



Nuclear Energy Canada Inc.

1025 Lansdowne Ave.
Toronto, Ontario Canada

ANNUAL COMPLIANCE MONITORING REPORT

January 1 to December 31
2025

The information contained in this report concerns the performance and operation of BWXT Nuclear Energy Canada Inc.'s (BWXT NEC) Class IB nuclear fuel facility located in Toronto Ontario. This report is prepared to meet fuel facility licence FFL-3621.00/2030 condition 3.2. The content demonstrates adherence to the BWXT NEC commitment to operate a safe Class IB nuclear fuel facility, as well as demonstrate compliance with applicable regulations and licence conditions specified by the Canadian Nuclear Safety Commission.

Revision	Description	Prepared by Date	Approved by Date
00	Initial Issue	EHS Team 2026-03-17	M. Duarte 2026-03-27

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1 EXECUTIVE SUMMARY

BWXT Nuclear Energy Canada Inc. (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. BWXT NEC's Toronto and Peterborough facilities are Class IB nuclear facility operations. The licence issued by the Canadian Nuclear Safety Commission (CNSC) authorizes BWXT NEC to operate and modify its nuclear fuel facility to produce natural and depleted uranium dioxide (UO₂) pellets in Toronto at 1025 Lansdowne Ave.

The purpose of this compliance report is to demonstrate that BWXT NEC Toronto has successfully met the requirements of the *Nuclear Safety and Control Act (NSCA)*, associated regulations and the Class IB Nuclear Fuel Facility Licence FFL-3621.00/2030 issued by the CNSC on January 1, 2021 and expiring on December 31, 2030. This report is prepared based on the CNSC's regulatory document REGDOC-3.1.2 *Reporting Requirements, Volume I: Non-Power Reactor Class I Nuclear Facilities and Uranium Mines and Mills*. Appendices containing confidential, proprietary, or prescribed information are submitted to the CNSC separately.

BWXT NEC is committed to continuously improving systems to protect employees, the environment, and our communities against environmental, health and safety hazards. We work to implement programs and objectives to conserve natural resources, prevent pollution and minimize waste. Maintaining a safe and healthy work environment for our employees is a top business priority. BWXT NEC has implemented a business management system that defines the requirements of the Quality Assurance (QA) program for the licensed activity, which ensures applicable buildings and facilities, process equipment, and processes used in support of licensed activities are conducted in accordance with the *Nuclear Safety Control Act*, associated regulations, applicable CNSC requirements, jurisdictional requirements, and best practices.

No significant operational changes occurred. Upgrades were made to programs with the objective of achieving continuous improvement and environmental health and safety excellence. Details are provided in the main sections of this report. Changes made to the physical facilities, equipment, processes, procedures, or practices that could impact employee health and safety, the environment, or the public as a result of the operation of the facility are assessed through the business-wide Change Control program.

BWXT NEC has established CNSC accepted Action Levels for various radiological and environmental parameters. An Action Level is defined in the *Radiation Protection Regulations* "as specific dose of radiation or other parameter that, if reached, may indicate a loss of control of part of a licensee's Radiation Protection Program, and triggers a requirement for specific action to be taken." Action Levels are also applied to environmental protection. Action Levels are facility-specific and set below regulatory limits; however, exceedances are CNSC reportable events. Accordingly, BWXT NEC has established Internal Control Levels for various radiological and environmental parameters that are set even lower than Action Levels to act as an early warning system. Internal Control Level exceedances result in internal investigation and correction and are not CNSC reportable events.

Employee workplace radiation exposures are measured by CNSC approved methods and systems. Overall, whole-body, skin, extremity and eye dose trends have remained steady over a five-year period. Dose reduction continues to remain a priority, with ongoing efforts towards shielding, material movement, improving ALARA awareness and Thermoluminescent Dosimeter (TLD) usage and storage compliance. All measured radiation exposures received by personnel in the reporting period were within regulatory limits, and Action Levels. There was one Internal Control Level exceedance in quarterly internal dose. This was investigated, the cause identified as hours worked, and corrective actions were initiated to prevent reoccurrence.

BWXT NEC has established conventional health and safety programs to manage the non-radiological workplace safety hazards to protect personnel. Key performance indicators are used to measure the success of the programs throughout the year. There were no lost time injuries during the reporting period.

BWXT NEC recognizes that an effective way of maintaining public trust is to maintain environmental excellence. This requires a demonstrated commitment to operating in accordance with the highest environment, health and safety standards. The facility maintains an effective environmental management system to achieve environmental goals and objectives and keep all environmental impacts well within applicable standards and as low as reasonably achievable. This program demonstrates compliance with relevant provincial and federal legislation. The environmental protection program is also compliant with the following standards:

- Canadian Standards Association (CSA) N288.6-12 (R2017), *Environmental risk assessments at Class I nuclear facilities and uranium mines and mills*
- CSA N288.5:22, *Effluent and emissions monitoring programs at nuclear facilities*
- CSA N288.4:19 (R2024), *Environmental monitoring programs at nuclear facilities and uranium mines and mills*

Air and water emissions are routinely measured to demonstrate compliance with the CNSC's environmental protection requirements and the principle of keeping radiation exposure As Low As Reasonably Achievable (ALARA). Annual releases were a very small fraction of regulatory limits, and all measurements were below Action Levels. Soil samples were taken surrounding the Toronto facility with all measurements within applicable guidelines.

An established emergency response plan is in place that describes the actions to be taken to minimize health, safety and environmental hazards to workers and local members of the public, which may result from fires, explosions, or the release of hazardous materials. The plan is intended to reduce the risk of emergencies such as fires and assist emergency staff and plant personnel in understanding key emergency response issues. The plan assists the facility in protecting employees, the local community and the environment through sound emergency management practices. The emergency response plan was developed in accordance with CNSC licence requirements. During the reporting period there was one reportable event related to a false fire alarm which triggered a response from Toronto Fire Services.

BWXT NEC has implemented and maintains a Safeguards Program and undertakes all required measures to ensure safeguards implementation in accordance with International Atomic Energy Agency (IAEA) commitments and CNSC regulatory document REGDOC-2.13.1 *Safeguards and Nuclear Material Accountancy*. Movement (inventory changes) of natural and depleted uranium are documented and reported to the CNSC as required. The IAEA and the CNSC jointly conduct annual verifications.

BWXT NEC safely transports dangerous goods, including Class 7 radioactive material shipments as governed by the *Transportation of Dangerous Goods Act and Regulations* and the *Packaging and Transport of Nuclear Substances Regulations*. Shipments occur routinely between suppliers and BWXT NEC's Toronto and Peterborough facilities, customers and waste vendors.

BWXT NEC places great importance on its relationships with Indigenous communities, government, and residents in the community and works to ensure there is open communication and awareness of BWXT NEC's operating activities. The Public Information and Disclosure Program defines the process for providing information about BWXT NEC operations and creating opportunities for two-way engagement and feedback. The Community Liaison Committee (CLC), whose mandate is to provide a forum for a cross-section of neighbours and other community stakeholders to share information and ideas, continued to meet regularly.



This compliance monitoring report demonstrates that BWXT NEC has successfully met the requirements of the *Nuclear Safety and Control Act (NSCA)*, associated regulations and CNSC Class IB Nuclear Fuel Facility Licence conditions.

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2 INTRODUCTION

The purpose of this compliance monitoring report is to demonstrate that BWXT NEC has successfully met the requirements of the *Nuclear Safety and Control Act (NSCA)*, associated regulations, and the Class IB Nuclear Fuel Facility Licence FFL-3621.00/2030 issued by the CNSC on January 1, 2021, and expiring on December 31, 2030. This report is prepared based on the CNSC's regulatory document REGDOC-3.1.2 *Reporting Requirements, Volume I: Non-Power Reactor Class I Nuclear Facilities and Uranium Mines and Mills*. Appendices containing confidential and proprietary information are submitted to the CNSC separately.

BWXT Nuclear Energy Canada Inc. (BWXT NEC) has been involved with the Canada Deuterium Uranium (CANDU®) industry from its earliest years. 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. BWXT NEC's Toronto and Peterborough facilities are Class IB nuclear facility operations. Nuclear substance use is regulated federally by the *Nuclear Safety and Control Act (NSCA)* and associated regulations through the CNSC.

The current CNSC operating Licence authorizes BWXT NEC to operate and modify its nuclear fuel facility located at 1025 Lansdowne Avenue, Toronto (Figure 1), BWXT NEC is licensed to produce fuel pellets from natural and depleted uranium dioxide.

The facility is located in a residential area with some industrial and commercial buildings in west-central Toronto (Figure 1). A number of high-rise apartment buildings and townhouses have been built immediately west of the facility and are set for occupancy 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 UO₂ powder into fuel pellets. Specifically, UO₂ 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 Figure 2 for the process.

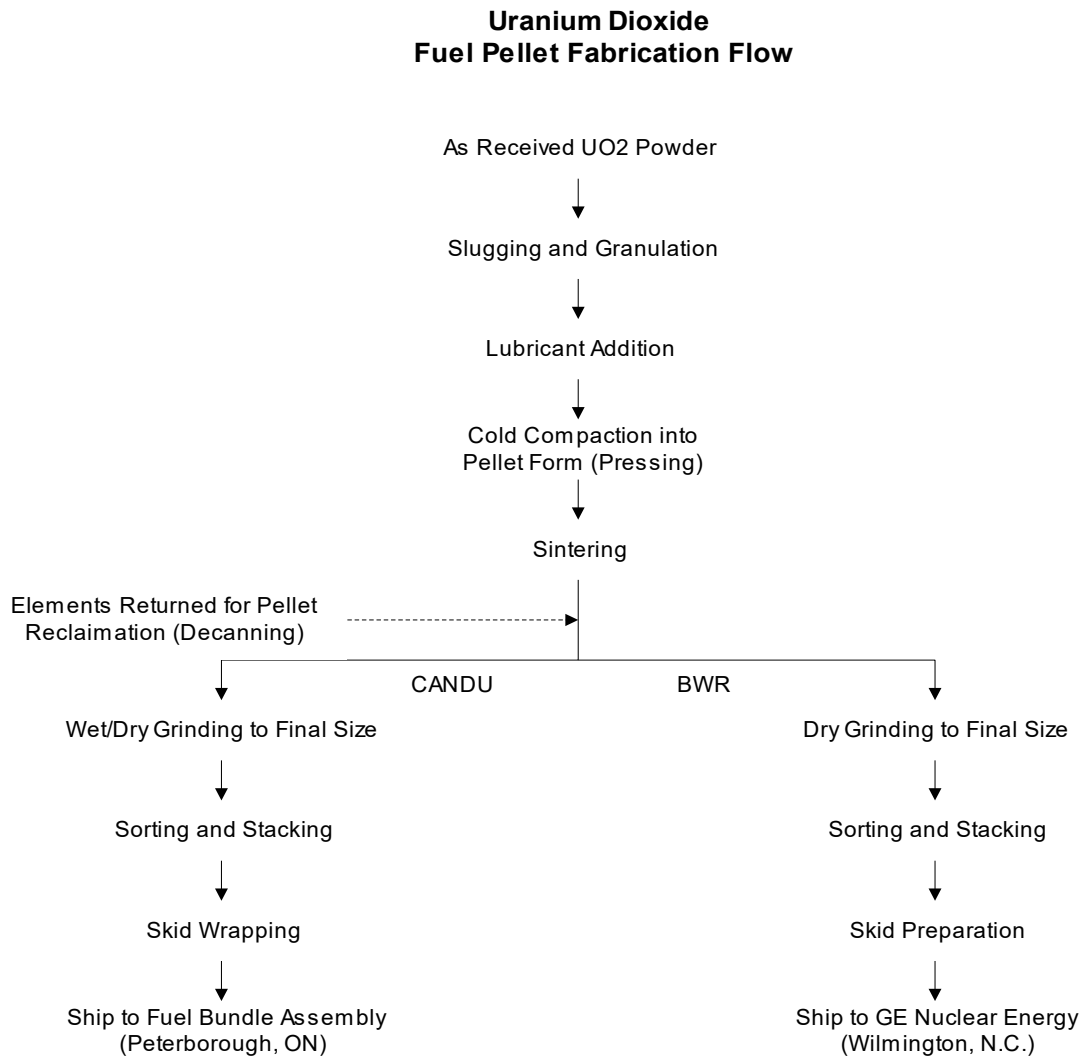


Figure 2: Uranium Fuel Pellet Manufacturing Process

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 facilities are also regulated federally by Transport Canada. BWXT NEC is additionally regulated environmentally through municipal sewer use bylaws and provincially by the Ontario Ministry of the Environment, Conservation and Parks (MECP).

BWXT NEC is committed to the establishment and continuous improvement of a healthy 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 potential radiological hazard from uranium at the facility is the inhalation of airborne UO₂ particles. A lesser potential radiological hazard exists in the form of low-level external gamma and beta radiation exposure to employees. Measurements are performed for airborne and surface traces of uranium as 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. All dose measurement results for employees were below regulatory limits and Action Levels.

Air and water emissions are routinely measured to demonstrate regulatory compliance and the ALARA principle. Annual releases were a small fraction of regulatory limits, and all measurements were below Action Levels.

Table 1 defines the acronyms used in this report.

Acronym	Definition
ACR	Annual Compliance Report
ALARA	As Low as Reasonably Achievable (social and economic factors considered)
ATS	Action Tracking System
BMS	Business Management System
BWR	Boiling Water Reactor
BWXT NEC	BWXT Nuclear Energy Canada Inc.
CANDU®	CANadian Deuterium Uranium
CCME	Canadian Council of Ministers of the Environment
CLC	Community Liaison Committee
CNSC	Canadian Nuclear Safety Commission
CSA	Canadian Standards Association

Acronym	Definition
CTS	Critical-to-Safety
DIV	Design Information Verification
dpm	Disintegrations per minute - unit of measure for radioactivity 1 dpm = 0.017 disintegrations per second/Becquerel
DRL	Derived Release Limit
EHS	Environment, Health and Safety
EMO	Emergency Management Organization
EMS	Environmental Management System
ERA	Environmental Risk Assessment
ERO	Emergency Response Organization
FHA	Fire Hazards Analysis
IAEA	International Atomic Energy Agency
IEMP	Independent Environmental Monitoring Program
LOTO	Lockout Tagout
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
NFCC	National Fire Code of Canada
OFI	Opportunity for Improvement
OPG	Ontario Power Generation
PAPR	Powered Air Purifying Respirator
PAIR	Partnership Accreditation in Indigenous Relations
PDP	Preliminary Decommissioning Plan
PIDP	Public Information and Disclosure Program
PIT	Physical Inventory Taking
PIV	Physical Inventory Verification
POI	Point of impingement
ppm	Parts per million

Acronym	Definition
SAT	Systematic Approach to Training
QA	Quality Assurance
SSC	Systems, structures and components
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
WHMIS	Workplace Hazardous Materials Information System
WSC	Workplace Safety Committee

Table 1: Definition of Acronyms

3 SAFETY AND CONTROL AREAS

3.1 Operating Performance

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

BWXT NEC has successfully implemented and maintained a program for safe operation of the facility and 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.

Over the reporting period, BWXT NEC 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. Related licensed activity audits and self-assessments are summarized in subsequent sections.

The 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. 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. Details are provided in subsequent sections of this report. There were no Action Level exceedances.

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.

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, 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, 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

All possession and processing limits, as specified in the CNSC facility Licence were met. Production data is proprietary and is provided separately to the CNSC in Appendix A.

Production shutdowns were scheduled periodically throughout the year for engineering projects, equipment maintenance, and continuous improvement. In the reporting period, there were five weeks of production shutdown, including one week in the first quarter, three weeks in the third quarter and one week in the fourth quarter.

3.1.2 Regulatory Inspections

Excluding safeguards related inspections, which are described in section 3.13 of this report, the CNSC completed two routine inspections during the reporting period.

1. An inspection was completed in May, focused on Environmental Protection. One non-conformance was issued, and one recommendation. These findings have been addressed and resulted in a review and update of boundary air monitoring action levels, and a minor documentation update.
2. An inspection was completed in November, focused on safety analysis and fitness for service. One recommendation was issued, involving a document review to ensure compliance with CNSC REGDOC-2.4.4.

In addition,

1. Transport Canada completed an inspection in January, concerning Hazardous Materials Transportation. No non-compliances or recommendations were made.

2. The City of Toronto completed an inspection concerning water effluent in December. No non-compliances or recommendations were made.

All corrective and preventive actions related to non-compliances are submitted to the regulator and tracked to closure.

3.2 Management System

The "Management System" Safety and Control Area covers 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 safety culture.

The management system defines the requirements of the quality assurance program for the licensed activity, which ensures applicable buildings and facilities, process equipment, and processes used in support of licensed activities, are conducted in accordance with the Nuclear Safety Control Act and associated regulations, applicable CNSC requirements, jurisdictional requirements, and best practices. A graded approach is used in the application of the management system program elements, such that the requirements are applied in a manner commensurate with the safety significance of the licensed activity, system, component, or structure.

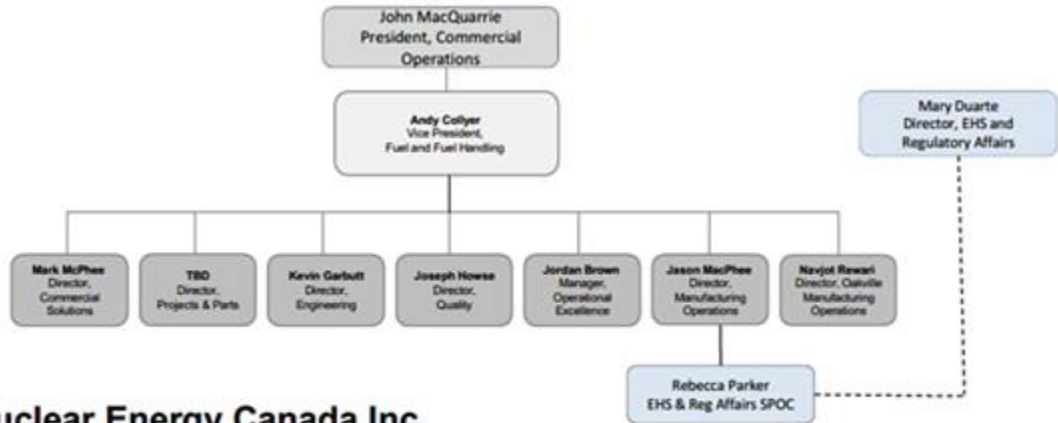
The management system is comprised of the following core program elements:

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

The President of BWXT NEC is responsible for all activities within BWXT NEC. Operations and the various functional groups, such as Environment Health and Safety, and Quality Assurance, report directly or indirectly to the President.

Senior Management accountability for the effectiveness of the management systems has also been defined. For example, the Quality Manager has been assigned the responsibility for monitoring and assessing the effectiveness of the business licensed activity management system and is responsible for

identifying problems, initiating or recommending solutions, and confirming their implementation and effectiveness. The company senior management organization structure is shown in Figure 3.



BWXT – Nuclear Energy Canada Inc.
Fuel and Fuel Handling Organization

March 10, 2026

Figure 3: BWXT NEC Organization Structure

The management system is fully implemented and compliant with CSA N286-17, *Management System Requirements for Nuclear Facilities*. All management system documentation required by Licence Condition 2.1 is in place. The EHS Policy establishes the direction for the management system. Continuous improvement is achieved through several review processes, including self-assessments, audits, and management reviews.

In 2025, the Director, Fuel Operations was promoted to Vice President, Fuel and Fuel Handling, and the NFAO Peterborough Plant Manager was promoted to Director, Manufacturing Operations. A new Director, EHS & Regulatory Affairs, was also appointed.

In 2026, a new NFAO Peterborough Plant Manager was appointed, and the Quality Manager was promoted to Director of Quality. In addition, acting assignments are currently in place for key functions, including EHS and licensing.

BWXT NEC’s corporate policy describes BWXT NEC’s commitments to the establishment and continuous improvement of a safety culture. The safety culture refers to the core values and behaviors resulting from a collective commitment by BWXT NEC leaders and individuals to emphasize safety, quality, ethics and security over competing goals to ensure protection of people and the environment.

BWXT NEC is committed to maintaining a strong safety culture and clearly states the expected safety culture behavior. For example, the promotion of a standard set of human error reduction tools for job-site workers and knowledge workers, which include:

1. Procedure Use and Adherence;
2. Questioning Attitude;
3. Situational Awareness;
4. Self-Checking.

BWXT NEC’s commitment to a strong safety culture is measured by tools such as employee concerns, incident investigations, audits and self-assessments, use of experience and corrective action program metrics which measure the effects of safety culture improvements. External agencies such as the CNSC audit BWXT NEC operations against CSA standards which include safety culture requirements (e.g., CSA N286-17).

In the reporting 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, goals established from business plans or external benchmarking standards. The Self-Assessment Program is a management tool used to engage the workforce in early and proactive detection of organizational or systematic weaknesses. It is a functional manager’s opportunity to take a structured look at their own function. Self-Assessments help identify low level issues or trends for early resolution before more significant problems occur.

A Self-Assessment schedule is prepared annually and ensures that each program element is reviewed periodically based on a risk-related approach. A summary of self-assessments conducted in the reporting period is provided in Table 2. The identified deficiencies were of low consequence, with the majority related to improvements in documentation accuracy and compliance. All identified deficiencies not corrected during the assessment were assigned and are being tracked to closure. There were no systemic deficiencies identified. The assessed program elements were determined to be effective.

In addition to the Self-Assessment program, routine compliance reviews are periodically completed against regulatory EHS requirements, such as general environmental, water management, safety management and emergency response.

Program Element	Number of Deficiencies and Opportunities for Improvement
Nonconformance and Corrective Action	2
Emergency Preparedness	5
OHSMS ANSI Z10 and Safety Elements	2
Radiation Protection	3
Training	1
Public Information and Disclosure	1
Respiratory Protection Program	2
EHS Audits	1
Total	17

Table 2: Summary of Self-Assessments

3.2.2 Licensed Activity Internal Audits

Internal auditing is an independent, objective activity designed to add value and continuously improve programs. Periodic assessment of program effectiveness is conducted through systematic internal audits that are planned and carried out on behalf of management to measure performance, the effectiveness of the program element processes and to promote continuous improvement. An audit schedule is prepared annually and ensures that each licensed activity program element is reviewed as per program requirements.

Table 3 provides a summary of internal audits conducted in the reporting period. The identified non-conformances were of low safety consequence, with the majority related to the accuracy and detail in documentation and implementation of practices. All identified non-conformances not corrected during the audit were assigned and are being tracked to closure, if not already closed. There were no systemic deficiencies identified. The assessed program elements were determined to be effective.

In addition, a summary review of all non-conformances is conducted as part of the management review to determine if any systemic deficiencies have been identified. Based on the review, continuous improvement opportunities are discussed and documented in meeting minutes with actions tracked to closure.

Audit Scope	Number of Non-Conformances
Communications	0
Environmental Protection (Water)	1
Radiation Protection (Public Dose - Dosimetry)	0
Self-Assessments and Annual Program Reviews	2
Total	3

Table 3: Summary of Internal Audits

3.2.3 Management Reviews

Management reviews for EHS program elements are conducted annually before the end of April each year to review the previous calendar year activities. The EHS management reviews encompass the following items:

- Status and follow-up of actions from previous management reviews;
- Results of applicable external agency audits;
- Open regulatory compliance obligations;
- Results of “Reg Auditor” (Gensuite®) compliance evaluations;
- Results of QA for licensed activity internal and external audits (where applicable);
- Results of QA for licensed activity management self-assessments;
- Trends in non-conformances (Gensuite® Action Tracking System items) for closure metrics;
- EHS related QA Actions;

- Trends in Incident and Measurement (Gensuite®) items for root cause;
- Status of EHS training activities;
- Procurement process;
- Extent to which Environmental, Health and Safety and ALARA objectives and targets have been met;
- Radiation dose trends;
- Communications and changes in the needs and expectations of interested parties, including complaints;
- Changing external and internal issues, including compliance obligations;
- Changes in risks and opportunities;
- Opportunities for continual improvement;
- Evaluation of the effectiveness and continuing suitability of the EHS Mission Statement and the Environment, Health and Safety Program, which includes the EHS management system and hazard prevention program.

The above inputs are reviewed to ensure continuing suitability, adequacy and effectiveness of the management system. The criteria for these are:

- **Suitable:** Does the system satisfy the requirements and represent the best way of doing things for our business?
- **Adequate:** Is the system fit for its current purpose?
- **Effective:** Does the system enable the right things to be done? Is it driving continuous improvement?

Formal meeting minutes are prepared. The management review meeting for 2024 held in April 2025 resulted in seven Opportunities for Improvements, including:

- A minor procedural revision to include Arnprior in the scope for annual management reviews
- Adding a review of OFIs from internal audits to future management reviews
- A review of self-assessment schedules for comprehensiveness
- Enhancing training requirements on pellet scrapping
- Enhancing review and classification of confined spaces
- A review of OPEX data related to two specific projects
- Updating the EHS Mission Statement to include information about the life cycle and sustainability of product from an environmental perspective.

No systemic deficiencies were noted. Overall, the implemented management system for the licensed activity program was considered suitable, adequate and effectively implemented. Continuous improvement remains a priority.

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.

The training program is outlined in the licensed activity management system manual, and business-wide training procedures. Qualifications and training requirements are identified, and personnel are given the appropriate training to ensure they are competent at the work they do. This training includes on-the-job training, radiation safety and respirator protection training. Workers only perform functions for which they are qualified. The Toronto facility achieved 100% regulatory training completion in the reporting period. Compliance with regulatory training completion is a key performance indicator that is tracked throughout the year. Key EHS course completion details are provided in Table 4. Note: n/a indicates that zero employees required the course during the reporting period.

Course Name	% Complete
Aerial Lift Practical	100%
Aerial Lifts	100%
Change Area Contamination Control	n/a
Compressed Gas Safety	100%
Electrical Safety 2.0 – Canada	100%
Emergency and Disaster Preparedness – Canada	n/a
Emergency Response & Fire Prevention Awareness	100%
Fall Protection Advanced	n/a
First Aid (Emergency Response Team)	100%
Indoor Hoisting and Rigging – Canada	100%
Lockout Tagout (LOTO) Procedure	100%
Lockout/Tagout 2.0 – Canada	100%
Lockout Tagout (LOTO) Try-Out Demonstration	100%
Portable Fire Extinguishers – Canada	100%
Powered Industrial Truck - Driving Evaluation	100%
Radiation Safety	100%

Course Name	% Complete
Respiratory Protection 2.0 - Canada	100%
Security Awareness	100%
Transportation of Dangerous Goods	100%
Workplace Hazardous Materials Information System (WHMIS)	100%

Table 4: Key Training Course Completion Summary

During the reporting period there were opportunities to improve training. Examples of these include:

- Training was provided for new emergency response work instructions including sprinkler shut off and lockdown.
- Additional cross training was completed for Emergency Response roles.

The 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 (NSCA)* and associated regulations. EHS and other staff are available after business hours as needed through cell phones.

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 preventive 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 facilities.

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 or regulatory approvals are conducted as required. In this way, impacts on the safety analysis are identified and the safety analysis is validated and updated, where necessary.

In 2024, a five-year update of the safety analysis report was made. The safety analysis 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 safety analysis report is scheduled for a routine five-year update in 2029.

The updated safety analysis report considered the presence of the apartment building currently under construction adjacent to the facility. The updated safety analysis report also considered the storage location

for completed skids; this area was modified and is now fire separated from adjacent areas to reduce the inventory of material available to fire originating in adjacent areas.

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 facilities, 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 of the facility are assessed through the Change Control program. Any 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 reporting period, there was one modification to the physical plant that altered the design basis and no significant facility changes. The modification involved the installation of two fire doors and a fire damper in the skid storage area allowing BWXT to fire separate this area from adjacent areas.

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.

A Critical to Safety (CTS) program is in place. 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 report;
- Respiratory personal protective equipment; and
- Instrumentation generating data to demonstrate Regulatory Compliance.

BWXT NEC documentation describes the CTS program for the production of nuclear fuel. Equipment identified on the CTS list is governed by a number of assurance procedures.

The CTS program elements include the following:

- Process to identify CTS equipment;
- CTS inventory list revision control;
- Procurement controls governing ordering and incoming verification to confirm CTS equipment received matches the CTS equipment list requirements;
- Requirements in the established change management program to adequately capture new additions and ensure sufficient detailed review of changes to existing CTS equipment; and
- The factors determining the preventive maintenance schedule of CTS Equipment.

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

Certain CTS tasks have associated immediate independent post-maintenance verification or testing. For example, independent verification is in place on the ventilation systems during filter changes as well as following rotoclone ductwork maintenance.

In the reporting period, 99% of CTS tasks issued were completed within 14 days of the target completion date. All CTS tasks issued in the reporting period are closed.

Preventive 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 preventive maintenance program for related equipment is reviewed as applicable. As a result, during the reporting period, the following improvements to preventive maintenance tasks were implemented:

- *H2&N2 COMPOUND (Monthly)* was updated to include a task to ensure bollards surrounding H2 compound and N2 fenced area are structurally feasible.
- New inspection was added for *EPOXY FLOOR INSPECTION (ANNUAL)* for first floor of facility.
- *WETS SYSTEM (6 MONTHS)* was updated with additional tasks to put WETS ADT on bypass and to monitor the valves actuating when dumping the WETS tanks.

Managing aging means ensuring the availability of required safety functions throughout the service life of the plant, with account taken for changes that occur with time and use. Aging management applies to SSCs that can, directly or indirectly, have an adverse effect on the safe operation of the plant. The asset management program accounts for aging through the CTS program inspection, testing and maintenance tasks. These processes provide warning signs and initiate corrective and preventive maintenance activities. Items identified for replacement are assessed through the Change Control program.

The preventive maintenance program is periodically assessed through self-assessments and internal audits, discussed in section 3.2 of this report. Key performance indicators are in place and are routinely reviewed. The program is adequate and effective and is continually improved.

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 UO₂. 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.

Internal radiation hazards exist in the form of loose uranium which may enter the body by inhalation, ingestion or absorption. As a result, air monitoring is conducted at various workstations. Workstation air monitoring is a key performance indicator that speaks to effective administrative and engineered controls. A

respiratory protection program is in place in accordance with Canadian Standards Association (CSA) Z94.4-18, *Selection, use, and care of respirators*. Additionally, surface contamination measurements (swipes) are conducted in manufacturing areas of each facility to monitor and reduce the amount of loose radioactive material available for potential internal exposure of employees. As these monitoring processes produce large quantities of data, trending of data is performed regularly and reviewed by site committees.

Additionally, urine samples are regularly provided by employees to indicate if inhalation may have occurred. Sampling frequency ranges from weekly to monthly, based on established criteria such as job function and worker location within the facility. Criteria which determine the frequency of urine sampling for an employee are documented in the Radiation Protection Program and is based on risk.

A second radiological hazard exists in the form of low-level external gamma and beta radiation doses to employees. Routine gamma surveys are conducted, and Nuclear Energy Workers (NEWs) are issued Thermoluminescent Dosimeters (TLDs) to measure whole body, skin, eye, and extremity dose to ensure compliance with the regulatory radiation dose limits and the ALARA principle. Dose results are reviewed by EHS staff on receipt from the licensed dosimetry service provider. In addition, the ALARA Committee reviews trending data from radiation monitoring results through routinely scheduled meetings and provides recommendations to improve ALARA implementation.

As external radiation hazards from the storage and use of radioactive materials may result in radiation doses to workers, routine gamma radiation surveys are conducted using real-time portable handheld radiation detectors. Measured dose rates are compared to established dose rate targets for a given area based on area classification and occupancy. When necessary, items are moved to alternative storage locations and/or shielded. Areas that appear routinely higher than target dose rates are investigated for permanent improvements, such as shielding or reconfiguration.

A component of the Radiation Protection Program is area classification. Areas are classified into four different categories for the purpose of controlling the spread of radioactive contamination and ensuring appropriate engineered and administrative controls are in place. These classifications are defined in the *Radiation Protection Manual* as follows:

- Unclassified Area - these areas do not involve nuclear substances and are considered public domain. Incidental contamination does not exceed the unclassified area Internal Control Levels.
- Active Area - these areas are designed for handling materials with loose contamination that is potentially above unclassified area Internal Control Levels. External radiation hazards are not of significant concern.
- R2 Area - these areas are designed for operations involving exposed non-dispersible nuclear substances, where external radiation is of concern and loose contamination may be above R1 Internal Control Levels.
- R3 Areas - these areas are designed for operations involving exposed solid dispersible nuclear substances, where external radiation may be of concern and where the hazard of contaminant inhalation or ingestion is identified. Loose contamination may be above R2 Internal Control Levels and below R3 Internal Control Levels. Where the inhalation hazard is high, respiratory protection is required for all area entries.

BWXT NEC has established CNSC accepted Action Levels for various radiological and environmental parameters. An Action Level is defined in the *Radiation Protection Regulations* as “a specific dose of radiation or other parameter that, if reached, may indicate a loss of control of part of a licensee’s Radiation Protection Program, and triggers a requirement for specific action to be taken.”

Action Levels are established in accordance with the CNSC regulatory document G-228, *Developing and Using Action Levels*, which are approved by the CNSC and specified in the Licence Conditions Handbook (refer to Table 5). Although Action Levels are set below regulatory limits, exceeding an Action Level is considered a CNSC reportable event in which BWXT NEC must notify the Commission within 24 hours of becoming aware that an Action Level has been exceeded. Accordingly, BWXT NEC has established Internal Control Levels for various radiological and environmental parameters that are set even lower than Action Levels to act as an early warning system. An Internal Control Level exceedance results in an internal investigation and corrective and preventive actions. During the reporting period, all measurements were below Action Levels and regulatory limits. There was one Internal Control Level exceedance in quarterly internal dose. This was investigated, the cause identified as hours worked, and corrective actions were initiated to prevent reoccurrence.

Nuclear Energy Worker	Period	Action Level (mSv)	
Effective dose	Quarter of a year	6.0	
Effective dose	1 year	15.0	
Effective dose	5 years	60.0	
Skin dose	1 year	350	
Extremity dose	1 year	350	
Pregnant NEW	Balance of the pregnancy	3.5	
Parameter		Action Level	
Urinalysis		10 µg/L for any period	
Nuclear Substance and Form	Action Level		
U in Airborne Contamination	Unclassified Area	R2 Area	R3 Area (non-mask)
	36 dpm/m ³	180 dpm/m ³	270 dpm/m ³

Table 5: Summary of Action Levels for the Radiation Protection Program

BWXT NEC has a well-established integrated management system for environmental, health and safety program excellence. The Radiation Protection Program is effectively implemented. BWXT NEC has an established *EHS Mission Statement* that is reviewed and signed annually by the President of BWXT NEC. The *EHS Mission Statement* includes a commitment to ALARA and continuous improvement. Elements of the Radiation Protection Program such as dose monitoring, contamination monitoring, and radiation field surveys, etc. are conducted by qualified workers and reviewed internally by EHS staff and Committees on a regular basis. Details of the reviews are recorded in meeting minutes.

An internal audit and self-assessment of the Radiation Protection Program, with a focus on elements of Radiation Protection Program effectiveness and compliance, are conducted routinely. Non-conformances are addressed and tracked to completion in accordance with program requirements.

In accordance with the *Radiation Protection Regulations* and CNSC REGDOC-2.7.1, *Radiation Protection*, BWXT NEC has implemented a Radiation Protection Program. This document establishes the Radiation Protection Program in place and identifies corresponding procedures to ensure that radiation exposures and doses are maintained ALARA.

Key components of the Radiation Protection Program include:

- Compliance with all relevant regulatory requirements;
- The setting of ALARA goals and objectives;
- Hazard recognition, risk assessment and change control processes;
- A comprehensive worker training program; and
- Documented safety concerns, near misses and incidents with appropriate root-cause analysis, preventive and corrective actions.

The Radiation Protection Program includes all worker radiation safety elements that demonstrate compliance with relevant regulations, codes, and standards including:

- EHS policy commitment to ALARA;
- Area classifications and requirements;
- Material handling;
- Non-routine or high-risk work controls;
- Internal and external radiation hazard assessments; and
- Internal and external radiation monitoring and recording.

Continuous improvement is achieved through several review processes, including site inspections, reported safety concerns, near miss and incident investigations, self-assessments, internal and external audits. There were no major changes to the Radiation Protection Program during the reporting period. Minor continuous improvements and administrative edits were instituted to the following:

- *Boundary Radiation Monitoring* work instruction
- *Continuous Boundary Air Sampling* work instruction
- *pH Probe Calibration and Maintenance* work instruction
- *Radiation Instrumentation* work instruction
- *Thermoluminescent Dosimeters* work instruction

The Radiation Protection Program is well-established and effective. Radiation dose trends demonstrate the company's commitment to ALARA. Program goals are monitored through the site's ALARA Committees as summarized in section 3.7.1.

3.7.1 ALARA Committee Performance

The ALARA Committee works to review and continuously improve elements of the radiation safety program and implement ALARA practices where practical in order to ensure that radiation dose levels are as low as reasonably achievable. Committee members consist of both unionized and management employees. The ALARA Committee targets quarterly meetings at a minimum. The committee met four times during the reporting period. Dose results, radiation protection related events, audits, and employee concerns were

reviewed and discussed. Actions are assigned and tracked as part of the meeting minutes. Committee activities are communicated to all workers via email distribution or employee notice board postings.

ALARA Committee goals and results for the reporting period are provided in Table 6. Goals that are not achieved are informally reviewed by the ALARA Committee to discuss probable causes. The feasibility of achievement is discussed, and implementation plans revised as needed. These are considered during future goal setting. As radiation doses continue to be well below the regulatory dose limits, dose reductions become increasingly challenging.

ALARA Committee Goals	Actual	Result
Review Radiation Protection Regulations (SOR/2000-203)	Completed	Achieved
Implement administrative controls to reduce dose to operators in high dose areas.	Completed	Achieved
Implement shielding in high dose area (1).	Completed	Achieved

Table 6: ALARA Committee Goals and Results

2026 goals for the ALARA Committee are established as follows:

1. Implement control(s) to reduce radiation dose in Taper Grinding.
2. Implement control(s) to reduce radiation dose in tote or wagon storage areas.
3. Review and improve laundry cart handling practices, including evaluating controls for the cart transported between the Peterborough facility and the Toronto facility to ensure appropriate contamination control.

3.7.2 Radiation Protection Training Program and Effectiveness

Radiation protection training programs are compliant with the Systematic Approach to Training (SAT) methodology. An internal or external specialist in radiation protection periodically provides classroom training to new and continuing NEWs or those working in areas with radioactive materials. Testing is performed on completion of the training to demonstrate employee understanding. Course content includes general shop floor rules, radiation fundamentals, sources of ionizing radiation, health effects, emergency response and other safety-related content. Training completion is monitored using a learning management software system, which tracks and triggers retraining as required. Course completion details are provided in section 3.3. Training effectiveness is monitored through radiation dose results, internal inspections, self-assessments, and audits as well as incident investigations.

3.7.3 Radiation Device and Instrumentation Performance

Radiation detection instrument error can occur due to a variety of factors: drift, environment, electrical supply, addition of components to the output loop, process changes, etc. The facility maintains a system for managing radiation detection instrument calibrations. Calibration is conducted to ensure accurate indication during field use. Calibrations are performed under environmentally controlled conditions suitable for the inspections, measurements, and tests being performed, as determined by the equipment manufacturer. Calibration intervals are established, so that calibration occurs before any anticipated significant changes

occur in measurement capability. Radiation detection equipment calibrations are conducted within 12 months of the previous calibration as required by regulation.

All active radiation devices and instruments were maintained in a state of safe operation. Where calibration is expired or where detectors fail calibration, they are removed from service until they are repaired and meet radiation calibration expectations.

There were no changes to the calibration program during the reporting period.

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 objects. This is known as radioactive contamination. Radioactive contamination refers to nuclear substances on surfaces or within the air, where its presence is unintended or undesirable.

Surface contamination measurements (swipes) are conducted in manufacturing areas. Contamination by itself is not necessarily an indicator of exposure potential but can be used as an indicator of housekeeping conditions; however significant amounts of loose surface contamination have the potential to become airborne. If this occurs, the air monitoring results will reflect the increased airborne concentration and appropriate corrective action is then taken. There were no significant personnel contamination events during the reporting period.

Routine surface contamination measurement results are summarized in Table 7. 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, 99% of swipes were within Internal Control Levels, indicative of effective contamination control measures and cleaning schedules.

Surface Contamination					
Classification and Area Description	Internal Control Level	2024		2025	
		Total Number of Samples	Total Number Samples Exceeding Internal Control Level (%)	Total Number of Samples	Total Number Samples Exceeding Internal Control Level (%)
R3-Powder Preparation, Pressing, Grinding, Laboratory	22,000 dpm/100 cm ²	464	0 (0.0%)	465	1 (0.2%)
R2-Sintering, Sorting & Stacking, Laboratory	2,200 dpm/100 cm ²	518	7 (1.4%)	526	14 (2.7%)
Active - Plant Washrooms, Laundry Room	2,200 dpm/100 cm ²	120	1 (0.8%)	122	2 (1.6%)
Unclassified	220 dpm/100 cm ²	536	9 (1.7%)	535	6 (1.1%)

Table 7: Surface Contamination Summary Results

3.7.5 Air Monitoring

As part of well-established and implemented industrial hygiene programs, 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 UO₂. These higher risk processes may require enhanced air monitoring and respiratory protection.

Each process workstation is monitored continuously during routine operating conditions for airborne UO₂ and samples are counted in-house. Internal dose to workers is estimated and assigned based on these air monitoring results. Workstation air sampling results are summarized in Table 8.

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

Table 8: Workstation Air Monitoring Summary

In the reporting period, eight workstation air samples exceeded an Internal Control Level. The results were identified during the daily air sample result reviews. Five were associated with Final Press #2, one was associated with Grinder #3, one was associated with Final Press #1, and one was associated with Final Press Feed #2. Internal Control Level exceedances are investigated, and corrective actions tracked to completion.

The elevated results for Final Press #2 were related to improper clamping of the hopper after routine cleanout or troubleshooting. The clamping mechanism around the hopper is currently being reviewed to find a better fitting design that improves its performance and reliability. No intakes or exposures were observed for employees working in the room.

The elevated results for Grinder #3 was related to grinder swarf cross contaminating the sample. During the daily sampling it was observed that the air sample was visibly dirty from process splash back. Corrective actions were implemented to prevent recurrence, including controls to minimize contamination.

The elevated results for Final Press #1 was related to cleaning and changing of the filters of the Torit systems in the Press Room. The cleaning of the Torit systems was performed under a radiation safety instruction where all employees involved in the work wore respirators. No intakes or exposures were observed.

The elevated results for Final Press Feed #2 was related to filter dismantling activities in the Press Feed room. The room is classified as a R3 area (mask) and under negative pressure. The activity was performed

under a radiation safety instruction where all employees involved in the work wore Personal Air Powered Respirators (PAPRs) and Tyvek suits. No intakes or exposures were observed.

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. When necessary, items are moved to alternative storage locations and/or temporarily shielded. Areas that appear routinely higher than target dose rates may be investigated for improvements, such as permanent shielding or reconfiguration. Routine dose rate measurements are summarized Table 9. Dose rates remain low in radioactive material handling, storage areas and adjacent occupied locations. An increase in the average dose rate in storage areas is attributed to a reclassification of one production area to a storage area in 2023. 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 year.

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

Table 9: Routine Dose Rate Survey Summary

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 $0.1 \mu\text{g U/L}$. Results are compared to Internal Control Levels and Action Levels and entered and retained in an electronic database. Urinalysis results are summarized in Table 10.

During the reporting period, there were no sample results above the Internal Control Level of $5 \mu\text{g U/L}$ or Action Level of $10 \mu\text{g U/L}$. This demonstrates that current engineered and administrative controls, where applicable, are adequately controlling the inhalation hazard.

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

Table 10: Urinalysis Results Summary

3.7.8 Radiation Doses

Radiation dose refers to the energy deposited or absorbed in materials through which it passes. Equivalent dose is used to assess how much biological damage is expected from the absorbed dose. It takes the properties of different types of radiation into account. Effective dose is used to assess the potential for long-term effects that might occur in the future. It is a calculated value, measured in milliSievert (mSv), which takes into account the absorbed dose to all organs of the body, the relative harm level of the type of radiation, and the sensitivities of each organ to radiation. Action Levels are site specific and are accepted by the CNSC through the facility Licence Conditions Handbook. Regulatory limits are specified in the *Radiation Protection Regulations*. Regulatory limits are listed in Table 11 and Table 12. All measured radiation doses received by individuals in the reporting period were within Action Levels and regulatory limits with one exception to one Internal Control Levels exceedance.

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	50
	(b) Five-year dosimetry period	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 11: Regulatory Effective Dose Limits

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

Table 12: Regulatory Equivalent Dose Limits

All workers are classified as either NEWs or non-NEWs. All NEWs are deemed to have a reasonable probability of receiving a dose of radiation that is greater than the prescribed limit for a member of the public (1 mSv/year) in the course of the person's work with nuclear substances or at a nuclear facility. All NEWs are assigned personal passive dosimeters known as TLDs (thermoluminescent dosimeter). These passive dosimeters measure the whole body and skin doses received in each monitoring period and are analyzed by the licensed dosimetry provider to calculate an eye lens dose. TLD rings are worn on certain employee's hands for a one-week period each quarter. The test results and the weekly hours of contact are used to estimate the extremity dose for that quarter. TLDs are exchanged monthly and analyzed by a CNSC licensed external dosimetry service provider. The dosimetry service provider reports the measured doses to BWXT NEC and to the Health Canada National Dose Registry. On receipt, knowledgeable staff reviews the monitoring results, and compares them to associated Internal Control Levels, Action Levels and regulatory limits.

The annual dose assignment for employees at BWXT NEC consists of external and internal dosimetry inputs, for which dose summaries are tracked quarterly, year-to-date, five-year and lifetime. All NEWs who are monitored for radiation exposure receive an annual dose letter identifying their annual dose.

Dosimetry results are summarized in the following sub-sections. Employees are divided into workgroups based on job function for dosimetry analysis and trending. Operators are employees who directly manufacture product. Staff includes management and professional employees who support the operation with licensed activities.

3.7.9 Total Effective Dose Equivalent (TEDE)

TEDE includes TLD monitored external and calculated internal dose based on workstation air monitoring. Table 13 provides a summary of TEDE dosimetry measurements with monitored workers grouped in various ranges of exposure. Approximately 38% of TEDE are less than 1 mSv. TEDE measurement results by work group are summarized in Table 14. Note that average dose results include zero measurements. The total collective dose for 2025 was 65.59 mSv. The maximum individual five-year dose listed in Table 15 is well below the 100 mSv regulatory limit and the 60 mSv Action Level.

The average annual TEDE trend for all monitored individuals is shown in Figure 4. Average TEDE is trending steady overall. Average and maximum doses remain very low which is credited to job rotation, decrease in Sort and Stack activities, and administrative controls. Additionally, improvements in ALARA awareness and operator experience are contributors. Overall, the maximum dose is trending steady.

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	22	2	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

Table 13: Total Effective Dose Equivalent Distribution

	Year	All Workgroups (TEDE)	Operators External Dose Only	Operators Internal Dose Only	Staff (TEDE)
Maximum (mSv)	2025	5.43	4.13	2.04	1.05
	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	1.68	1.38	0.93	0.10
	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.

Table 14: TEDE, External and Internal Dose Summary

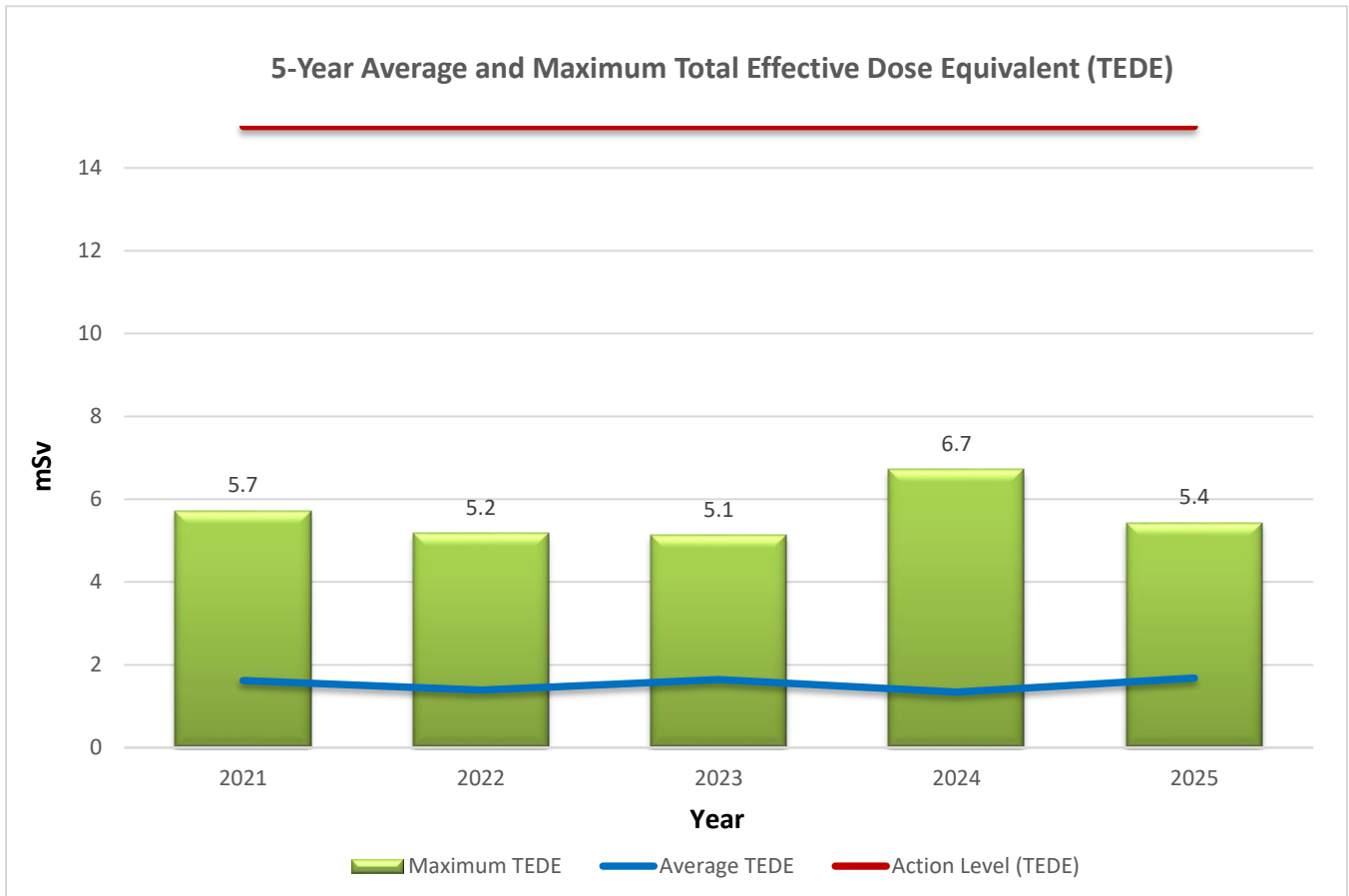


Figure 4: 5-Year Maximum and Annual Total Effective Dose Equivalent

Maximum Individual (mSv)	Year Range	All Workgroups
	2021 – 2025	24.0
	2016 – 2020	36.6
	2011 – 2015	39.1
	2006 – 2010	41.1

Table 15: Maximum Individual Five-Year Dose

3.7.10 Equivalent Skin Dose

TLDs measure the skin doses received in each monitoring period. Skin dose is the measure of the radiation dose that is absorbed by the skin from the deposition of energy from low penetrating radiation.

Table 16 provides a summary of equivalent skin dosimetry measurements with monitored workers grouped in various ranges of exposure. Approximately 28% of skin doses are less than 1 mSv. Skin dose by workgroup is listed in Table 17. The average annual skin dose trend for all monitored individuals is shown in Figure 5.

Skin doses across all workgroups remain a fraction of the applicable regulatory limit and Action Level. The overall trend is showing that average and maximum skin dose is steady. While the primary objective of shielding improvements is reduction in gamma exposures, there is also a reduction in overall beta fields in the work area from the shielding.

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	3	11	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

Table 16: Equivalent Skin Radiation Dose Equivalent Distribution

	Year	All Workgroups	Operators	Staff
	Maximum (mSv)	2025	29.65	29.65
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	8.48	11.78	0.10
	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

Table 17: Equivalent Skin Dose Summary

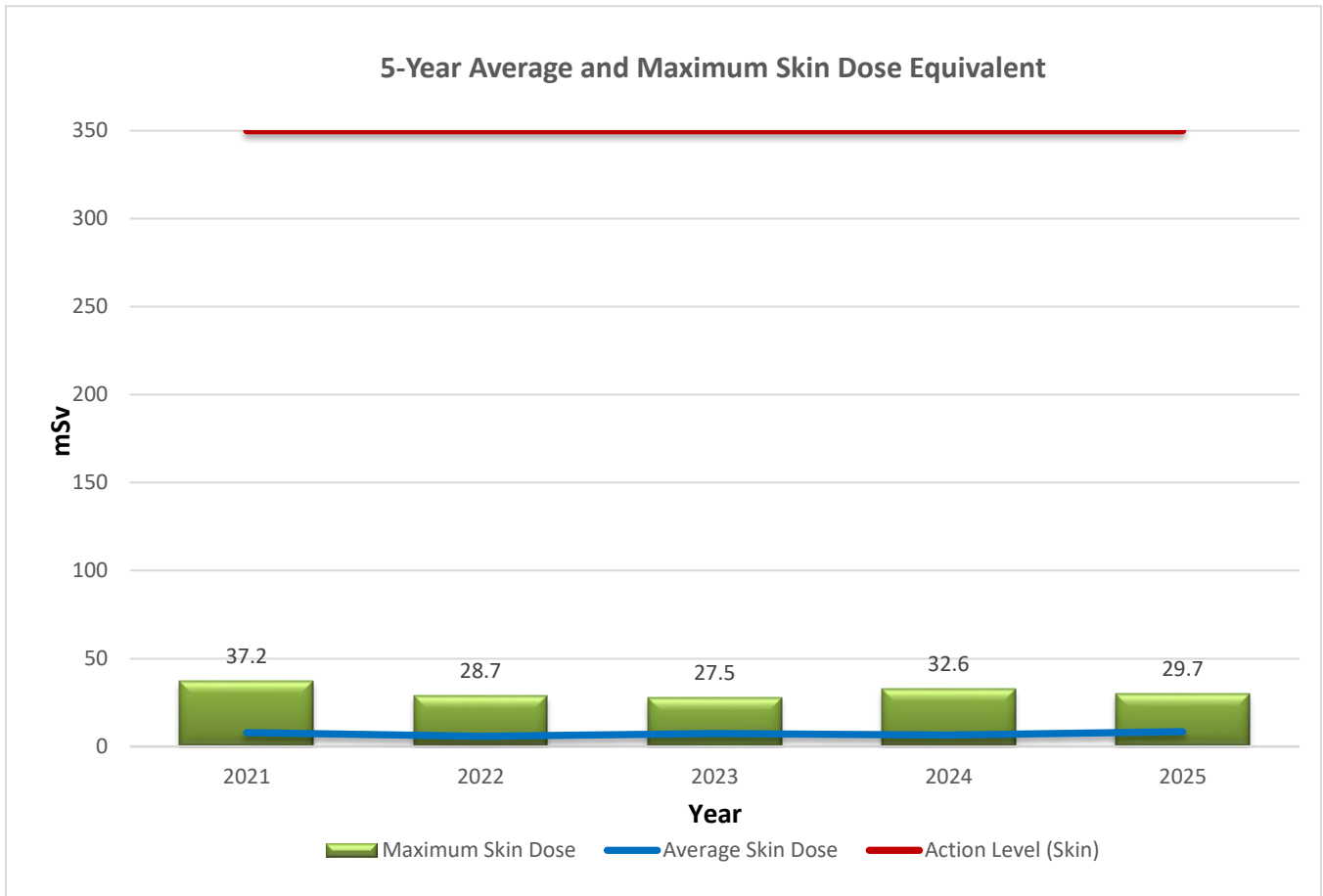


Figure 5: 5-Year Maximum and Average Skin Dose Equivalent

3.7.11 Equivalent Extremity Dose

TLD 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.

Table 18 provides a summary of equivalent extremity dosimetry measurements with monitored workers grouped in various ranges of exposure. Approximately 64% of extremity doses are less than 20 mSv. Equivalent extremity dose by work group is summarized in Table 19. Staff do not participate in the extremity monitoring program since there is minimal direct handling of product. The average annual extremity dose trend for all monitored individuals is shown in Figure 6. Average extremity doses continue to remain low.

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	5	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

Table 18: Extremity Dose Equivalent Distribution

	Year	All Workgroups	Operators	Staff
	Maximum (mSv)	2025	62.08	62.08
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

Table 19: Equivalent Extremity Dose Summary

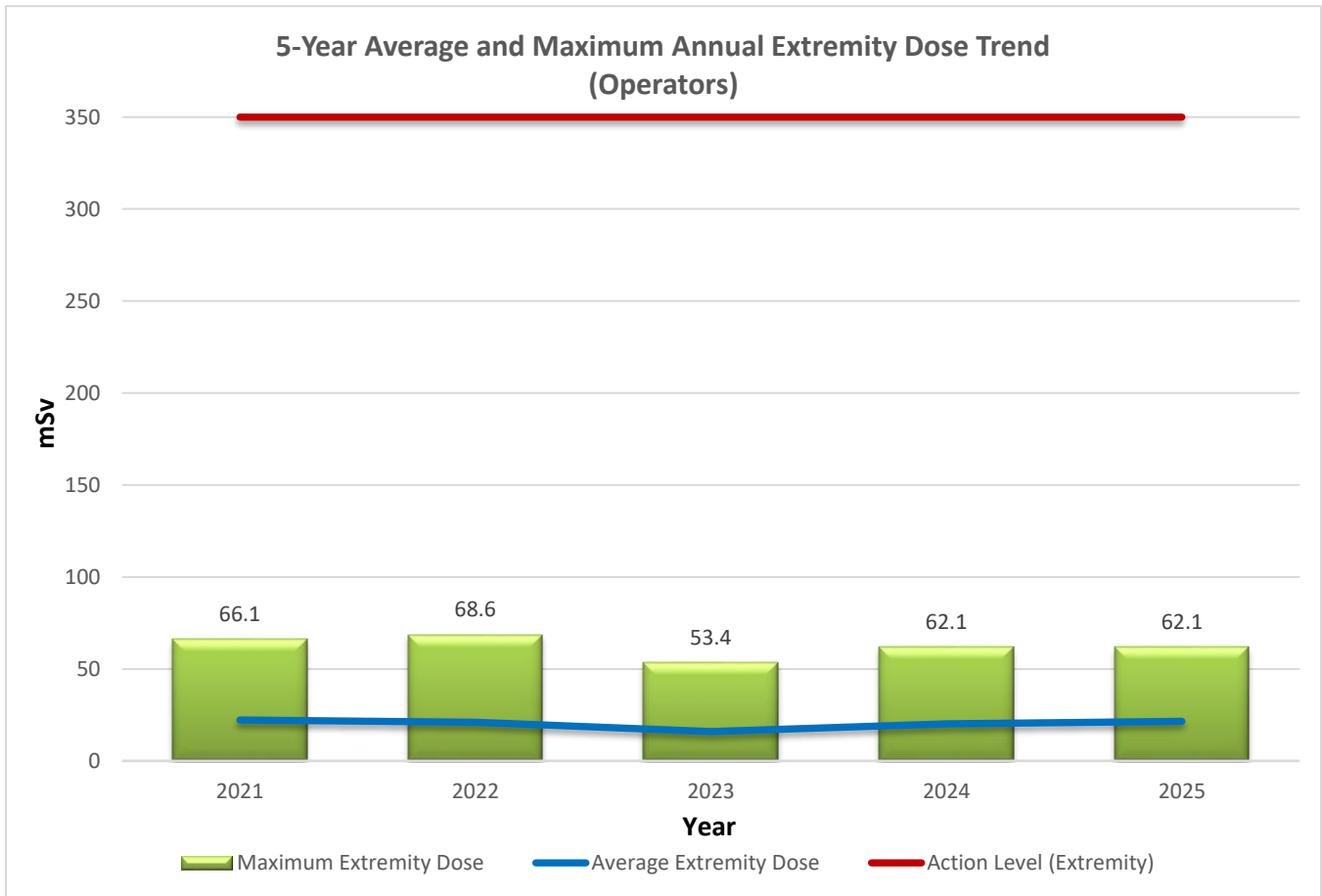


Figure 6: 5-Year Maximum and Average Extremity Dose

3.7.12 Equivalent Lens of an Eye Dose

Equivalent eye lens dose is measured using the whole body TLD. The dosimetry provider calculates the eye dose Hp(3), using the results from the multiple elements within the TLD. All workers wear safety glasses, which helps to shield against the beta radiation that contributes to eye lens dose.

The regulatory limit for a NEW is 50 mSv, shown in Table 12. Currently there is no Action Level in place at Toronto for eye lens dose. An internal control limit was set at 4.25 mSv/quarter. The maximum dose for the year was 4.13 mSv and the average dose amongst all workgroups was 1.02 mSv. In 2025 all eye lens equivalent doses were under the regulatory limit and Internal Control Level.

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 11. 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 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 boundary 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 and is not used for drinking. Through direct correlation with the facility DRLs, the estimated effective dose contribution as a result of air releases is calculated.

In addition, the contribution from gamma radiation emission 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 (5,781 hours in a non-leap year).

Over the reporting period, radiation dose to members of the public surrounding BWXT NEC Toronto increased but remains a small fraction of the applicable regulatory dose limit as shown in Table 20 and Figure 7. As a result of Toronto operations, the total estimated radiation dose to a member of the public is 109.1 µSv (0.03 µSv from airborne emissions + 109.1 µSv from direct gamma radiation). In comparison to the 1 mSv (1,000 µSv) per year effective dose limit to a member of the public, doses from the operation are low at 10.9%. An increase in public dose was seen in 2024, as a result, BWXT Toronto undertook an investigation into this increase. Storage locations, production practices, background locations, and measurement variability were looked at as part of the review. ALARA initiatives were implemented in 2025 in the Grinding area, and additional measures are being considered for 2026. A 20% decrease was observed in 2025.

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%

Table 20: Estimated Radiation Doses to Members of the Public

* Value revised from original report.

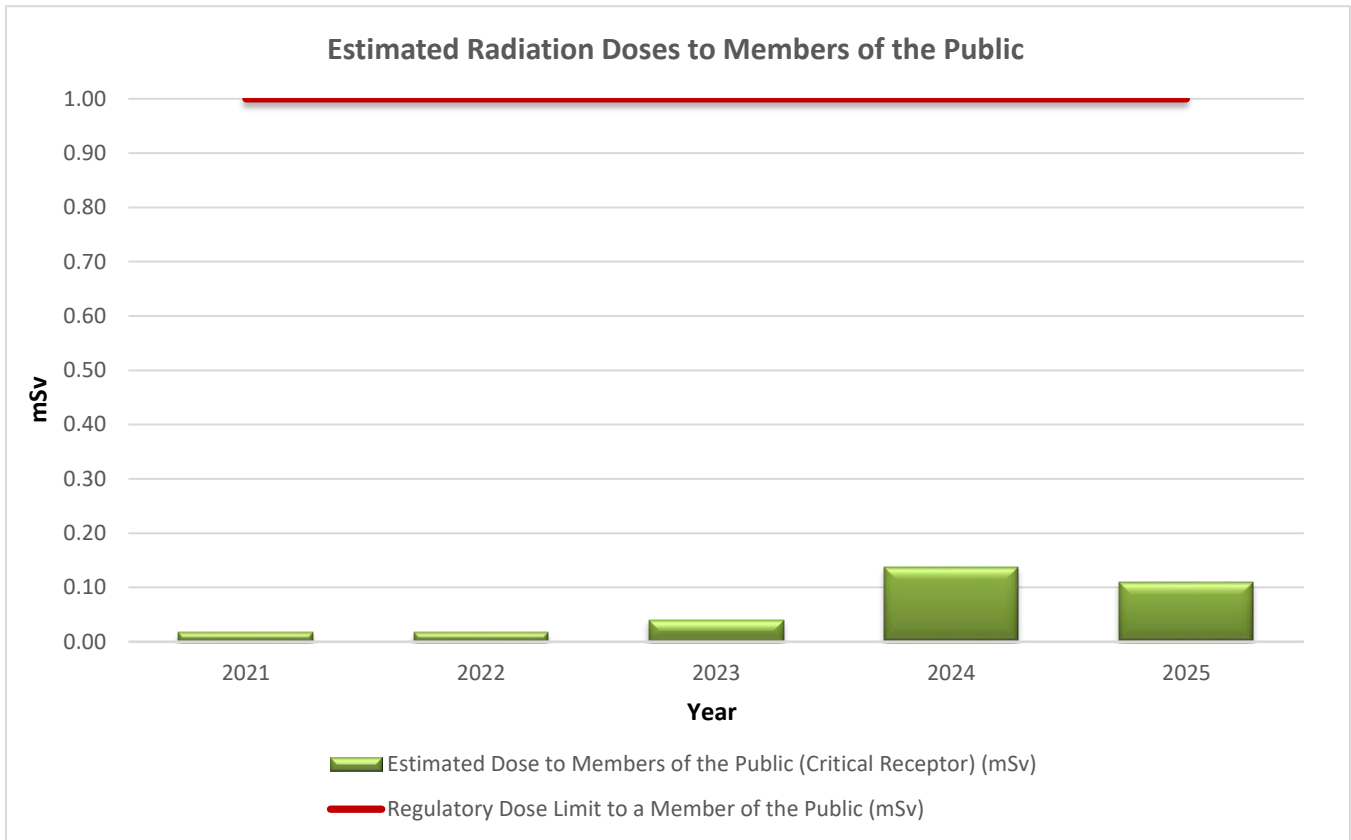


Figure 7: Estimated Radiation Doses to Members of the Public

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 environmental, health and safety 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.

Key components of the Health and Safety program include:

- Compliance with all safety and health-related regulatory requirements;
- The setting of EHS goals and objectives;
- Hazard recognition, risk assessment and change control processes;
- A comprehensive worker training program; and,

- Documented safety concerns, near misses and incidents with appropriate root-cause analysis, preventive and corrective actions.

The EHS program includes all worker safety elements that demonstrate compliance to relevant regulations, codes, and standards:

- EHS Policy
- Hazard Analysis and Regulatory Compliance
- Employee Involvement
- EHS Specialist
- Accident/Incident Investigation
- EHS Training
- Housekeeping
- Personal Protective Equipment
- Contractor Safety
- Emergency Preparedness/Response
- Risk Assessments
- High Risk Operations
- Industrial Hygiene
- Chemical Management
- Ergonomics
- Lock-Out Tag-Out

Continuous improvement is achieved through several review processes, including site inspections, reported safety concerns, 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).

3.8.1 Workplace Safety Committee

Eleven meetings were held with quorum. A total of 31 investigations and inspections were conducted in the reporting period. This includes Workplace Safety Committee (WSC inspections), and near-miss, incident, and injury investigations. The WSC inspections led to 118 actions logged and tracked to closure. The top finding categories from WSC inspections were 'housekeeping', 'fire protection', and 'equipment'. Established goals for the reporting period are summarized in Table 21.

WSC Goals	Actual	Result
Housekeeping Awareness Campaign (10).	10/10	Achieved
Departmental Participation in Inspection (4).	4/4	Achieved
Participate in Federal H&S Committee or Canada Labour Code training.	1/1	Achieved

Table 21: Workplace Safety Committee Goals and Results

2026 goals for WSC are established as follows:

1. PPE and chemical usage review for maintenance jobs (5).
2. Joint WSC committee meeting with another NEC or BWXT site.
3. Canada Labour Code – Part II: Occupational Health and Safety Review (5).

3.8.2 Hazardous Occurrences

Under the Canada Occupational Health and Safety Regulations there are several different types of hazardous occurrences including:

- Minor Injury: any employment injury or an occupational disease for which medical treatment is provided and excludes a disabling injury.
- Disabling Injury: any employment injury or an occupational disease that results in either time loss, or modified duties. Disabling injuries can be either temporary, or permanent, depending on whether the employee is expected to make a full recovery.
- Loss of Consciousness: from an electric shock or a toxic or oxygen deficient atmosphere.
- Rescue / Revival or other Emergency Procedures: any incident that requires emergency procedures to be implemented, such as a hazardous substance spill, bomb threat or violence prevention procedure.

Annual reports are provided to the Minister Employment and Social Development Canada as required by regulation.

3.8.2.1 Injuries and Illness

BWXT NEC Toronto has had three consecutive years without a Lost Time Injury (LTI), and prior to 2022 had five years without a Lost Time Injury (LTI). The LTI cases in 2022 were related to COVID-19 potential workplace exposures.

2021	2022	2023	2024	2025
0	14	0	0	0

Table 22: Lost Time Injuries

During the reporting period, there were zero lost time injuries, zero minor injuries and two first aids. The body part associated with the cases included hand (1) and finger (1). The accident type associated with these injuries included 'falls, same level' and 'cut/laceration'.

There were seventeen near miss events logged following defined event classification criteria. The top noted categories were 'safety,' 'radiation protection', 'industrial hygiene' and 'air.' Root causes most identified associated with personal factors were 'unintentional deviation', 'not under direct control of employee', and 'lack of knowledge or skill', those associated with job factors included 'inadequate job planning, instruction, supervision', 'inadequate mechanical integrity, maintenance management' and 'inadequately maintained tools/equipment'.

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.

BWXT NEC has an effective environmental protection program in place 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. Environmental protection programs are compliant with:

- CSA N288.6-12 (R2017), *Environmental risk assessments at Class I nuclear facilities and uranium mines and mills*,
- CSA N288.5:22, *Effluent and emissions monitoring programs at nuclear facilities*, and
- CSA N288.4:19 (R2024), *Environmental monitoring programs at nuclear facilities*.

3.9.1 Environmental Risk Assessment

An Environmental Risk Assessment (ERA) has been completed in accordance with CSA N288.6:22. The ERA was updated in 2023 and revised in February 2025 to address comments from CNSC staff. The assessment concluded that emissions from the facility are very low and no adverse effects to human health or the environment are expected.

The ERA evaluated potential radiological and non-radiological exposures, as well as noise associated with facility operations. Radiological dose to members of the public was assessed to be well below applicable regulatory limits.

Emissions of non-radioactive contaminants from the facility were below the MECP Point of Impingement (POI) standards, and releases to water were also assessed to be minimal. Based on these results, emissions from the facility are not expected to result in adverse effects on human health or the environment.

The ERA also concluded that emissions of radioactive and non-radioactive materials from the facility pose no adverse effects to non-human biota.

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

3.9.2 Environmental Management System

BWXT NEC has a well-established integrated management system for environmental, health and safety 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 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.

An Environmental Management System is in place to identify and control environmental aspects and drive continuous improvement to enhance performance and minimize risk to the employees and the public.

Key components of the environmental protection program include:

- Compliance with all environmental-related regulatory requirements;
- The setting of environmental goals and objectives;
- Hazard recognition, risk assessment and change control processes;
- A comprehensive worker training program; and,
- Documented environmental concerns, near misses and incidents with appropriate root-cause analysis, preventive and corrective actions.

The EHS program includes all environmental protection elements that demonstrate compliance to relevant regulations, codes and standards:

- Air
- Water
- Waste
- Dangerous goods shipping
- Facility perimeter / boundary radiation monitoring
- Soil sampling

Continuous improvement is achieved through several review processes, including site inspections, reported concerns, near miss and incident investigations, self-assessments and audits. Environmental goals performance is discussed in section 3.9.4. Following these proactive reviews, the findings are documented, corrective actions identified and tracked to completion.

Internal inspections are completed on a routine basis and include all areas of the facility. The purpose of these inspections is to identify environmental as well as health and safety issues. WSC members carry out routine site inspections. After an inspection, the findings are documented, corrective actions identified and submitted to responsible personnel to address. Depending on the complexity of the finding immediate action may be required (i.e., equipment shutdown), or the action may be incorporated into meeting minutes, or tracked in the ATS.

3.9.3 Effluent and Environmental Monitoring Programs

Small amounts of radiological and non-radiological substances are released to the environment as the result of operations at BWXT NEC. Environmental protection is regulated municipally for water effluent through sewer-use by-laws, provincially for air effluent and federally by the CNSC for both air and water. Airborne and waterborne radiological and non-radiological emissions to the environment are monitored as part of the effluent monitoring programs. 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. An Action Level is defined in the *Radiation Protection Regulations* as "specific dose of radiation or other parameter that, if reached, may indicate a loss of control of part of a licensee's Radiation Protection Program, and triggers a requirement for specific action to be taken." Action Levels are also applied to environmental protection. 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. No regulatory limits or Action Levels were exceeded during the reporting period.

3.9.3.1 Independent Environmental Monitoring Program

To complement existing and ongoing compliance activities and site monitoring programs, the CNSC implemented its Independent Environmental Monitoring Program to verify that the public and environment around CNSC-regulated facilities are not adversely affected by releases to the environment. This verification is achieved through independent sampling and analysis by the CNSC. This program applies to the BWXT NEC operations. The most recent results are available for sampling conducted in 2025. Results are compared to relevant provincial and federal guidelines and are available on the CNSC website.

3.9.4 Environmental Protection Program Performance

Environmental protection goals and results are summarized in Table 23.

Environmental Protection Program Goals	Actual	Result
Investigate 2 recycling and/or energy reduction opportunities.	Completed	Achieved
Dismantle 35 exhaust filters by year-end.	50 processed	Achieved
Divert 200 kg of radioactive waste by year-end.	200 kg diverted	Achieved

Table 23: Environmental Protection Program Goals

2026 Environmental Protection goals are established as follows:

1. Dismantle 100 exhaust filters by year-end.
2. Light sensor installation in plant (2).
3. Divert 200 kg of radioactive waste by year-end.

3.9.5 Air Effluent Monitoring

BWXT NEC has a valid *Environmental Compliance Approval* issued by the Ministry of Environment, Conservation and Parks (MECP) for air emissions. In accordance with permit conditions, the site maintains emission summary and dispersion modelling reports and acoustic assessment reports that demonstrate compliance to 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 0.

A summary of air effluent sampling results is summarized by stack in Table 24. Results are trended over five years as shown in Figure 8, emission concentrations are reported using third party measurements, with exception of the highest value recorded, which is reported from in-house measurements.

The facility perimeter air quality results are summarized in Table 25. The average and maximum facility perimeter air quality monitor results are trended over five years and consist of very low uranium in air concentrations and well below the Action Level of 1.00 µg/m³ as shown in Figure 9.

Uranium in Air Effluent					
Stack Description	Emission Contaminant	Total Number of Samples	Action Level (µg/m ³) (# Samples Exceeding Level)	Highest Value Recorded (µg/m ³)	Average Value Recorded (µg/m ³)
Rotoclone	Uranium	251	1.0 (0)	0.065	0.015
6H-68	Uranium	251	1.0 (0)	0.048	0.013
4H-48	Uranium	251	1.0 (0)	0.031	0.009
Furnace #1	Uranium	251	1.0 (0)	0.146	0.022
Furnace #2/4	Uranium	251	1.0 (0)	0.050	0.016
Furnace #5/6	Uranium	251	1.0 (0)	0.079	0.026

Table 24: Uranium in Air Effluent Summary

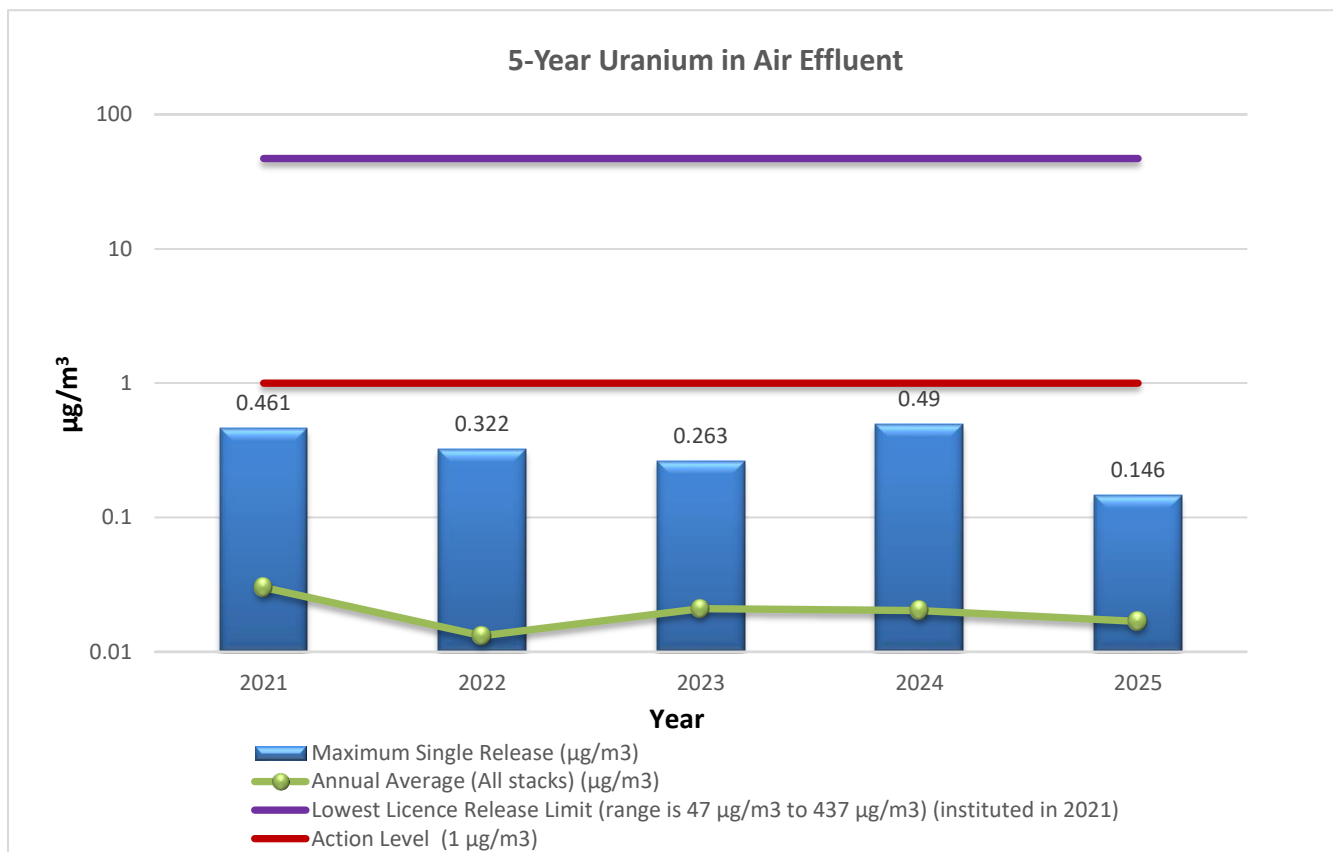


Figure 8: Five-Year Uranium in Air Effluent

Note: the above graph has a logarithmic scale

	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/m³)	0	0	0	0	0
Average Concentration (µg U/m³)	0.000	0.000	0.000	0.000	0.000
Highest Value Recorded (µg U/m³)	0.003	0.005	0.003	0.001	0.002

Table 25: Summary of Facility Perimeter Air Monitoring

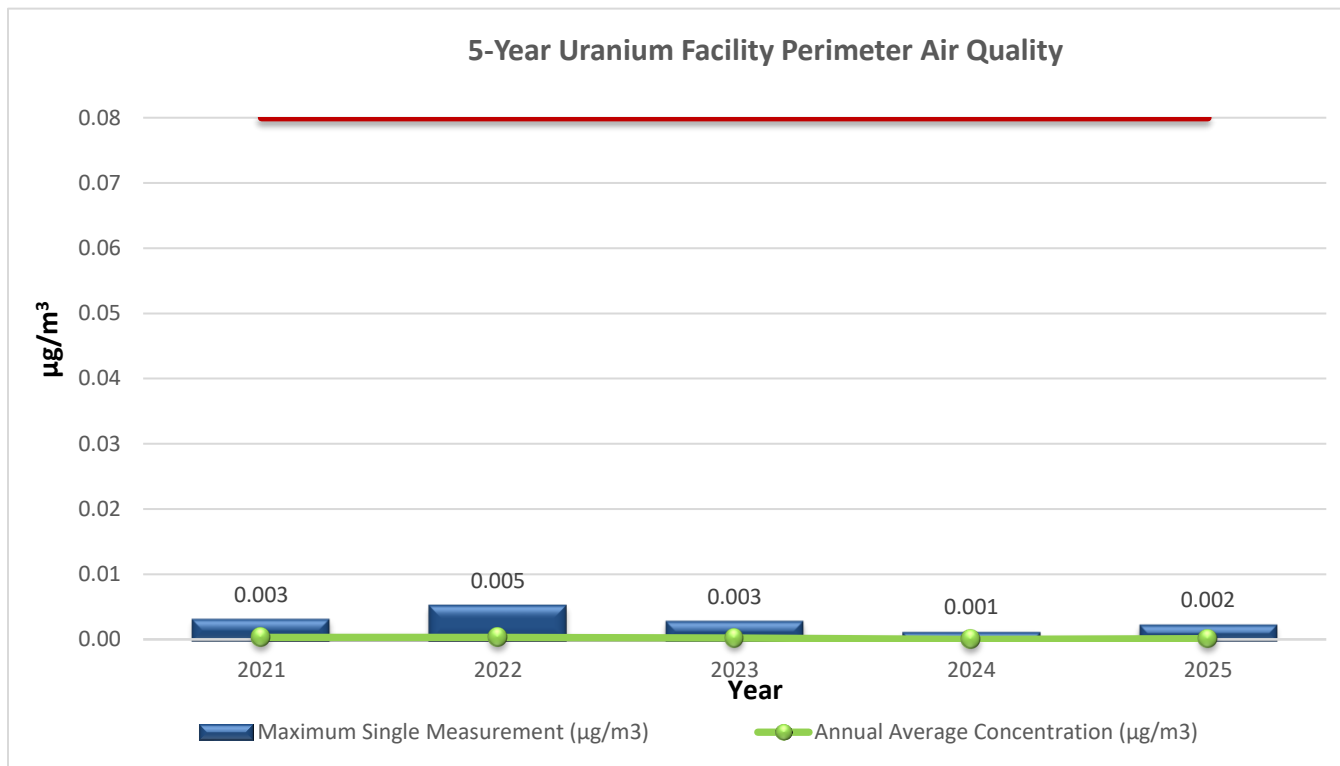


Figure 9: Five-Year Annual Facility Perimeter Air Monitoring

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 UO₂ and the concentration of UO₂ in waste water leaving the treatment system is measured in-house. The concentration of UO₂ in the total waste water 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. Waste water 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 26. Sample measurements are taken at the point of release. Annual discharges for uranium are trended in Figure 10. 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).

	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

Table 26: Water Effluent Monitoring Summary

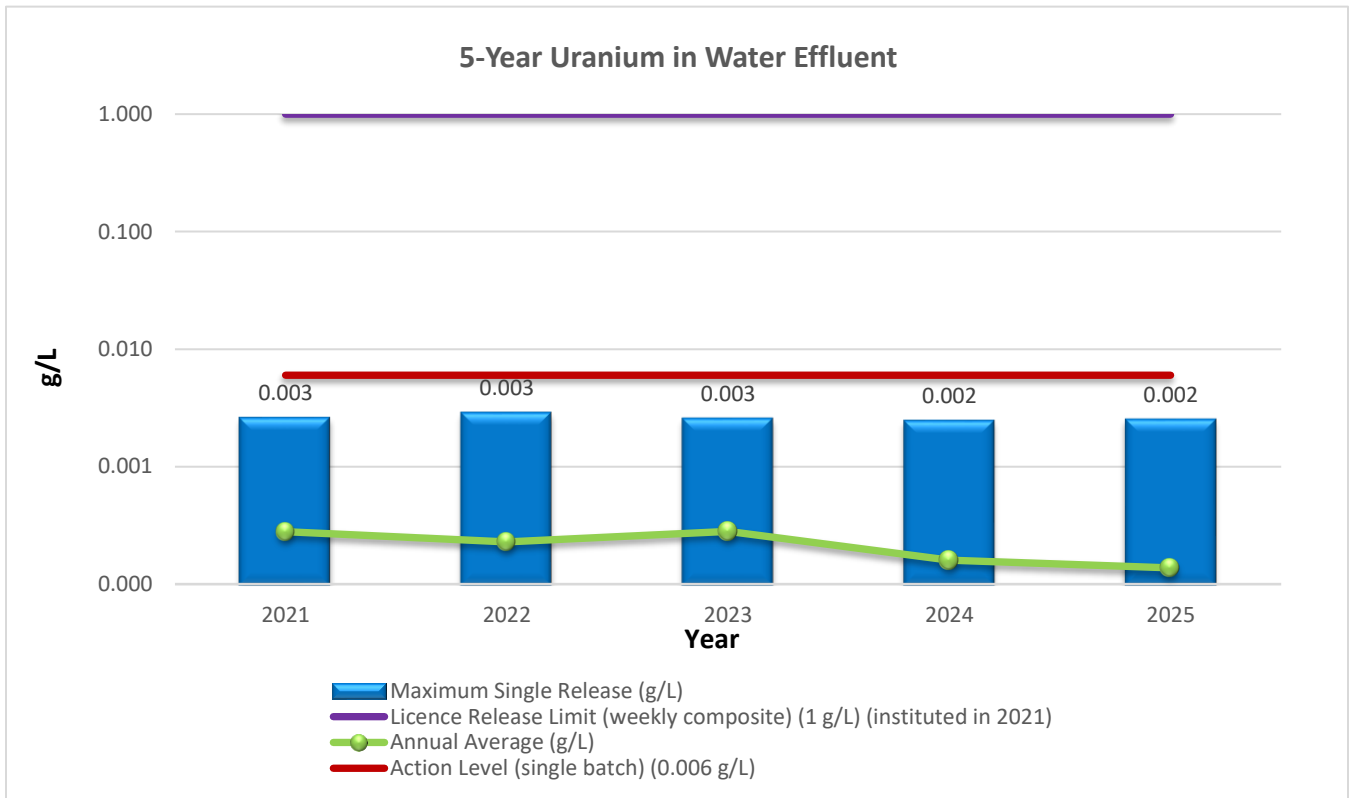


Figure 10: Five-Year Uranium in Water Effluent

Note: the above graph has a logarithmic scale

3.9.7 Soil Sampling Measurements/Monitoring

3.9.7.1 Uranium

Uranium may be detected at low levels in various rocks, ores, soil, water, air and plants. In Ontario, background levels of uranium in soil are generally below 2.5 µg/g (parts per million (ppm)). The Canadian Council of Ministers of the Environment (CCME) have established soil quality guidelines to protect human health and the natural environment. The guidelines represent levels of uranium in soil below which no risk to human health is expected. For residential and parkland land use, the guideline is 23 µg/g; for commercial land use, the guideline is 33 µg/g; for industrial land use the guideline is 300 µg/g. These guidelines have been adopted by the MECP and are listed in Ontario Regulation 153/04. Uranium content in soil at concentrations higher than the MECP standards suggest a need for further assessment, and mitigation of the source of the uranium to eliminate potential exposure and environmental impairment.

Depositions of uranium are measured by taking small samples of surface soil and analyzing for natural uranium. Uranium in soil sampling is conducted annually by a third-party consultant. If soil analysis indicates rising natural uranium levels, emissions may have increased, and investigation is made into the cause.

Facility UO₂ 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 35 locations in accordance with a documented plan. 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. The data shows prevalent winds from north to south-west. One quality control soil sample at a background location approximately 10 km north of the facility was also taken, 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 27.

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.

	Location Description		
	On BWXT NEC property	On industrial/commercial lands, i.e., south rail lands	All other locations, i.e., residential
Relevant CCME Guideline (µg U/g)	300 µg U/g	33 µg U/g	23 µg U/g
Number of Samples Taken	0	1	35
Average concentration (µg U/g)	N/A	0.6	0.6
Maximum concentration (µg U/g)	N/A	0.6	0.8

Table 27: Soil Sampling Result Summary

The analytical results show a range of concentrations from 0.4 µg/g to 0.8 µg/g with all 35 sample locations having reported uranium concentrations below the Ontario background concentration of 2.5 µg/g. These results are well 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 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.

3.10 Emergency Management and Fire Protection

The emergency preparedness and fire protection programs are well-established and effective. The facility has established an 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 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 standards and meets the CNSC 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 reporting period there were 35 corrective actions categorized as emergency preparedness/fire protection.

There were no events that activated the Emergency Management Organization during the reporting period.

There was one reportable event that occurred in the reporting period that triggered a response from Toronto Fire Services. There was an issue with a smoke beam detector activating the fire alarm and response from Toronto Fire. It was determined to be a false alarm likely caused by dust movement. The false fire alarm was conservatively reported to the CNSC as a matter of regulatory interest, since the arrival of Toronto Fire Services at the facility might trigger stakeholder interest. A public disclosure was also posted on BWXT NEC's website for the false alarm.

3.10.1 Emergency Preparedness Program Activities

The facility implemented program improvements, which focused on cross training and drill management. There were several improvements recommended as a result of drills in the areas of drill development, emergency equipment, training, communication, and emergency protocols.

Emergency preparedness development is achieved through response drills where actual responses are critiqued to continually improve the effectiveness of the process and the capability of responders. These are conducted at least annually. All employees are trained on established fire prevention measures, emergency situation 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 as defined in the facility training matrix. Training course completion is summarized in Table 4.

Tests of the emergency plans were performed in the following area:

1. Fire drills (three)
2. Full scale emergency exercise involving Toronto Fire Services
3. Fire event involving ERO participation (three)
4. Lock-down table-top exercise with EMO participation

The full-scale emergency exercise resulted in five (5) opportunities for improvement to improve future exercises and enhance emergency preparedness at the Toronto facility.

3.10.2 Fire Protection Program Activities

The Fire Protection program describes the systems and resources available to prevent and detect fire and to minimize impact from a fire event. The program consists of the following key elements:

Fire and Life Safety Features;

- Inspection and Maintenance;
- Fire Protection Assessment;
- Fire Protection;
- Housekeeping;
- Minimization of Combustibles;
- Ignition Source Control;
- Impairment;

- Design for the Prevention and Mitigation of Fires;
- Training;
- Outside Coordination; and,
- Program Assessment.

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.

The facility maintains a documented fire safety plan that is developed in accordance with the *National Fire Code of Canada*, the *National Building Code of Canada* and CSA N393-13, *Fire protection for facilities that process, handle, or store nuclear substances*. The fire safety plan is based on the documented FHA and ensures that measures are appropriate to the facility. It provides information on resources in the buildings, emergency procedures and actions to be taken in the event of a fire. It includes training, duties of designated personnel, details of maintenance procedures and fire protection measures. The information assists the occupants in utilizing life safety features in the buildings, ensures an orderly evacuation at the time of an emergency and provides a maximum degree of flexibility to achieve the necessary fire safety for the buildings

Fire protection systems are inspected and tested in accordance with the *National Fire Code of Canada (NFCC)* following an established schedule. Third-party reviews and internal self-assessments are conducted annually. Identified continuous improvements are tracked to completion using the Gensuite® Action Tracking System (ATS).

In 2025, the Annual Facility Condition audit was completed, the objective of this inspection was to satisfy the licence condition requiring annual verification that the site complies with the applicable codes and standards, and maintains the intended level of fire, life and nuclear safety. There were three (3) findings identified which were deemed minor in nature. It was concluded that BWXT fire protection program was being followed and effectively maintains the condition of the facility in compliance with that required by NFCC-2015 and operational requirements of CSA N393-13.

During the reporting period, BWXT NEC continued to work with Toronto Fire Services to establish a clear basis for contingency response planning between the organizations to deal with fire and rescue emergency situations. This included the successful completion of one emergency response exercise.

The program facilitates effective communication and exchange of relevant information, and assures timely, reliable, and effective decision-making and response actions. Site hazard reviews and site familiarization tours are scheduled annually with Toronto Fire Services. Approximately 70 Toronto Fire Services employees participated in the tours in 2025.

Physical plant changes are periodically made to improve the fire protection program. In 2025, work included the installation of two fire doors and a fire damper in the skid storage area allowing BWXT to fire separate this area from adjacent areas. Post indicating valves were also installed for both buildings outside the facility enabling prompt shutoff of sprinklers once safe. Minor changes to improve the fire protection program were also achieved through the creation of a master inspection list eliminating multiple document versions and through the repair of damaged fire separations (i.e., fire stopping openings and ceiling tile replacement) and fire door labels.

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 any 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 (NSCA)* and associated regulations and the facility licence conditions. Radioactive waste 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 about 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.

Waste management and generation details are further described in Appendix B, submitted to the CNSC separately.

BWXT NEC maintains a Preliminary Decommissioning Plan (PDP) and Financial Guarantees in accordance with CNSC REGDOC-2.11.1 Decommissioning, CNSC REGDOC-3.3.1 Financial Guarantees for the Decommissioning of Licensed Activities, and CSA N294-19 Decommissioning of Facilities Containing Nuclear Substances. 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 2025, the CNSC Commission accepted the revised financial guarantee amount and BWXT put in place the required financial guarantee instruments to reflect these accepted amounts.

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 operating 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 safe and secure facilities. 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. Program details are prescribed information and confidential. Examples of security measures in place at both facilities include:

- Access control (access cards and locked restricted-access areas);
- Facility Access Security Clearance program;
- Security guards;
- Security barriers;

- Intrusion detection systems; and,
- Preventing the unauthorized removal of nuclear material.

During the reporting period, the following security activities occurred; the facility completed a third-party threat risk assessment, and BWXT Corporate Security performed a security review. Recommendations from both activities are being tracked to completion in Gensuite®.

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 REGDOC-2.13.1 *Safeguards and Nuclear Material Accountancy* (which superseded RD-336 *Accounting and Reporting of Nuclear Material*). Movement of safeguarded nuclear material (inventory changes) are documented and reported to the CNSC as required.

BWXT NEC has implemented and maintained a well-established Safeguards program throughout the licence period and undertakes all required measures to ensure IAEA commitments and CNSC regulatory requirements are met. BWXT NEC reports all Inventory Change Documents for both facilities through the Nuclear Materials Accountancy Reporting system.

The Physical Inventory Taking (PIT), was conducted on July 25th, 2025. Physical Inventory Verification (PIV) and Design Information Verification (DIV) involving the CNSC and the IAEA followed on July 28th and 29th, 2025. The scope of the PIV concerned book examination, physical verification of nuclear material and evaluation of the quality and performance of BWXT NEC's measurement system. The scope of the DIV concerned verification of the facility, general building design, essential equipment, accounting procedures, operator's measurement system, nuclear material characteristics, nuclear material location & flow and operational status of the facility. Short Notice Random Inspections were conducted by the IAEA on March 12th and September 3rd, 2025. The inspections involved physical examination of powder drums and scrap drums with pellet and powder samples taken for further analysis by the IAEA. No non-conformances were noted. A reactive inspection was performed on July 24th and 25th. The inspection was focused on the Safety and Control Area of Safeguards and associated aspects of Management Systems and Human Performance Management. No non-conformances found. Five recommendations were raised and tracked through ATS.

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 facilities. In the reporting period, all packaging and shipments to and from both facilities were conducted safely according to applicable regulations. Shipments of dangerous goods are not routinely made from BWXT NEC by air, rail or water. Routine road shipments of both dangerous goods and non-dangerous goods are made between suppliers, the Toronto plant, the Peterborough plant and customer nuclear generating stations. Shipments of prescribed substances are only made to:

- Persons in Canada, holding a valid CNSC Licence to possess such prescribed substances; or,

- Persons in Canada, not requiring a valid CNSC Licence by virtue of the *Nuclear Safety and Control Act (NSCA)* and regulations; or,
- Persons outside Canada, as approved by an Export Permit, CNSC Export Licence, or combination of CNSC Export Licence and reference to General Export Permit as applicable.

The transportation of dangerous goods in Canada is regulated by Transport Canada through the *Transportation of Dangerous Goods Regulations*. Additional requirements for the transport of Class 7 radioactive materials is regulated by the CNSC through the *Packaging and Transportation of Nuclear Substances Regulations*. In addition, the IAEA has established uniform regulations for all modes of transportation throughout the world. The IAEA has published the *Regulations for the Safe Transport of Radioactive Material* and the CNSC has endorsed these through the *Packaging and Transport of Nuclear Substances Regulations*.

BWXT NEC has an established *Emergency Response Assistance Plan* compliant to Part 7 of the *Transportation of Dangerous Goods Regulations*. It is in place to ensure that timely and effective response protocols are in place with the intent to protect public safety, property and the environment in the event of an accident involving the transportation of natural or depleted UO₂. Transportation of uranium materials to and from BWXT NEC are included in the plan. There were no CNSC inspections focused on the packaging and transport of nuclear substances during the reporting period. There was one Transport Canada inspection in 2025, no issues were noted in the report.

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.

A Self-Assessment was conducted in October focused on public opinion and feedback. In 2025, post-event and post-tour surveys were issued to new contacts to BWXT NEC's community email list and to

those who attended tours. A quarterly review meeting will be conducted to review actions and feedback from these surveys. Looking ahead to 2026, focus group sessions will be implemented to obtain feedback from community members.

BWXT NEC looks forward to continuing to find ways to improve our program, providing more in-person engagement opportunities, and implementing feedback from community members.

4.1.1 Employee/Internal Communications

BWXT NEC uses a variety of means to engage its approximately 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 Relations

BWXT NEC works to ensure there is open communication and awareness of operating activities with all levels of government in the Toronto community. In 2025, BWXT NEC issued a re-election congratulatory letter to MP Dzerowicz along with an offer to meet and a meeting was held at the Toronto facility with MP Dzerowicz in March. Meeting offers were extended to MPP Stiles and Councillor Bravo, however no meetings or tours were conducted. Throughout the year, BWXT NEC emailed sixteen electronic updates to the MP, MPP and Councillor in Davenport. More information about the details of these email updates can be found in 4.1.4.3.

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](#).

In 2025, BWXT NEC shared information via email and sent a letter with an offer to meet to Mississaugas of the Credit First Nation and Toronto York Region Métis Council.

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 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 is available to the public at nec.bwxt.com.

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 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.

In 2025, BWXT NEC coordinated a Community Connect Information Event at the Toronto facility parking lot in September. Approximately 27 community members attended. Additionally, BWXT NEC held a second Community Connect Information Event in November at the Toronto facility parking lot. Approximately six community members attended the event. These in-person events provided an opportunity to engage with community members, obtain feedback, and educate about our operations. Information signs about safety, regulatory compliance, public information, fuel pellet manufacturing, careers, and radiation and uranium were displayed at the events, along with printed materials that community members could take home. Senior level management and directors were available to answer questions from community members and guests were encouraged to sign up to join BWXT NEC's email contact list. Additionally, guests could request to be included in the next community tour opportunity. Community members asked questions on the following topics: operations, fuel pellet manufacturing, nuclear waste, safety and environmental monitoring, emergency preparedness, job opportunities, community engagement.

BWXT NEC issued invitations to these events through a multipronged approach using mailers, Facebook advertisements, website news on the home page of nec.bwxt.com, and email updates to BWXT NEC's subscribers.

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 Peterborough 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. Each newsletter includes contact information and an overview of BWXT NEC's Peterborough operations. In 2025, two newsletters were shared with the Toronto community in June and November. The Spring/Summer Newsletter provided an update on BWXT NEC's community support for local learning through the partnership with Western Technical-Commercial School, information on the 2024 Annual Compliance Report, environmental monitoring data and infographics related to radiation, progress in BWXT's Indigenous Relations Roadmap, details on honouring May 5 Red Dress Day for Missing and Murdered Indigenous Women, Girls, and Two-Spirit Individuals, new website look announcement, career information, and an overview of contact information and operations. The Spring/Summer Newsletter was mailed to over 6,700 community members, included in an email update, and posted on nec.bwxt.com. The Fall/Winter Newsletter provided an update on BWXT NEC's community support for Oasis Dufferin Community Centre and Western Technical-Commercial School, link to join the community Facebook Group, annual drill completion details, Community Liaison Committee recruitment, new virtual tour of the pellet manufacturing, and an overview of contact information and operations. The Fall/Winter Newsletter was mailed to over 6,600 community members, included in an email update, and posted on nec.bwxt.com.

Email Updates: BWXT NEC sends regular email updates to subscribers as another tool to share information and engage with the community. 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](#). In 2025, sixteen email updates were sent. The following topics were covered: Community engagement and volunteerism, CNSC events and meetings, overview of the PIDP, radiation facts, Indigenous relations, tours and presentations provided, facts, event invitations, CNSC IEMP results, website updates, newsletters, Facebook Group invitations, drill notice, tour invitation, and a holiday message. The email updates all include an introductory message from one of the members from BWXT's Corporate Affairs team who are responsible for the Public Information & Disclosure Program. Additionally, each email update 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. In 2025, one postcard mailer was sent. The postcard was mailed in September to over 6,700 community members to advertise for BWXT NEC's Community Connect Information Event. A secondary mailer was prepared but not issued due to Canada Post strike. This mailer was to provide notice of an upcoming drill. To pivot, BWXT NEC utilized expanded targeted advertisements to ensure information was shared with community members.

Information Brochures: BWXT NEC maintains public information brochures. These brochures 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 nec.bwxt.com. Brochures are also available at the guardhouse along Brandon Avenue.

4.1.4.4 Community Volunteerism and 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 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 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.

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.

BWXT NEC held a new member orientation and tour on February 11 in person. BWXT NEC subsequently met with the CLC on March 25 (in-person), June 19 (virtual), and September 24 (in person) for regular meetings. A year-end evaluation meeting was held on November 19 (virtual). Meeting records are posted on nec.bwxt.com. Representatives from Nuclear Waste Management Organization attended the June meeting to provide an overview on long-term storage plans for Canada's nuclear waste. Representatives from Creative Fire attended the October meeting virtually to discuss BWXT's Indigenous Relations Roadmap. A hybrid approach to meetings was taken in 2025 to address feedback from 2023 members about availability in person. This change was encouraging as almost all members attended the CLC meetings in 2025.

Topics discussed during the 2025 meetings include: community giving and volunteerism, events and presentations, tours, new apartment complex across the road, emergency response and drill notifications, communication tools and outreach, annual compliance report review, guest speakers, community surveying, media engagement, CNSC mid-term review meeting, Indigenous relations, and website review session.

BWXT NEC launched a recruitment campaign in the fall of 2025 to attract new members. 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.

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.

In 2025, there were 18,787 sessions from 16,117 users. Top pages visited were: Home page (39%), Emergency Response (11%), and About Us (4%).

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 good and highlighted that the website was easy to navigate. Each member also rated website subpages and most were very effective. One CLC member noted that there should be a page dedicated to radiation and nuclear power. It was explained to the member that a dedicated page exists, but that it can be reviewed for improvements. One member shared there should be more information about nuclear medicine, projects happening in the non-licensed part of the Peterborough site, and student engagement. Overall, the CLC was impressed and noted there was a lot of great information on the website.

Over the course of 2025, new information was regularly updated on the website. The following represents some of the updates that were posted:

- Document summaries and environmental information
- Emergency response information and drill details
- Frequently asked questions
- Public Disclosures
- Community Liaison Committee meeting minutes, recruitment information
- Indigenous Relations Roadmap
- Community newsletters
- Community event details
- Annual Compliance Report information
- Notice of CNSC's IEMP and annual public meeting
- Community involvement and support

4.1.7 Community Events

BWXT NEC conducts community surveys to obtain feedback from community members, including strengths and key areas for improvement. BWXT NEC's first survey was conducted 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.

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 alternate options to a survey. The idea of a focus group was discussed and CLC members noted there was potential connections locally to conduct this type of engagement. 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.

4.1.8 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.

In 2025, BWXT NEC received 1,047 emails and 227 calls, the majority of which were spam, questions for finance or purchasing, job seekers or agencies seeking employment verifications. Two emails were received from community members interest in a tour.

All emails and calls to the information line were appropriately handled and addressed. We continue to encourage community members to use these channels to contact our team with questions, comments, and concerns.

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.

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 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](#).

In 2025, there were three public disclosures made:

- 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.

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 2025, the CNSC Commission accepted the revised financial guarantee amount and BWXT 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.

BWXT Toronto is planning to refurbish four furnaces in the next three years to extend the life cycle of these furnaces to meet the production requirements.

5 CONCLUDING REMARKS

BWXT NEC is committed to the establishment and continuous improvement of a healthy 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 employees, the public and the environment. It is a top business priority to continuously improve our EHS systems to protect fellow employees, the environment, and our communities against environmental, health and safety hazards. BWXT NEC management recognizes, reviews, prioritizes and controls workplace hazards and ensures compliance with applicable regulatory requirements, applicable codes and company policies.

Governed by an integrated management system, conventional health and safety, radiation protection and environmental protection programs are well implemented. All radiation dose measurement results were below Action Levels and regulatory limits. There was one Internal Control Level exceedance in quarterly internal dose. This was investigated, the cause identified as hours worked, and corrective actions were initiated to prevent reoccurrence. Environmental protection programs are well implemented. There was one reportable event during the reporting period that was related to a false fire alarm that triggered a response from Toronto Fire Services. Facility emission results were very low and below Internal Control Levels, Action Levels and regulatory limits. Annual releases to the air and water were both a very small fraction of regulatory limits. Public dose was a small fraction of the public dose limit.

All production and possession limits were respected. Transportation of dangerous goods was conducted safely between suppliers, customers and waste vendors without risk to workers, the public or the environment.

This annual compliance monitoring and operational performance report demonstrates that BWXT NEC has successfully met the requirements of the *Nuclear Safety and Control Act (NSCA)*, regulations and CNSC Class IB Nuclear Fuel Facility Licence requirements.