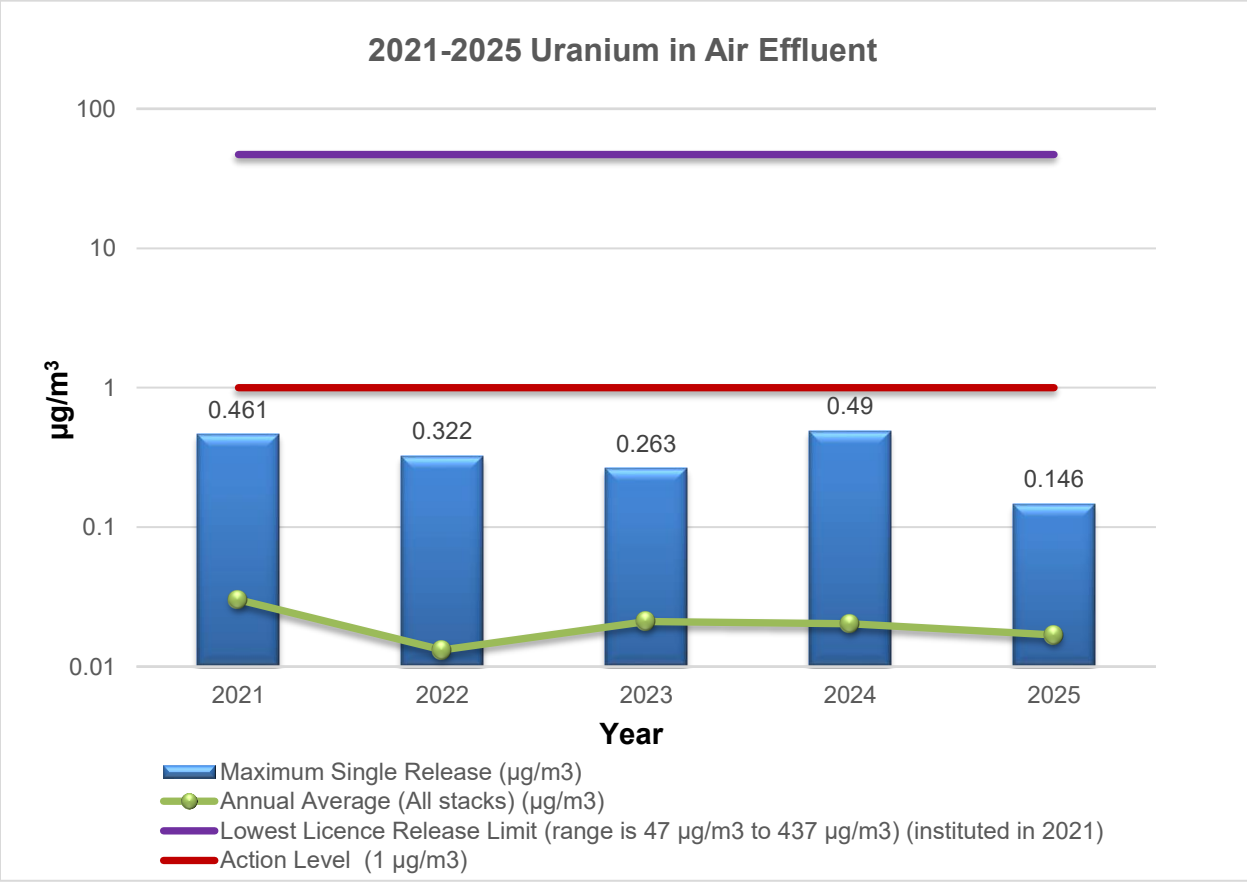

Figure 7: 2021-2025 Uranium in Air Effluent

Note: The above graph has a logarithmic scale.

Table 17: Summary of Facility Perimeter Air Monitoring

	2021	2022	2023	2024	2025
Number of Facility Perimeter Air Samples Taken	260	260	260	260	260
Number of Samples > Action Level (0.08 µg/m^3)	0	0	0	0	0
Average Concentration (µg U/m^3)	0.000	0.000	0.000	0.000	0.000
Highest Value Recorded (µg U/m^3)	0.003	0.005	0.003	0.001	0.002

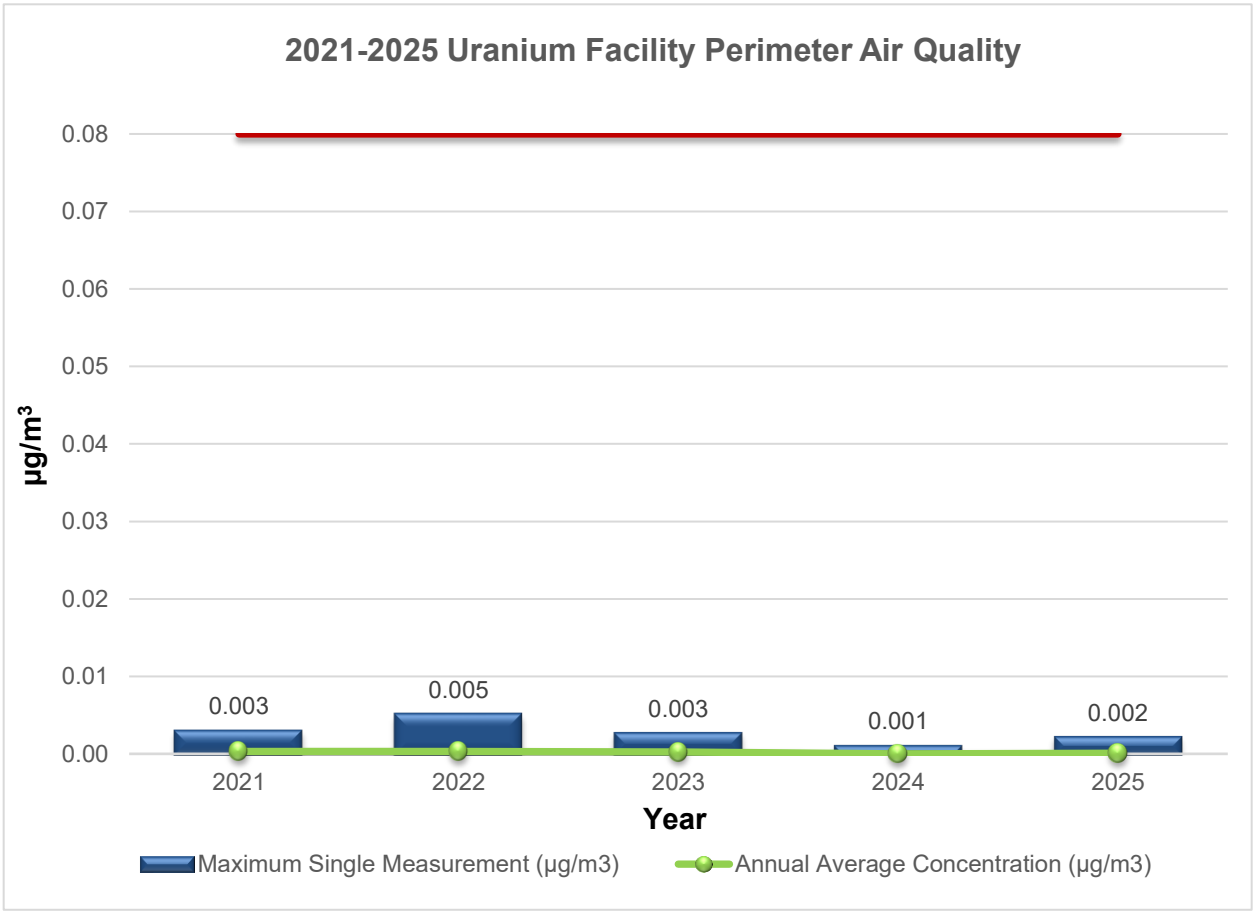

Figure 8: 2021 – 2025 Uranium Facility Perimeter Air Quality

3.9.6 Water Effluent Monitoring

Water is used to clean protective clothing, walls, floors, equipment and in various other janitorial functions. The water is treated to remove UO_2 and the concentration of UO_2 in wastewater leaving the treatment system is measured in-house. The concentration of UO_2 in the total wastewater leaving the plant premises is calculated and compared to the Internal Control Level of 3 ppm and the Action Level of 6 ppm (per batch). Maximum values reported are calculated from the analyzed in-house samples. In addition, a weekly composite sample is prepared and sent for independent analysis at an accredited external laboratory. The minimum detectable concentration is 0.000001 mg U/L or parts per million (ppm). Averages and annual releases are calculated from the weekly composite samples.

The water effluent treatment system operates as follows:

1. Wastewater is held in batches.
2. Each batch is treated, then sampled.
3. Each batch is only released when in-house sample results confirm the concentration is less than 3 ppm (note: The Action Level for a batch is 6 ppm).

Results from water effluent monitoring are summarized in Table 18. Sample measurements are taken at the point of release. Annual discharges for uranium are trended in Figure 9. Total water effluent releases are showing a steady trend. Results continue to remain low and below the Action Levels of 6 ppm (per batch) and 3 ppm (annual average).

Table 18: Water Effluent Monitoring Summary

	2021	2022	2023	2024	2025
Total Amount of Liquid Discharged (L) (from Uranium Processing Areas)	1,368,270	1,222,850	1,262,510	1,153,445	1,017,940
Maximum Uranium Concentration (at the point of release) (ppm)	2.55	2.82	2.51	2.41	2.47
Number of Samples Exceeding Action Level (6 ppm per batch)	0	0	0	0	0
Annual Average Uranium Concentration (at the point of release) (ppm)	0.28	0.23	0.28	0.16	0.13
Number of Samples Exceeding Action Level (3 ppm annual average)	0	0	0	0	0
Minimum pH	6.7	6.9	6.7	6.7	6.7
Average pH	7.4	7.3	7.1	6.9	7.0
Maximum pH	8.6	7.9	7.8	7.7	7.8

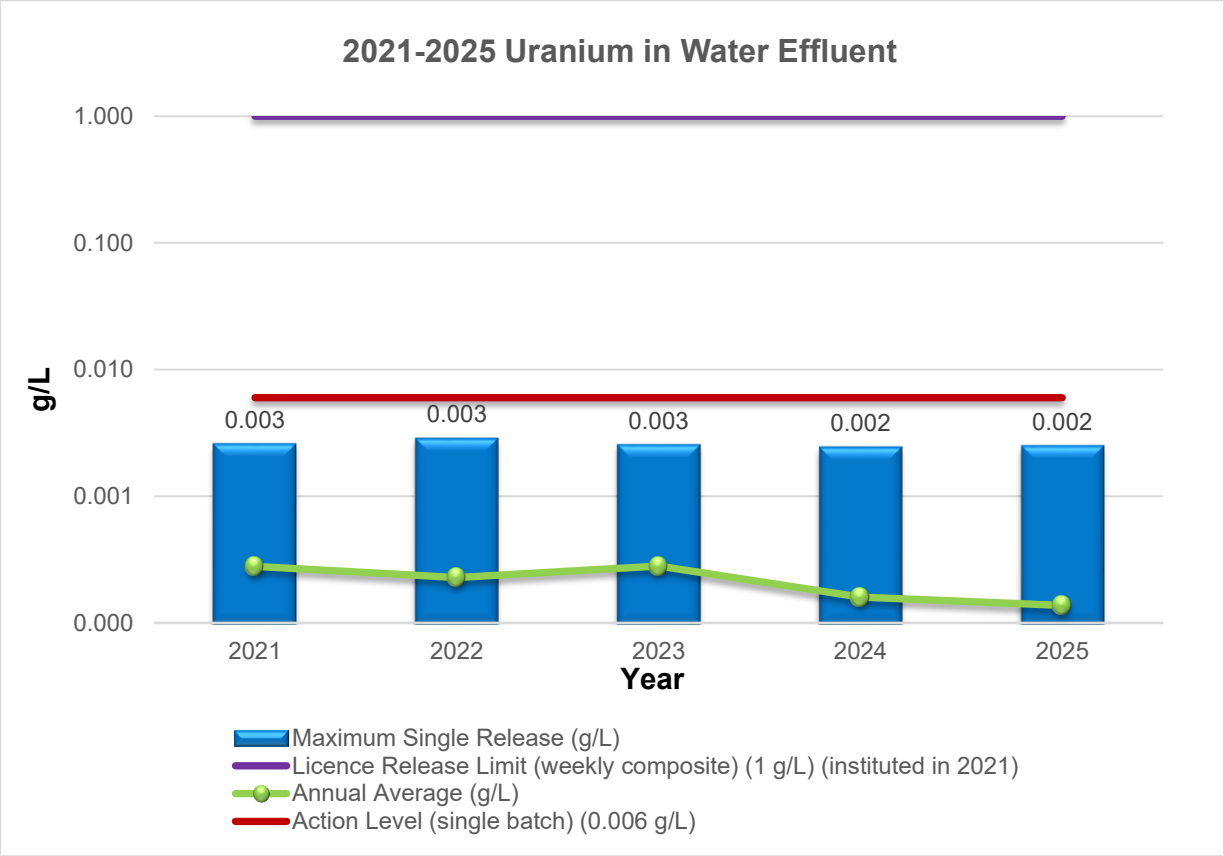

Figure 9: 2021-2025 Uranium in Water Effluent

Note: The above graph has a logarithmic scale.

The water effluent monitoring program continues to perform as intended, ensuring protection of the public and the environment. Routine review of results and trending analyses are conducted to identify variations and confirm continued compliance. Moving forward, BWXT NEC will maintain its existing monitoring practices and continue to evaluate opportunities for improvement where appropriate to ensure ongoing alignment with best practices and regulatory expectations.

3.9.7 Soil Sampling Measurements/Monitoring

Facility UO_2 air emissions are the primary pathway for potential release into the natural environment by impingement on the ground surface in the immediate vicinity of the facility depending on the wind direction. UO2 is insoluble in water but may be washed into the soil by rainfall, snow, etc. Surface uranium levels will indicate deposited emissions. Continuous ambient air monitoring units are installed at the perimeter of the facility (boundary air monitors) to verify the effectiveness of the emission control systems. No concerns have been detected regarding release of uranium as sampled at the perimeter/boundary air monitoring units which is consistent with very low emissions as measured at the emission stacks.

Samples of surface soil were retrieved from multiple locations in accordance with a documented plan this has varied between 32-41 sampling locations annually over the licence term. The sampling methodology used is based on the MECP *Guidelines on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario*, December 1996, ISBN-0-7778-4056-1. Annually, the five-year

average wind data obtained from Toronto Pearson Airport climate data centre (located approximately 12 kilometers west of the facility), is reviewed and used to confirm the appropriateness of the selected soil sampling locations. Quality control soil samples were taken at background locations approximately 10-15 km north of the facility annually, along with three blind duplicate samples for field quality control purposes. The soil samples are stored in a cooler with ice and transported for analysis at an independent accredited laboratory by Inductively Coupled Plasma Mass Spectrometry for uranium content. The minimum detectable concentration is 0.05 part per million (0.05 µg U/g). Results are compared to previous years and the CCME guidelines. A summary of results taken in the reporting period is listed in Table 19.

Starting in 2023 locations on the restricted CN Railway property were permanently removed from the program as access to this land is no longer permitted by CN due to safety concerns. Soil sampling locations on BWXT NEC property were also removed at this time

Table 19: 2021-2025 Uranium Soil Sampling Result Summary (µg/g)

Sampling Location	2021	2022	2023	2024	2025
BWXT NEC Property Average concentration (µg U/g)	2.4	0.8	0.9	N/A	N/A
BWXT NEC Property Maximum concentration (µg U/g)	4.6	1.1	1.0	N/A	N/A
Industrial/commercial lands, i.e., south rail lands Average concentration (µg U/g)	1.0	6.4	0.5	N/A	N/A
Industrial/commercial lands, i.e., south rail lands Maximum concentration (µg U/g)	1.0	28.1	0.6	N/A	N/A
All other locations, i.e., residential Average concentration (µg U/g)	1.0	0.6	0.5	0.6	0.5
All other locations, i.e., residential Maximum concentration (µg U/g)	1.1	2.3	0.8	1.5	0.8

NOTE: MECP Table 1 SCS 2.5 µg U/g (Ontario Background)

Relevant CCME Guidelines:

- **BWXT NEC property = 300 µg U/g**
- **Industrial/Commercial lands = 33 µg U/g**
- **All other locations = 23 µg U/g**

Minimum Detectable Limit for Uranium – 0.05 µg U/g

N/A – Sampling not performed

The analytical results show a range of concentrations from 0.3-28.1 ug U/g with most samples having reported uranium concentrations below the Ontario background concentration of 2.5 ug U/g. These results are below the acceptable standard published by the MECP under Ontario Regulation 153/04 and CCME soil quality guideline. Based on the analytical results of the sampling program, there is no evidence to suggest that uranium used at the BWXT NEC facility has had a negative impact on Toronto soils. No safety risk associated with the presence of uranium has been identified to the public in the community surrounding the BWXT NEC facility.

BWXT NEC will continue to conduct routine soil monitoring in accordance with regulatory and licence requirements, ensuring that environmental protection objectives are maintained. Ongoing evaluation of sampling locations will be performed to confirm that the program remains effective and representative of site conditions.

3.10 Emergency Management and Fire Protection

The emergency preparedness and fire protection programs are well-established and effective. The facility has an established emergency plan that describes the actions to be taken to minimize the health and environmental hazards, which may result from fires, explosions, or the release of hazardous materials. The plan includes effects to the local area and members of the public. The plan is intended to reduce the risk of fires within the facility and assist emergency staff and plant personnel in understanding key emergency response issues, and assist the facility in protecting employees, the local community, and the environment through sound emergency management practices. The emergency plan is developed in accordance with applicable standards and meets the CNSC operating Licence requirements.

Continuous improvement is achieved through several review processes, including site inspections, reported safety concerns, near miss and incident investigations, drills, and self-assessments. Non-conformances are tracked to closure.

During the licensing period there was one event that activated the emergency organization in 2021. The activation of the Emergency Organization was in response to a site wide power failure, and the CNSC was notified.

Looking ahead to the remainder of the licence term, BWXT NEC Toronto will continue to strengthen its emergency management and fire protection capabilities through periodic training, program reviews, and ongoing collaboration with municipal emergency services. Opportunities for improvement will be identified through lessons learned from drills and exercises to further enhance overall emergency preparedness and response effectiveness.

3.10.1 Emergency Preparedness Program Activities

The facility continues to update and improve its Emergency Response Program. Program improvements including revisions to emergency response work instructions were made during the licensing period.

Throughout the first half of the licensing period, BWXT NEC continued to demonstrate a high level of emergency preparedness. All employees are trained on established fire prevention measures, emergency responses, emergency evacuation routes and their responsibilities. Awareness training is conducted during new employee orientation and refreshed through response drills. On-site emergency responders are provided with the level of training necessary to allow them to effectively perform their designated functions. During this period, annual drills and exercises were conducted including simulated events such as fire response, medical emergencies, and hazardous material spills. Lessons learned from these exercises were documented and incorporated into revised procedures and training plans to support continuous improvement. Site evacuation drills were also performed to ensure employee familiarity with emergency procedures and evacuation routes.

In addition, BWXT NEC maintained strong communication and coordination with local emergency services throughout the licensing period, supporting mutual understanding of specific site hazards and emergency protocols. As part of this engagement, BWXT NEC invites Toronto Fire Services to participate in the annual emergency response drill. To date, they have consistently taken part in these exercises and have provided valuable feedback during post-drill debrief sessions, contributing to the continuous improvement of BWXT's emergency preparedness program.

Looking ahead, BWXT NEC Toronto will continue to conduct annual drills, refresh training, and evaluate opportunities to enhance coordination with external responders. These efforts will ensure the continued effectiveness and improvement of the Emergency Preparedness Program for the remainder of the licence term.

3.10.2 Fire Protection Program Activities

BWXT NEC Toronto maintains a comprehensive Fire Protection Program that aligns with applicable codes, standards, and regulatory requirements to ensure the ongoing protection of personnel, property, and the environment. The program encompasses fire prevention, inspection, testing, and maintenance of fire protection systems, as well as emergency response training and continuous improvement initiatives.

Throughout the first half of the licensing period, BWXT NEC maintained a high standard of fire safety performance. Fire detection, alarm, and suppression systems, and extinguishers, were routinely inspected, tested, or maintained in accordance with the established preventative maintenance schedule. Results of these inspections and audits confirmed the systems continued reliability and compliance with applicable requirements.

The documented fire hazards analysis (FHA) identifies the facility fire hazards and their potential impact on worker and public safety, and asset protection. A five-year update of the FHA was completed in 2023 to demonstrate the fire protection goals and safety performance criteria of CSA N393:13 is being met at the facility. The 2023 Fire Hazard Analysis actions and recommendations were closed in the 2024 calendar year.

Significant fire protection maintenance activities were also completed during this licence period. In 2024, two 1.5 hour rated sliding doors were installed at room barriers to meet the equivalent fire-resistance rating, and fire protection goals of the facility. Emergency lighting in Building 9, and fire damper installation in the HVAC ductwork located in the pellet skid storage area also occurred. Minor changes to improve the fire protection program were also achieved throughout the licensing period, some of these updates included: repairs for damaged fire separations and upgrades to emergency lighting.

Looking ahead, BWXT NEC Toronto will continue to maintain and improve its Fire Protection Program through scheduled inspections, maintenance, and regular updates to supporting documentation. The site will continue collaborating with Toronto Fire Services to confirm that mutual support arrangements remain effective and that emergency responders remain familiar with site layouts and fire protection systems.

3.11 Waste Management

The "Waste Management" Safety and Control Area covers internal waste and by-product related programs which form part of the facility's operations, up to the point where the waste is removed from the facility to a separate waste and by-product management facility. This Safety and Control Area also covers the ongoing decontamination and planning for decommissioning activities.

Radioactive wastes are materials that contain a nuclear substance, and which have been declared to be waste. BWXT NEC has an effective and well-established radioactive waste disposal program that ensures all radioactive waste disposals are compliant with the *Nuclear Safety and Control Act* and associated regulations and the facility operating Licence Conditions. Radioactive solid wastes generated from fuel manufacturing, which consist of, or are contaminated by uranium are accumulated in controlled and classified areas. These are compacted for volume reduction where possible and shipped routinely to a licensed radioactive waste disposal facility. Only approximately

0.1% of the uranium that is processed ends up in waste streams. Nearly all nuclear material is used in the product or recycled back to the supplier.

BWXT NEC maintains a Preliminary Decommissioning Plan (PDP) and Financial Guarantees in accordance with CNSC regulatory requirements and applicable standards. The 2023 Toronto facility PDP was reviewed against the criteria set in CSA Standard N294-19, *Decommissioning of Facilities Containing Nuclear Substances* (November 2019), CNSC REGDOC-2.11.2, *Decommissioning* (January 2021), and CNSC REGDOC-3.3.1, *Financial Guarantees for the Decommissioning of Nuclear Facilities and Termination of Licensed Activities* (January 2021).

The PDP strategy and end-state objective of decommissioning is to release the site from regulatory control for industrial use or demolition of the structures. These are reviewed at least once every five years. The PDP summaries for Peterborough and Toronto remain available on our website (www.nec.bwxt.com).

In November of 2022, BWXT NEC submitted an updated PDP to CNSC staff, which was revised in August of 2023 and was accepted by CNSC staff in October of 2023. In 2024, the CNSC Commission accepted the revised financial guarantee amount and BWXT NEC put in place the required financial guarantee instruments to reflect these accepted amounts.

Looking ahead, BWXT NEC Toronto will continue to set environmental goals with waste minimization and sustainability as key considerations. The site will pursue opportunities to reduce waste generation, improve recycling and reuse practices where feasible, and ensure disposal operations remain robust, compliant, and aligned with evolving regulatory and corporate sustainability expectations.

3.12 Security

The "Security" Safety and Control Area covers the programs required to implement and support the security requirements stipulated in the regulations and in the Licence.

The facility maintains a Security Program in accordance with the *General Nuclear Safety and Control Regulations*, *Class I Nuclear Facilities Regulations*, and the *Nuclear Security Regulations*. The Security Program outlines the systems, processes and responsibilities for performing security operations with the objective of maintaining a safe and secure facility. The program manual identifies the individual responsibilities for implementation and maintenance of the program. The manual includes instructions for administering the Security Program, provides the basis for security protocols and identifies the controls in place to meet regulatory requirements. Throughout the licensing period, BWXT NEC maintained a robust security posture through controlled access systems, staff training, and routine program assessments.

The program will continue to be maintained and periodically reviewed to ensure ongoing compliance with CNSC and corporate security standards.

3.13 Safeguards and Non-Proliferation

The "Safeguards and Non-proliferation" Safety and Control Area covers the programs required for the successful implementation of the obligations arising from the Canada/IAEA Safeguards and Non-proliferation Agreement. BWXT NEC has implemented and maintains a Safeguards Program and undertakes all required measures to ensure safeguards implementation in accordance with IAEA commitments and CNSC regulatory document 2.13.1 *Safeguards and Nuclear Material Accountancy*. Movement of safeguarded nuclear material (inventory changes) are documented and reported to the CNSC as required.

During the current licence term, BWXT NEC Toronto has maintained a robust Safeguards and Non-Proliferation program consistent with the Nuclear Non-Proliferation Treaty and associated CNSC regulatory requirements. Throughout the first half of the licence period, the facility successfully completed multiple safeguards verification activities, including Physical Inventory Taking (PIT), Physical Inventory Verification (PIV), and Design Information Verification (DIV) inspections as well as Short Notice Random Inspections (SNRIs) conducted each year. No non conformances were noted throughout the licence period.

Looking forward, BWXT NEC Toronto will continue to support IAEA and CNSC inspection activities, maintain accurate nuclear material accounting, and refine internal reporting practices to ensure continued compliance with all safeguards and non-proliferation requirements.

3.14 Packaging and Transport of Nuclear Substances

The "Packaging and Transport of Nuclear Substances" Safety and Control Area covers the packaging and transport of nuclear substances and other nuclear materials to and from the licensed facility.

BWXT NEC maintains a comprehensive Packaging and Transport program to ensure the safe and compliant movement of nuclear substances in accordance with the *Packaging and Transport of Nuclear Substances Regulations* and the *Transportation of Dangerous Goods Regulations*.

During the current licence term, consignments were prepared, packaged, and documented in accordance with regulatory requirements. In March 2024, a reportable event occurred for the Peterborough facility when a single uranium dioxide pellet was inadvertently shipped back to the Toronto facility in a skid that had been returned. The skid was part of a planned radioactive shipment of empty contaminated packaging, which is transported under a different UN number than scrap pellets. The event was self-identified and promptly reported to the CNSC, investigated internally, and corrective actions were implemented and tracked to closure. There were no impacts to worker health, public safety, or the environment.

The sites Emergency Response Assistance Plan (ERAP) was revised and approved by Transport Canada in 2023 and remains valid and in effect until November of 2026, at which time it will be updated. The ERAP outlines response protocols to ensure timely and effective protection of the public, property, and the environment in the event of an accident involving the transport of natural or depleted uranium dioxide.

Tabletop emergency drills were conducted in 2021 to test elements of the Transportation Emergency Plan, with identified improvements implemented and tracked to completion.

Looking forward, BWXT NEC will continue to maintain a robust transport program that emphasizes compliance, safety, and continual improvement.

4 OTHER MATTERS OF REGULATORY INTEREST

4.1 Public Information & Disclosure Program

BWXT NEC, is committed to connecting with the Toronto community in a timely, transparent and meaningful way. BWXT NEC recognizes that the most effective way to build and sustain public trust is to maintain environmental excellence while fostering an atmosphere of openness and transparency with the community. The purpose of our Public Information & Disclosure Program is to provide the strategy and methodologies to be employed for public communications, information distribution and feedback, and how these activities will be managed.

BWXT NEC's Public Information and Disclosure Program (PIDP) document has been developed in accordance with CNSC REGDOC-3.2.1, "Public Information and Disclosure."

The objectives of our program are to:

- Improve the level of awareness and understanding among community members about our licensed operations and activities.
- Provide information on the anticipated effects to the environment and on human health and safety, of the licensed activity to the community.
- Foster dialogue with the community to assist our team in determining the information needs and preferred methods for information sharing.
- Build and maintain a relationship of trust with the community.
- Provide meaningful opportunities for the community to discuss and share issues and relay concerns related to our facilities.
- Provide opportunities for community members and other interested parties to visit and tour our facilities.

Over the course of 2021-2025, a number of improvements were made to the Public Information & Disclosure Program:

- Hired a Communications Specialist to support the program with a focus on the Toronto facility.
- Held more in-person meetings, tours and events to allow for increased two-way dialogue and feedback.
- Increased efforts and outreach to expand the Toronto Community Liaison Committee, this is still ongoing.
- Improved attendance at CLC meetings and collected focused feedback throughout the year specific to emergencies, drills, community surveying, and communications tools.
- Created a dedicated Facebook Group to allow for specific community-focused content sharing and engagement.
- Increased the use of targeted social media advertisements to reach a larger audience.
- Created a virtual tour of the Toronto pellet manufacturing process and shared publicly.
- Improved Indigenous Relations program across BWXT in Canada. More engagement with Indigenous communities (meeting held with Mississaugas of the Credit First Nation).
- Improved community volunteerism and financial support.
- Continuously reviewed and improved public website, updated throughout based on public feedback, questions, comments, and concerns.
- Improved public communications materials to include more two-way information sharing (i.e., inclusion of answers to common questions community members frequently ask about drills).
- Added additional environmental monitoring data reports to the website, focused on emission types and points, concentrations and licence release limits.
- Increased engagement with real estate associations and developers in close proximity to the facility.
- Added banners along the fence line to advertise more about what BWXT NEC does in Toronto and how to connect with the team.

- Expanded media engagement and outreach to ensure contacts information is available and stories about BWXT NEC are accurate and informative.
- Improved feedback process to ensure all input from community members is collected, tracked, and actioned to completion.

The following subsections provide more information about BWXT NEC's public engagement initiatives throughout 2021-2025.

4.1.1 Employee/Internal Communications

BWXT NEC uses a variety of means to engage its ~40 employees in Toronto. The company uses the employee portal (intranet), electronic bulletin boards, email alerts and printed communications to issue company news, executive blogs, and general business updates. Open communication is important to BWXT's leadership team, and employees are encouraged to contact leadership throughout the year with questions.

4.1.2 Government Stakeholders

BWXT NEC recognizes the importance of building and maintaining relationships with all levels of government in the communities in which it operates and proactively seeks to engage local elected officials to ensure representatives are aware of BWXT NEC's operating activities in Toronto.

BWXT NEC hosted several community leaders at the Toronto facility between 2021-2025, and shared monthly electronic updates with these representatives.

- In 2021, no facility tours were conducted with elected officials in Toronto due to the pandemic. Virtual meetings were held with MPP Stiles and the Councillor Bailao. In 2021, BWXT NEC responded to a phone call from the office of MP Dzerowicz and sent a re-election congratulatory letter with an offer to meet.
- In 2022, no facility tours were conducted with elected officials in Toronto due to the long-term impact of the pandemic. BWXT NEC contacted the office of MP Dzerowicz and sent a re-election congratulatory letter with an offer to meet.
- In 2023, no facility tours or meetings were conducted with elected officials in Toronto.
- In 2024, offers to meet were extended to Councillor Bravo, MP Dzerowicz and MPP Stiles, however no meetings or tours were conducted.
- In 2025, BWXT NEC issued a re-election congratulatory letter to MP Dzerowicz along with an offer to meet. A meeting was held at the Toronto facility with MP Dzerowicz. Meeting offers were extended to MPP Stiles and Councillor Bravo, however no meetings or tours were conducted.

BWXT NEC will continue to keep elected officials informed of updates and will continue to work to meet with these community stakeholders.

4.1.3 Indigenous Relations

BWXT in Canada (which includes BWXT NEC) joined the Canadian Council for Indigenous Business (CCIB) in 2017 and is committed to building and sustaining positive relationships with Indigenous communities. BWXT is participating in the CCIB's Partnership Accreditation in Indigenous Relations (PAIR) certification program and is currently PAIR-Committed. BWXT Canada has a public commitment and policy and an internal Indigenous Relations Committee that meets regularly to

review objectives outlined in the PAIR criteria as the company works to find ways to increase Indigenous cultural awareness and strengthen its ties with Indigenous communities. In July 2024, BWXT introduced an Indigenous Relations Roadmap for the company's operations in Canada. The Indigenous Relations Roadmap is a leadership guide to advancing Indigenous Truth and Reconciliation across the business in an aligned and meaningful way. In September 2024 BWXT's Indigenous Relations Roadmap Oversight Committee was established to oversee the implementation of the Indigenous Relations Roadmap. More information about BWXT's Roadmap can be found on BWXT NEC's website.

Between 2021-2025, BWXT NEC made efforts to engage with Mississaugas of the Credit First Nation and Toronto York Region Métis Council.

- In 2021, BWXT NEC shared information via email and sent a letter with an offer to meet. BWXT NEC sponsored the Métis Nation of Ontario's Annual General Assembly.
- In 2022, BWXT NEC shared information via email and sent a letter with an offer to meet. BWXT NEC sponsored the Métis Nation of Ontario's Annual General Assembly.
- In 2023, BWXT NEC shared information via email. BWXT NEC sponsored the Métis Nation of Ontario's Annual General Assembly.
- In 2024, BWXT NEC shared information via email and sent a letter with an offer to meet. In July, letters with an offer to meet. Chief Sault and Councillor Sault from Mississaugas of the Credit First Nation visited the Toronto facility for an introductory meeting and tour in September. Chief Sault provided feedback on BWXT NEC's Land Acknowledgement and noted interest in business development opportunities. In October, members from Wabigoon Lake Ojibway Nation visited the Toronto facility for an overview and tour, in collaboration with Nuclear Waste Management Organization. BWXT NEC sponsored the Métis Nation of Ontario's Annual General Assembly.
- In 2025, BWXT NEC shared information via email and sent a letter with an offer to meet.

BWXT NEC looks forward to continuing to engage with and find opportunities to support Mississaugas of the Credit First Nation and Toronto York Region Métis Council.

4.1.4 Community Relations

BWXT NEC is committed to timely and transparent communication with the Toronto community and works to ensure there is open, two-way communication and awareness of BWXT NEC's operating activities. Throughout 2021-2025, BWXT NEC utilized a variety of communication channels to provide information to neighbours, including electronic email updates (which includes any interested member of the public), fence banners, newsletters, mailers, social media and targeted advertisements. Community members can sign up to join BWXT NEC's email updates anytime by contacting the company at questions@bwxt.com or by submitting their info by clicking to our online form.

4.1.4.1 Tours & Presentations

BWXT NEC recognizes the importance of building and maintaining relationships with the community in Toronto. At community events, visitors can sign-up to be added to BWXT NEC's contact list to receive updates throughout the year and to indicate interest in a tour.

Facility tours and presentations help community members better understand our business and provide opportunities for in-person discussion and feedback. To additionally allow community

members to see our operations, a virtual tour of the fuel pellet manufacturing was released in 2025 and can be found on BWXT NEC's website and YouTube.

Throughout 2021-2025, BWXT NEC engaged with many community members, groups and organizations, with the primary purpose of sharing information and addressing concerns.

- In 2021 and 2022, facility tours were on hold due to the pandemic. Community webinars were held each year to provide an opportunity for community members to learn about BWXT NEC and engage with their questions.
- In 2023, there were no facility tours held. A community webinar was conducted as well as a community barbeque to provide an opportunity for community members to learn about BWXT NEC and engage with their questions.
- In 2024, three facility tours were held (Community Liaison Committee, Mississaugas of the Credit First Nation, Wabigoon Lake Ojibway Nation with Nuclear Waste Management Organization). A community information event was conducted to provide an opportunity for community members to learn about BWXT NEC and engage with their questions.
- In 2025, four facility tours were held (Community Liaison Committee, Women in Nuclear Canada, North American Young Generation in Nuclear (NAYGN) York University Chapter, community members). A tour was scheduled with MP Dzerowicz, however due to time commitments she was not able to stay for the tour. The community member tour was a new addition in 2025 and was offered to all subscribers of BWXT NEC's Toronto email list. Three community members attended the tour.

4.1.4.2 Community Events

BWXT NEC hosts and attends community events as they create a platform for the exchange of information between the company and community members. These events help to build positive relationships within the community and demonstrate transparency and openness to discussion.

Senior leaders and department experts attend our community events and provide information about BWXT NEC's operations, safety, licensing, community outreach and more. At our events, we ensure we have a variety of information materials, visuals and takeaways for community members to ensure information is readily available. Visitors are encouraged to sign up to join BWXT NEC's email contact list and indicate their interest in a tour.

- In 2021 and 2022, due to the pandemic, community webinars were held in lieu of our traditional in-person event format. The 2021 live webinar saw 27 participants and the 2022 live webinar saw 13 participants. BWXT NEC representatives answered questions for over 30 minutes on both the 2021 and 2022 webinars and throughout each event, viewers could submit their questions in the comment section and BWXT NEC would address these questions live in the video feed.
- In 2023, an in-person community barbeque was held in Toronto and attracted over 150 community members. Additionally, a webinar was held. The 2023 live webinar saw 11 participants. BWXT NEC representatives answered questions for over 30 minutes. Viewers could submit their questions in the comment section and BWXT NEC would address these questions live in the video feed. Recordings from the 2021, 2022 and 2023 webinars can be found on BWXT NEC's website.

- In 2024, a Community Information Event was held at the Toronto facility. Approximately 20 community members attended the event. Students from Western Technical-Commercial School's FIRST Robotics team joined the event to showcase their robot, Franzen.
- In 2025, two in-person community events were held at the Toronto facility. Approximately 27 community members attended the first event, and seven community members attended the second event.

BWXT NEC issues invitations to community events through a multipronged approach that includes mailers, social media advertisements, website news, and email invitations to subscribers.

Throughout 2021-2025, the majority of questions that were posed during these events focused on uranium, waste management, climate change, environmental monitoring, radiation detection and protection, community support and communication, and job opportunities.

4.1.4.3 Community Newsletters, Email Updates, Postcard Mailers and Brochures

Community Newsletters: BWXT NEC distributes community newsletters as a tool to share information with the local Toronto community about the company's operations, environmental monitoring, CNSC licence, events, and activities in the community. Community newsletters are mailed to neighbours in the surrounding community, posted on BWXT NEC's website for download, shared on social media, and emailed to subscribers. Three newsletters were mailed to the Toronto community each year in 2021 and 2022, and two newsletters were mailed in 2023. In 2024, BWXT NEC expanded the newsletter format to include more information. With this expanded format, two newsletters were issued each year in 2024 and 2025. Each newsletter is mailed to approximately 6,500 neighbours in Toronto, a key improvement from the previous licensing period. The 2024 Fall/Winter newsletter was not mailed due to the Canada Post strike. To ensure community members were provided the newsletter, BWXT NEC placed a targeted social media advertisement which obtained over 10,600 views. From 2021-2024 the Toronto newsletter was translated to Portuguese and made available on BWXT NEC's website. In 2025, BWXT NEC made the decision to stop translation due to the lack of downloads. Newsletter content is developed from community feedback, questions and concerns, CLC feedback and suggestions, noteworthy news about BWXT NEC's environmental monitoring, licensing, community engagement and more. Each newsletter includes contact information and an overview of BWXT NEC's Toronto operations.

Email Updates: BWXT NEC sends regular email updates to subscribers as another tool to share information and engage with the community. At the end of 2020, BWXT NEC began using Constant Contact for sharing email updates. This platform allowed for more formal looking information sharing, contact tracking and management, link clicks and downloads, and provides the ability to use other tools like built in surveying. The platform is also easy for new subscribers to join. The Toronto contact list currently has approximately 100 subscribers and this list has grown over time since beginning in 2020. Community members can sign up to join BWXT NEC's email updates anytime by contacting the company at questions@bwxt.com, signing up on our website, or by submitting their information to our contact form. Topics in email updates include environmental monitoring, information about uranium and radiation, corporate giving and volunteerism, community event and tour invitations, links to learn more, Indigenous relations progress, regulatory dates and news, Community Liaison Committee recruitment, community survey details, newsletters, and more. On average, approximately 11 email updates were issued each year in 2021-2025 to Toronto community members. Each message included an introductory note from one of the key Public Information & Disclosure Program contacts and contains contact information and details about BWXT NEC.

Postcard Mailers: BWXT NEC primarily uses mailed postcards as an additional outreach method to invite community members to participate in an event or share information on a specific topic such as Community Liaison Committee, advanced notice of drills, and community surveying. On average, two mailers are issued to the Toronto community each year. The distribution is the same as our community newsletters and information that is included in a mailer is also posted on BWXT NEC's website and social media.

Information Brochures: BWXT NEC maintains public information brochures which are updated annually when new information is available from the Annual Compliance Report. These brochures are available in during events and are also posted on BWXT NEC's website. Brochures are available at the guardhouse along Brandon Avenue.

4.1.4.4 Community Volunteerism & Investment

BWXT NEC believes in fostering healthy and vibrant communities. Through our initiative, BWXT Volunteer Strong, our employees have the opportunity to help build stronger communities where they live and work by volunteering their time and expertise to local causes.

- In 2021, employees contributed to a spring fundraiser for Oasis Dufferin Community Centre and an employee volunteered at the Bruce Power/Region of Peel Vaccination Hub in Brampton.
- In 2022, employees contributed to a spring fundraiser for Oasis Dufferin Community Centre and participated in a walk in support of Oasis Dufferin Community Centre during the Coldest Night of the Year event in February.
- In 2023, employees volunteered for the company's Toronto community barbeque, helping to plan and execute the event.
- In 2024, employees volunteered at Oasis Dufferin Community Centre, helping to prepare the food bank.
- In 2025, employees volunteered at Oasis Dufferin Community Centre, helping to prepare the food bank. Employees also attended two of Western Technical-Commercial School's FIRST Robotics competitions.

In addition to providing volunteer hours, BWXT NEC supports a range of community-based groups/initiatives that help improve community life through charitable giving:

- In 2021, 2022 and 2023, funding was provided to Western Technical-Commercial School for their FIRST Robotics Program and for bursary awards for students continuing education in STEM fields. BWXT NEC also made charitable contributions to the Davenport-Perth Neighbourhood and Community Health Centre, Ontario Tech University for student awards, and Oasis Dufferin Community Centre.
- In 2024, funding was provided to Western Technical-Commercial School for their FIRST Robotics Program and for bursary awards for students continuing education in STEM fields. BWXT NEC also made charitable contributions to Pauline Junior Public School to assist with funding for STEM technology, Davenport-Perth Neighbourhood and Community Health Centre for healthy meals and snacks for community members, Ontario Tech University for student awards, and Oasis Dufferin Community Centre for toiletry products for the community.

- In 2025, funding was provided to Western Technical-Commercial School for their FIRST Robotics Program and for bursary awards for students continuing education in STEM fields, Oasis Dufferin Community Centre for toiletry products for the community, Ontario Tech University for student awards, and Spinal Cord Injury Ontario for their community programs.

4.1.5 Toronto Community Liaison Committee (CLC)

The Toronto CLC was established in 2013 and meets three to four times per year in the evening. The CLC is a forum for the exchange of information between the community and BWXT NEC and allows members to bring forward questions, discuss concerns and identify opportunities to improve community relations. CLC members provide input on topics to highlight in newsletters and communications, event planning, website updates, community initiatives and more. Their input is valuable in guiding communications efforts with community members. BWXT NEC ensures that representatives from senior leadership as well as subject matter experts attend each regular meeting.

Upon joining the CLC, each member is provided an orientation session and tour (note that tours did not occur during the pandemic). The CLC also has a Terms of Reference which each member agrees to upon their acceptance of their membership. This document is reviewed annually and updated when required with input from CLC members. The Terms of Reference provides guidance on the structure and purpose of the CLC, along with conduct and length of membership and renewal. At the end of each year, CLC members are asked to provide feedback via a survey form. Input provided through this form is discussed at the year-end review meeting. This allows CLC members to provide anonymous feedback and suggestions to the company. In 2021 the role of a CLC Member Co-Chair was implemented to ensure CLC members could have more opportunity to collaborate on agenda topics and submit anonymous suggestions on behalf of the CLC. Since implementation, this Co-Chair role has been occasionally filled when a CLC member is interested. BWXT NEC continues to offer the position to CLC members, however we have found the CLC to be quite open and honest with their feedback and suggestions even without this role.

- In 2021, the CLC had a membership of twelve members (including representatives from Lake Ontario Waterkeeper, Toronto Police Service and Davenport Perth Neighbourhood Community Health Centre). One member left the CLC mid-year due to location change and two members were participating in their final year on the CLC, bringing the total membership to eleven members in 2021. During the year, CLC members provided feedback on website content, guest speakers, social media connections, monitoring data, community engagement and Indigenous cultural awareness training. BWXT NEC launched a recruitment campaign in the fall of 2021 to attract new members. Letters requesting members were sent to the following organizations: DIG-IN, Davenport Neighbourhood Association, Davenport Perth Neighbourhood Community Health Centre, Foundry Lofts, Toronto Fire Services, Toronto Police Services, and Toronto Public Health. Four applications were received and three were accepted upon review.
- In 2022, the CLC had a membership of twelve members (including representatives Lake Ontario Waterkeeper, Toronto Police Service and Davenport Perth Neighbourhood Community Health Centre). BWXT NEC coordinated a workshop with the Canadian Centre for Science Communications early in 2022 of which three CLC members attended. The purpose of this workshop was to learn more about how to effectively communicate science information to the general public. BWXT took a number of actions during the workshop to make improvements to website content and communications materials, all of which were implemented. During the year, CLC members provided feedback on website content, student outreach, guest speakers, community engagement and social media advertisements. BWXT NEC launched a recruitment campaign in the fall of 2022 to attract new members. Letters

requesting members were sent to the following organizations: Dupont Lofts, Foundry Lofts, Métis Nation of Ontario Toronto & York Region 8 Métis Council, and Mississaugas of the Credit First Nation. No applications were received for the 2023 CLC.

- In 2023, the CLC had a membership of four members (including a representative from Toronto Police Service). The reason for the lower number in membership was due to CLC members terms ending and previous CLC members deciding to not continue as members. During the year, CLC members provided feedback on the community growth, sharing information about radiation, community events and community leader engagement. BWXT NEC launched a recruitment campaign in the fall of 2023 to attract new members to the CLC. One application was received and accepted upon review.
- In 2024, the CLC had a membership of four members (including a representative from Toronto Police Service). During the year, CLC members provided feedback on community engagement and events, Indigenous engagement, environmental monitoring and materials for community events. BWXT NEC launched a recruitment campaign in the fall of 2024 that aimed to attract new members to the CLC. Letters requesting members were sent to the following organizations: Bloor Improvement Group, DIG-IN, Davenport Neighbourhood Association, Davenport Perth Neighbourhood Community Health Centre, First Portuguese Canadian Cultural Centre, Forest Hill Real Estate, Foundry Lofts, Toronto Fire Services, and Toronto Public Health. One application was received during the Community Information event in November and this applicant was accepted upon review.
- In 2025, the CLC had a membership of five members (including a representative from Toronto Police Service). During the year, CLC members provided feedback on drill communications, event opportunities in the community, community engagement ideas, virtual tour, guest speakers, community surveying, and website content. Letters requesting members were sent to the following organizations: Bloor Improvement Group, Bloor West Village BIA, Bloor West Village Residents Association, Bloordale Village BIA, Daveport Neighbourhood Association, Davenport Perth Neighbourhood Community Health Centre, Forest Hill Real Estate, Foundry Lofts, First Portuguese Canadian Cultural Centre, Friends of West Toronto Rail Path, George Chuval Neighbourhood Centre, Junction Triangle Community Action Network, Junction BIA, Junction Residents Association, Little Portugal BIA, Native Canadian Centre of Toronto, Project Neutral, Regal Heights Village BIA, Toronto Fire Services, and Toronto Public Health. Four applications were received and three were accepted upon review. One of the accepted members has been unresponsive to email and phone outreach.

Guest speakers are occasionally invited to CLC meetings to provide additional information on specific topics of interest. The CLC provides input on guest speakers and topics for discussion. Between 2021-2025, the following guest speakers attended CLC meetings: Canadian Nuclear Safety Commission, Arcadis, Canadian Nuclear Association, Nuclear Waste Management Organization, and Creative Fire.

CLC meeting records are taken during meetings and shared with CLC members for review. The final copies are posted on BWXT NEC's website.

BWXT NEC proactively recruits for new CLC members on an annual basis in the fall and promotes recruitment through a variety of channels such as, community newsletters, website, social media, postcard mailers and fence banners. CLC applications are available at the fall/winter events and CLC members are encouraged to share with their networks to encourage new members to join. Specific organizations and groups are invited to join the CLC via letter invitation. Although the CLC in Toronto has declined in membership since 2021, we are continuing to see active engagement and

feedback from the smaller group. We will however continue to engage with community to expand to include more members and representatives from key community organizations.

4.1.6 Website

BWXT NEC has a dedicated public information website, nec.bwxt.com. The website provides information about the company's operations, safety and compliance, environmental monitoring, Public Disclosure Protocol, community outreach, Indigenous engagement, and events/activities that can be accessed by members of the public.

BWXT NEC continues to see increased engagement on the website and has made significant upgrades throughout 2021-2025. Throughout each year information is updated to ensure the website remains relevant and current. As feedback is received, improvements are made to address questions and concerns from community members.

In 2022, BWXT NEC held a workshop with CLC members and the Canadian Centre for Science Communications. The purpose of this workshop was to learn more about how to effectively communicate science information to the general public. As a result of the workshop, BWXT NEC took a number of actions to make improvements to website content and communications materials (include more safety messaging and supporting information, improve website language to be more user friendly, add more photos of employees with the products we manufacture, simplify tables and add more information about emissions). All of these actions were implemented that year.

In 2025, BWXT's Brand and Marketing team completed an upgrade to the company websites. The nec.bwxt.com site was part of this upgrade, and the overall website was re-branded and updated to a new platform. The website remained similar in navigation and information and provided an opportunity to leverage feedback on the new content. BWXT NEC held a website feedback session with CLC members where each member was asked to review the new webpages and content and provide suggestions for improvement. CLC members noted that their overall impression of the website and quality of content was excellent and highlighted that the website was easy to navigate. Each member also rated each subpage as very effective. One CLC member noted that the BWXT corporate website popped up for them upon internet search and suggested BWXT NEC include more links from that site to the dedicated nec.bwxt.com site. BWXT NEC confirmed that the link is available on the corporate site and noted that the company heavily advertises the dedicated website to ensure community members land on the right page. Another CLC member noted that the website is very informative and shared they could have spent hours navigating through all the content.

4.1.7 Public Inquiries & Opinion

BWXT NEC utilizes multiple avenues for communication with members of the public. BWXT NEC has a dedicated website (nec.bwxt.com), email (questions@bwxt.com) and toll-free telephone number (1.855.696.9588). These contact details appear on BWXT NEC's website and on all information products. The phone and email are available 24/7 and monitored daily. All public inquiries are responded to in a timely manner and logged and actions are tracked to completion.

Feedback and questions from the public are solicited to understand current public opinion. Feedback is collected through a variety of methods, such as through meetings, tours, phone calls, emails, social media comments, public events, volunteer initiatives, CLC members, employees and occasionally opinions are printed in local media and members of the public are interviewed in local stories. We utilize feedback to measure the effectiveness of our program.

Between January 1, 2021, and December 31, 2025, many emails and phone calls were received to BWXT NEC's public channels. Majority of these messages were spam, questions for finance or

purchasing, community giving inquiries, job seekers, and agencies seeking employment verifications. All emails and calls to the information line were appropriately handled and addressed.

- In 2021, BWXT NEC received 682 emails and 181 calls. Six emails were received from community members. One was a congratulatory note about the licence renewal, one was a question about argon and the hydrogen tank, one was a request for the Emission Summary and Dispersion Modelling tables for both facilities, one was a request for information on water testing, one was a request to park a school bus on-site, and the final email was a request for a tour.
- In 2022, BWXT NEC received 1473 emails and 113 calls. Three emails were received from community members. One was a complaint from a neighbour who thought BWXT NEC was moving into the facility and did not understand the company had been operating there for over 60 years, one was a question if the Toronto plant was still operating and at what capacity, and one was questions about radiation and proximity to the community. One phone call was received by a community member asking if BWXT NEC sells CANDU reactors.
- In 2023, BWXT NEC received 1503 emails and 228 calls. Three emails were received from community members. One was a question about radiation dose reported in the ACR, and the other two were questions about garbage pick up around the property fence line. One phone call was received from a community member who received BWXT NEC's drill mailer, asking about noise levels during the drill.
- In 2024, BWXT NEC received 1573 emails and 251 calls. One email was received from a professor expressing interest in a tour. Three calls were received from community members on the following topics: property questions from a real estate agent, questions from a community member looking to move in the neighbourhood, and a question for a neighbour about our community event in November.
- In 2025, BWXT NEC received 1047 emails and 227 calls. Two emails were received from community members interest in a tour.

BWXT NEC continues to encourage community members to use these channels to contact our team with questions, comments, and concerns.

4.1.8 Community Surveying

BWXT NEC conducts community surveys to obtain feedback from community members, including strengths and key areas for improvement. BWXT NEC's first survey was organized in 2018 by Ipsos, an independent research firm. This survey provided BWXT NEC with baseline community feedback shortly after the acquisition of the company in December 2016. Subsequent surveys were conducted in 2020, 2022 and 2024 and survey results were shared publicly through BWXT NEC's communications channels. Copies of survey results are available on BWXT NEC's website.

The objectives of surveys are as follows:

- Gain awareness, knowledge and familiarity of BWXT operations in the local community.
- Gauge impressions of BWXT as an organization, including attention to safety, community engagement, job creation, and more.
- Identify recall and awareness of BWXT communications in the community, if these have been made available to residents.

Survey methodology changed in 2024 when BWXT NEC removed the phone survey aspect, which was recommended by Ipsos, due to lack of landlines available for reach. The 2024 survey saw the highest participant response, but many were not as familiar due to an increase in targeted social media outreach, making it difficult to compare 2024 data to previous years.

In 2025, BWXT NEC discussed the topic of community surveying with CLC members to review previous survey results, obtain feedback, and determine the most effective path forward. It was suggested that BWXT NEC conduct surveying again, but perhaps in a different setting like a focus group. The CLC also suggested that BWXT NEC use more specific questions to ensure the responses can be actioned to make real improvements to community engagement. Another suggestion was to survey throughout the year through the website, social media channels and email updates. BWXT NEC is in the process of planning multiple focus groups with an independent research firm in early 2026. Details from these engagement sessions will be shared publicly when available.

4.1.9 Earned Media

BWXT NEC aims to respond to media inquiries in a timely manner provides the media with access to subject matter experts and facility tours when appropriate. Media events, press conferences and news releases are executed when required, and news releases are posted to the BWXT NEC website.

Print, broadcast and online (digital/social media) media coverage is closely monitored for stories about BWXT NEC on an ongoing basis. The purpose is to stay cognizant of any information about the company in near real time while measuring the amount and nature of media coverage. This permits BWXT NEC to be prepared to respond to any inquiries either internally or externally and helps BWXT NEC ascertain the prevailing attitudes of the public towards the operations.

Between January 1, 2021, and December 31, 2025, BWXT NEC's Toronto facility was mentioned four times in the media.

- In 2021, BWXT NEC was mentioned in an article in the West End Phoenix. The article tone was negative and reflected concerns from community members on fuel pellet manufacturing, Canadian Nuclear Safety Commission, and Nuclear Waste Management Organization.
- In 2022 and 2023, there was no mention of BWXT NEC in any Toronto media.
- In 2024, BWXT NEC was mentioned in an article in Battlefords Now. The article tone was neutral and focused on the timing of the uranium workers study at the University of Saskatchewan.
- In 2025, BWXT NEC was mentioned in an article in Junction Spin. The article tone was neutral and focused on operations in Toronto and an upcoming community information event. BWXT NEC also hosted The Globe and Mail for a media interview and an article was posted shortly after. The article tone was neutral and focused on the specific process in Toronto.

4.1.10 Social Media

In 2020, BWXT NEC launched dedicated Facebook and X social media channels to better engage with community members. Social media channels help BWXT NEC share information about activities with the public in a timely way. In 2024, BWXT's corporate division consolidated BWXT NEC's Facebook and X accounts to be inclusive of all BWXT's operations in Canada and provide communities with a greater understanding of the business. To pivot with this change, BWXT NEC began utilizing targeted social media advertising to share information with the community around the

facility. In 2025, the Canada accounts were consolidated into BWXT's corporate account. To continue to pivot, BWXT NEC launched a dedicated Facebook Group in 2025. The purpose of this group is to share news with community members and provide an additional channel for two-way communication and feedback. BWXT NEC continues to work to expand the audience of this Facebook Group and encourage community members to join.

Targeted advertisements have become a reliable, impactful tool for BWXT NEC. Through these advertisements, BWXT NEC can reach specific audiences and locations and track views, comments, link clicks and other engagements. The majority of the advertisements have comments and feedback which are logged and dispositioned by BWXT NEC. On average, BWXT NEC's targeted advertisements in Toronto reach 14,050 community members with 150 link clicks – a much larger distribution compared to traditional paper mail. During situations where paper mail is not available (i.e., Canada Post strike), targeted advertisements are increased to reach a larger audience.

- In 2021, one targeted Facebook advertisement was used to share information about the community webinar.
- In 2022, one targeted Facebook advertisement was used to share information about the annual drill.
- In 2023, three targeted Facebook advertisements were used to share information about the community barbeque, community webinar, and Community Liaison Committee.
- In 2024, five targeted Facebook advertisements were used to share information about the annual drill, community event, community survey, Community Liaison Committee, and community newsletter.
- In 2025, six targeted Facebook advertisements were used to share information about the new Facebook Group, two community events, annual drill, Community Liaison Committee, and one was used to encourage community members to subscribe to BWXT NEC's email updates.

4.1.11 Public Disclosure Protocol

BWXT NEC has a Public Disclosure Protocol in place that sets guidelines for providing timely information to interested members of the public and other stakeholders. This protocol and all public disclosures issued by BWXT NEC can be found on the company website. This protocol's objectives are to provide information on licensed activities to persons living near the site, foster public awareness and provide a forum for community members to discuss issues and concerns related to the licensed facilities. The Public Disclosure Protocol is readily available for download as a PDF on BWXT NEC's website.

Based on this protocol, BWXT NEC commits to:

- Maintaining two-way communication channels with the target audience to better understand and address comments, questions and concerns;
- Providing reporting on its website within 48 hours of unusual operational events that have the potential for offsite consequences or which many be of interest to the target audience;
- Providing timely reporting via its website on environmental events that trigger notification of the CNSC under Section 29 of the General Nuclear Safety and Control Regulations;

- Providing information to the target audience through BWXT NEC's website and/or other Public Information Program activities about significant operational changes or expansions that require an environmental assessment or amendments to our facility licence;
- Posting environmental monitoring results (relevant sections of Annual Compliance Reports) on its website;
- Consulting with stakeholders to determine the type of information, and method for information sharing regarding this Public Disclosure Protocol;
- Posting this Public Disclosure Protocol on the BWXT NEC website.

The following Public Disclosures were made between January 1, 2021, and December 31, 2025:

- February 19, 2021 – Fire alarm was accidentally activated during maintenance on a compressor, resulting in response from Toronto Fire Services. No health or safety risk to the public, environment or employees.
- March 26, 2021 – Notice to community that a construction contractor would be performing work in front of the facility to install a sewer sampling port for use by the City of Toronto.
- December 30, 2022 – Sprinkler alarm system activated in the warehouse building, resulting in response from Toronto Fire Services. There was no fire, but two sprinkler heads were activated, resulting in regular sprinkler water entering the storm sewer system. Water samples were taken and the results demonstrated there was no impact to the health and safety of the public, environment or employees.
- June 29, 2023 – Toronto Fire Services responded to an offsite fire at the CP rail property beside the facility and accessed the area via BWXT's parking lot. The fire was extinguished and was not related to BWXT's operations.
- November 4, 2024 – Fire alarm was accidentally activated during maintenance on the alarm panel, resulting in response from Toronto Fire Services. No health or safety risk to the public, environment or employees.
- April 3, 2025 – Fire alarm was accidentally activated in the warehouse, resulting in response from Toronto Fire Services. No health or safety risk to the public, environment or employees.
- July 11, 2025 – Notice to community that a contractor would be removing and placing asphalt in the visitor parking lot and that river rock would be removed and replaced with asphalt. No health or safety risk to the public, environment or employees.
- December 18, 2025 – Notice to community that contractors would be on the site to install a new sprinkler valve on the exterior of the building. No health or safety risk to the public, environment or employees.

During a CNSC inspection in 2024, one Notice of Non-Compliance was raised, noting that BWXT NEC should add a contact for the program to the Public Disclosure webpage and a PDF of the protocol. The primary contact for the program was added to the webpage and PDF file that was previously on the website, closing out this action.

4.2 Cost Recovery

BWXT NEC is current on its cost recovery payments to the CNSC.

4.3 Financial Guarantees

The Preliminary Decommissioning Plan (PDP) and associated decommissioning cost estimates are in place in accordance with CNSC regulatory requirements and applicable standards. The 2023 Peterborough and Toronto facility PDPs were reviewed against the criteria set in CNSC REGDOC-2.11.2, *Decommissioning* (January 2021), CNSC REGDOC-3.3.1, *Financial Guarantees for the Decommissioning of Nuclear Facilities and Termination of Licensed Activities*(January 2021), and CSA Standard N294-19, *Decommissioning of Facilities Containing Nuclear Substances* (November 2019). The PDP strategy and end-state objective of decommissioning is to release the site from regulatory control for industrial use or demolition of the structures.

In November of 2022, BWXT NEC submitted an updated PDP to CNSC staff, which was revised in August of 2023 and was accepted by CNSC staff in October of 2023. In 2024, the CNSC Commission accepted the revised financial guarantee amount, and BWXT NEC put in place the required financial guarantee instruments to reflect these accepted amounts. The financial instruments remain valid in the format approved by the CNSC. The issuers of the financial guarantee instruments remain in good standing. The financial rating of the financial guarantee issuers were provided to the CNSC in March of 2025.

4.4 Improvement Plans and Future Outlook

BWXT NEC remains committed to continuously improve its EHS programs to improve efficiency and minimize risk to employees, the public and the environment. Facility operations are projected to be lower in 2026 due to the downtime for refurbishment of Pickering OPG's nuclear reactors.

5 CONCLUDING REMARKS

BWXT NEC Toronto continues to operate its licensed activities in a safe and compliant manner, consistent with regulatory requirements and the conditions of the site licence. Performance across all safety and control areas has remained effective throughout the current licence term.

Results from radiation protection and environmental monitoring programs confirm that worker doses and public exposures remain well below regulatory limits, and effluent releases continue to demonstrate strong control of licensed activities. Programs such as ALARA, Environmental Management, and Emergency Preparedness remain well-established and are subject to ongoing review and continuous improvement.

Since the start of the current licence period, BWXT NEC Toronto has implemented several enhancements to improve radiological controls, workplace safety, and environmental performance. These efforts demonstrate a strong commitment to the protection to workers, the public, and the environment.

Looking ahead, BWXT NEC Toronto will continue to focus on sustaining regulatory compliance, implementing process and infrastructure improvements, and supporting a strong nuclear safety culture though training, engagement, and continuous improvement initiatives.