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Nordion®
A Sotera Health company

NORDION (CANADA) Inc.
CLASS 1B FACILITY

License Number: NSPFL-11A.00/2050

2025 ANNUAL COMPLIANCE AND OPERATIONAL PERFORMANCE REPORT to the Canadian Nuclear Safety Commission for the period JANUARY to DECEMBER 2025

Signatures

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1. EXECUTIVE SUMMARY

This Annual Compliance and Operational Performance Report (ACOPR) provides performance and operational information for Nordion (Canada) Inc.'s (Nordion) Class 1B Facility. It reports annual performance against the Nuclear Safety and Control (NSC) Act, applicable regulations, relevant safety and operational programs and the license conditions of the Nuclear Processing Facility License issued by the Canadian Nuclear Safety Commission (CNSC) (License NSPFL-11A.00/2050) and demonstrates that Nordion is operating in a safe and responsible manner.

As per Nordion's license condition on annual reporting, this report contains information on the following:

- The operation and maintenance of the facility
- A summary of facility and equipment performance and changes
- Changes to operating policies and organization
- Occurrences and personnel radiation exposures
- Releases of nuclear substances and hazardous substances from the facility
- Changes to the emergency procedures, changes that affect or may affect the facility's emergency response arrangements, training activities, drill and exercise activities and unplanned events in which the facility's emergency response organization was tested
- The results of the effluent monitoring of the facility
- The results of environmental monitoring
- A summary of non-radiological health and safety activities, information on minor incidents and lost time incidents
- A summary of the Public Information Program activities
- A summary of Indigenous engagement
- The proposed 2026 Environmental, Health and Safety (EHS) Objectives

The key points of this report are as follows:

- All key measures were implemented to ensure continued compliance with Nordion's Licence Conditions Handbook (LCH).
- All measurable radiation doses received by personnel and the public were within the regulatory limits of 50 mSv/yr for Nuclear Energy Worker (NEW) personnel and 1 mSv/yr for non-NEW personnel (contractors) and the public.
- Nordion had no radiological exceedances of any environmental regulatory limit or action level in 2025.
- Nordion had 1 medical treatment injury in 2025. This injury related to an employee tripping on a transition strip (between carpet to flooring) and injuring their wrist.
- There was one reportable exceedance of the City of Ottawa Sewer Use Bylaw in 2025 related to exceedances of the total suspended solids (TSS), BOD5 and nonylphenol in a quarterly sanitary release sample.

In 2025, Nordion's Class 1B Facility operated within the requirements of the NSC Act, the applicable regulations and the conditions of the operating license issued by the CNSC save for three non-compliances with the NSC Act related to the regulations and within Nordion's site license NSPFL-11A.00/2050. These three non-compliances were identified during CNSC inspections. Each was determined to be of low-safety significance and were promptly corrected. Nordion had six incidents that were reportable to the CNSC in 2025 (see Appendix A). Corrective actions have been implemented to address the reportable.

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GLOSSARY

ACOPR	Annual Compliance and Operational Performance Report
ACR	Annual Compliance Report
ALARA	As Low As Resonably Achievable
AOPFN	Algonquins of Pikwakanagan First Nation
AMMS	Advanced Maintenance Monitoring System
BH	Borehole
BOD	Biochemical Oxygen Demand
CAPA	Corrective Action/Preventative Action
COF	Cobalt Operations Facility
[redacted]	
CNSC	Canadian Nuclear Safety Commission
CSA	Canadian Standards Association
DRL	Derived Release Limit
EHS	Environment, Health and Safety
EM	Emergency Management
EMS	Environmental Management System
ERP	Emergency Response Program
FSAR	Final Safety Analysis Reports
HEPA	High Efficiency Particulate Air
H&S	Health & Safety
IAEA	International Atomic Energy Association
IMS	Incident Management System
ISO	International Organization for Standardization
KOB	Kanata Operations Building
KRMF	Kanata Radiopharmaceutical Manufacturing Facility
LCH	Licence Conditions Handbook
MCA	Multi Channel Analysis
MDA	Minimum Detectable Activity
MSFS	Management System for Safety
NEW	Nuclear Energy Worker
NSC	Nuclear Safety and Control
NVS	Nuclear Ventilation System
PIV	Physical Inventory Verification
RE	Roy Errington
SCBA	Self Contained Breathing Apparatus
TDG	Transportation of Dangerous Goods
TLD	Thermo-luminescent Dosimeter
TSS	Total Suspended Solids
US DOT	United States Department of Transportation
US NRC	US Nuclear Regulatory Commission
WSIB	Workplace Safety Insurance Board

1. INTRODUCTION

Nordion (Canada) Inc. (Nordion) is an indirect, wholly owned subsidiary of Sotera Health Company (Sotera Health), a leading global leader of mission-critical end-to-end sterilization solutions, lab testing and advisory services for the healthcare industry. Nordion's Class 1B Facility is dedicated to the manufacturing of sealed sources used in cancer therapy and irradiation technologies.

Production operations for Nordion are housed in the Cobalt Operations Facility (COF) portion of the Kanata Operations Building (KOB).

A summary of the organizational structure and key environmental, health and safety (EHS) personnel is provided in Section 2.1.5.

Throughout this report, Nordion has defined the following EHS risk significance definitions within its internal procedures:

- Low Risk – A finding or failure that will not result in negative impact to security, employee health and safety, the environment, registrations, or licenses.
- Medium Risk – A finding or failure that resulted or could potentially result in a negative impact to security, employee health and safety, the environment, registrations, or licenses.
- High Risk – An event or occurrence which has a major negative impact, or potential major negative impact on security, employee health and safety, the environment, registrations, or licenses.

1.1 Compliance with Other Regulations

Nordion has multiple regulatory stakeholders in addition to our relationship with CNSC. We engage with agencies such as the Workplace Safety Insurance Board (WSIB), Transport Canada (Transportation of Dangerous Goods (TDG) regulations), US Department of Transportation (US DOT) and US Nuclear Regulatory Commission (US NRC). In 2025, there was one reportable occupational injury incident to WSIB related to our Class 1B facility (section 2.8.4).

There were no non-compliances to other transport-related regulatory authorities.

There was one reportable environmental release that was required to be reported to the City of Ottawa in 2025 related to one quarterly sample resulting in an exceedance of Total Suspended Solids (TSS), Biochemical Oxygen Demand (BOD5), and nonylphenol. This was investigated and corrective actions were taken. The investigation identified that this was a result of the Third Party improperly handling the sample. There was no impact to the environment. As a result of this error by the third-party, Nordion switched to a different third-party. Subsequent sampling using this new third-party indicated no exceedances.

1.2 New Licensed Activities

In September 2025, Nordion was granted a 25-year licence renewal, NSPFL-11A.00/2050 that replaces NSPOFL-11A.01/2025. This licence renewal did not introduce any new licensed activities. This ACR covers all activities occurring in 2025 under NSPFOL-11A.01/2025 and subsequently NSPFL-11A.00/2050.

1.3 Significant Modifications or Changes to Site or Facility

Significant modifications and repairs that were carried out in 2025 include:

- Three sections of the water main pipe feeding the Nordion facility were upgraded to PVC pipe (from cast iron pipe) and a new shut-off valve was installed in the water main line.
- Two roof replacement projects (KOB lower, RE Building) were completed to address sections of roofs that had reached their end-of-life.

1.3.1 Changes to Procedures Related to Operations Safety and Control

In 2025, the following modifications were made to procedures related to operational safety and control:

- QAP AP-45 “Change Control Procedure” was updated to align with the document notification requirements documented in the Nordion Licence Condition Handbook.
- QAP AP-30 “Management and Control of Documents” was updated due to the implementation of a new Document Management System at Nordion.
- SE-HS-009 “Work Permit Authorization Program” was updated to revise the work permit form to account for wall penetrations and to formally add coring and drilling in the hazards identification section of the form.
- Implementation of a formal aging mechanism for transport packages plan aligned with the IAEA SSR-6 2018 regulations.

1.4 Operational Challenges

In 2025, there was a contamination event that resulted in air borne Co-60 concentrations, within the active area, above Nordion’s administrative level and that resulted in contamination of a portion of the active area. This is described in section 2.7.4. There were no impacts to the public or environment as a result of this event.

2. SAFETY AND CONTROL AREA

2.1 Management System

2.1.1 Applicable Activities

The Management System for Safety (MSFS) is applicable to all CNSC licensed activities conducted under our Class 1B nuclear substance and processing facility operating license. Licensed activities include those activities undertaken to operate a nuclear substance processing facility and to service prescribed equipment.

Nordion operates the facility for the manufacture of sealed sources for medical and industrial applications. Nordion manufactures sealed sources that are packaged and transported to be installed in prescribed equipment at another location or licensee. In addition, Nordion services its own self-shielded irradiator that is used to support the operations of the facility. Nordion may also service, at this same facility, prescribed equipment from other licensees and clients for which they have provided procedures to the CNSC. No such activity occurred in 2025.

2.1.2 Management System for Safety Program Effectiveness

The EHS committee reviews the key metrics of the management system for safety program on a regular basis.

The annual management review of the Environmental Management System (EMS) and the MSFS was conducted in June 2025, by the EHS Committee, to review the 2024 EHS Performance Report. This report assessed the performance related to the 14 Safety and Control Areas over the past three years. Additionally, the 2025 Environmental Objectives and Targets and resource requirements for the EMS and MSFS were discussed. The EHS Committee agreed that the programs are resourced adequately to ensure that critical issues were being addressed. Financial and specialized skills resources were assessed to be adequate.

The Committee concluded that they were satisfied with the effectiveness of the EMS and the MSFS.

2.1.3 Internal and External Audits

Nordion uses both internal and external audits as a key part of the MSFS and the EMS.

2.1.3.1 Internal Audits

In 2025, there were 20 internal audits completed by Nordion of its and

as part of the inspection program, conducted a total of 12 health and safety inspections.

These audits encompassed a comprehensive review of production areas and supporting functions, as well as an evaluation of applicable policies and program elements.

Nordion used third-parties to perform internal audits of Nordion's ISO 14001, regulatory compliance, and fire prevention programs.

All findings were addressed and tracked to resolution using Nordion's EHS tracking system.

2.1.3.2 External Audits of Nordion

In 2025, the CNSC conducted 3 inspections of Nordion.

The inspections topics and their results were as follows:

CNSC Inspection Topic	Result
Transport & Package	One non-compliance and one recommendation
Emergency & Fire Protection	Two non-compliances and one recommendation
Transport Security	Three recommendations

The CNSC findings for the Transport & Package and Emergency & Fire Protection inspections were all of low safety significance and have been addressed.

2.1.3.3 External Audits Conducted by Nordion

Nordion conducted one EHS audit of a supplier in 2025. There were no non-conformances resulting from the supplier audit.

2.1.4 Management System for Safety Program Improvements

There were no revisions or changes to the overall Nordion MSFS Program in 2025.

Improvements were made to specific parts of the MSFS program such as to the Radiation Protection (RP) Program, Conventional Health and Safety Program, the Environmental Protection Program, the Emergency Preparedness Program, and the Fire Protection. These are discussed in Section 2.7.8, 2.8.3 and 2.9.7, 2.10.4 and, 2.10.8, respectively.

2.1.5 Summary of Organizational Structure and Key EHS Personnel

Nordion is an indirect, wholly owned subsidiary of Sotera Health Company and operates as a stand-alone company.

The list of EHS personnel for Nordion as of December 2025 is provided below.

Nordion – EHS Compliance

- Senior Vice President EHS (Sotera Health Company)
- Director, Regulatory & EHS
- Director, Global Security
- Manager, Global Security
- Contract Security Analyst
- Contract Security Supervisor
- Contract Security Assistant Supervisor
- Contract Security Protection Officers [redacted]
- Manager, Radiation Safety & Nuclear Transportation

- Radiation Surveyor
- Junior Radiation Surveyor
- Senior EHS Compliance Specialist (2)
- Senior Licensing Coordinator
- Senior EHS Specialist / Radiation Safety Officer
- Manager, EHS
- EHS Compliance Specialist
- EHS Specialist

2.1.6 Changes to the Organizational Structure and Roles and Responsibilities of Key Personnel

EHS Compliance Organization Changes in 2025:

- A new Junior Radiation Surveyor was hired

2.2 Human Performance Management

2.2.1 Overall Performance of Human Performance Management

Employee training was provided in accordance with QAP AP-47 “Training Program and Management System” and SE-TRN-006 “Systematic Approach to Training System”. Nordion provides EHS training for all employees as per SE-TRN-003 “Compliance Environmental, Health and Safety Training”. In 2025, Nordion’s training program continued to meet the requirements of CNSC REGDOC-2.2.2, “Personnel Training” and License Condition 3.1 of the Nordion LCH for the implementation and maintenance of a training program.

Nordion’s Change Control procedure, QAP AP-45, required that training requirements be assessed and documented for procedural changes. These requirements include assessment of the roles assigned to the document, the level of training to be completed and the training completion time. Most controlled documents require “read and understand” training regardless of the impact of changes. Change Leaders were required to consult with relevant managers and determine whether the read and understand training needed to be supplemented by instructor-led classroom training and/or On-The-Job-Training. For changes assessed to have a high or medium risk safety impact, a “Training Needs Analysis” must be completed and EHS must review and approve of the final training decision.

2.2.1.1 Training Attendance Rate

Nordion designs and maintains a variety of radiation safety training courses. New employees who are not classified as Nuclear Energy Workers (NEWs) receive a basic course on EHS which provides information on the facilities, emergency response procedures and alarms, and basic procedures for safety in the workplace. NEWs received a NEW Indoctrination Course. To be authorized to enter the Active Area unescorted, the employee must complete and pass a written test, as evidence of understanding the principles of radiation protection and Nordion safe work practices. NEW retraining and retesting are conducted on a three-year frequency. In addition, NEWs are provided with a half day Radiation Instrumentation Workshop, dealing specifically with the selection and use of radiation survey and contamination meters for the Active Area. In 2025, there were no radiation safety incidents attributed to employee radiation safety practices. This is an indication that the radiation safety training is effective.

Supplementary training programs are provided to all personnel working on behalf of Nordion depending on the nature of the job and the requirements specified by their manager. These programs include but are not limited to topics such as emergency response awareness, care and use of respirators, material handling training, and working safely with fume-hoods.

Employees who transport, handle, or offer dangerous goods for transport are trained in the TDG requirements. The training program includes an online course training that is required once on employment or upon job change. Retraining is conducted on a two-year frequency.

In 2025, the number of scheduled participants that required safety training was 320, and by the end of the year, 317 of the scheduled participants completed the training, which included refresher training. Therefore, the actual attendance completion rate for 2025 was 99%. Of the 3 outstanding training, 2 have been completed. The third was related to an employee that was away on extended leave and had been removed from the corresponding role until training is completed. As per established practice, employees were restricted from undertaking any work for which they had not yet been fully trained.

A summary of the key safety training programs is provided in Table 1.

Table 1
2025 Safety Training Programs

Program	Number of Participants Requiring Training in 2025	Number of Participants Completed Training in 2025
Nuclear Energy Worker (NEW) Indoctrination[3] and NEW Refresher	40	40
Radiation Instrumentation Workshop[3]	39	38*
Radiation Safety Review for Operators[3]	23	23
TDG online	26	25*
TDG Advance	21	21
Crane	21	21
Pallet Truck	14	14
Forklift	5	5
Contractor Radiation Safety Protection Training[3]	21	21
Contractor EHS Training Level I[3]	24	24
In-Depth Security Awareness[3]	54	54
Emergency Response Part 1[3]	1	1
Emergency Response Part 2[3]	1	1
Emergency Response Part 3[3]	6	5**
Emergency Response: Security	13	13
Emergency Response: Site Security Volunteer[3]	0	0
Emergency Response: Monitors[3]	2	2
Self Contained Breathing Apparatus (SCBA) Part 1[3] and 2[3]	9	9
TOTAL	**320**	**317**

[3] Key EHS course
*Outstanding training has been completed at the time of this ACR.
** The employee was on leave during the scheduled training session. Employe has been removed from emergency response roll until training is completed.

2.2.2 Evaluation of Training Effectiveness

2.2.2.1 Trainee Reaction

Trainee reaction reflects the degree to which participants found the training favourable, engaging, and relevant to their work. Feedback was collected through standardized evaluation forms completed for all internally developed, instructor-led EHS training courses. These forms capture overall satisfaction ratings as well as input on aspects of engagement, relevance, and any factors that may affect the learning environment. All feedback is reviewed to support ongoing improvements to course content, delivery, and classroom conditions.

In 2025, 100**%** of evaluation forms rated the training as Good, Very Good, or Excellent, demonstrating consistently high trainee satisfaction. Participants also reported that the courses were engaging, relevant to their job responsibilities, and encouraged active participation.

2.2.2.2 Trainee Learning

Trainee learning reflects the extent to which participants acquired the intended knowledge and skills presented in key EHS training courses. Learning outcomes are measured through the assessment tests administered at the end of each course. Test results are reviewed to confirm that training objectives were achieved and to identify any areas requiring refinement.

In 2025, 100% of trainees successfully passed the required assessment tests for all key EHS training courses. This result indicates strong comprehension of course material across all participants.

2.2.2.3 Training Results

Training results is the degree to which targeted outcomes occur because of the training. The effectiveness of training results is measured by the EHS significance (high, medium, and low) and the frequency of unplanned events documented through processes such as the deviation process, the non-conformance process, investigations, and customer complaints where the root cause was determined to be related to human error or training. The targeted outcome is zero high risk unplanned events related to human error or training as well as no trend for recurrence (three or more) of the same unplanned event with the same human error or training root cause.

In 2025, there were no high risk, unplanned events where the root cause was attributed to Nordion training or human error.

2.2.3 Confirmation of Sufficient Number of Qualified Workers

Nordion ensures that the required complement of qualified personnel is always available to support safe operations, including overnight activities and emergency situations. Coverage levels remained stable throughout the year, with no changes to risk levels or personnel availability.

Nordion Security maintains continuous on-site presence, and Radiation Surveyors are on site whenever work involving radioactive materials is performed. Key emergency response personnel, including Facilities and Production Managers, remain always on-call, and the Incident Manager has the authority to initiate call-ins of both on-call and regular response staff as needed.

The organization maintains a large and well-distributed group of trained Fire Wardens, Marshals, and other emergency response personnel. Because Nordion and BWXT Medical occupy different portions of the same facility, the emergency response structure incorporates qualified responders from both organizations to ensure full coverage when required.

Availability of qualified staff is routinely assessed through Nordion's Emergency Response Program, including scheduled drills and exercises. The emergency call list is tested annually, and results consistently demonstrate that sufficient emergency response personnel, representing all key response groups, can be mobilized within the required timeframes.

In addition, Nordion maintains continuous Health Physics coverage through on-call personnel who are qualified to lead radiation safety activities and establish protective measures for workers, the public, and the environment. A formal on-call roster ensures that the Manager, Global Security (or designate) and the Director, Regulatory/EHS (or designate), who is also a qualified Health Physicist, are always available to support emergency response actions.

2.3 Operating Performance

2.3.1 Effectiveness in Carrying Out Licensed Activities

Licensed activities were carried out in accordance with Nordion's programs, policies and procedures.

Nordion's programs that are in place for auditing and capturing non-conformances continue to identify issues in areas that require corrective actions. These processes functioned as expected.

The 2025 EHS program objectives and results are shown in Table 2.

A system is in place to ensure that the manager self-assessment performance reviews are completed twice a year. The self-assessment process is audited annually. Deviations, Change Forms, and complaints are reviewed yearly at the Annual Joint EMS and MSFS review.

Table 2
2025 EHS Program Objectives and Results

Objective	Measure/Target *	Result
Timely CAPA Closure	• Ensure timely closure of CAPAs (100% completion to target date) • No overdue compliance action items	Tracked month by month basis through Leadership Team. December 2025 - 0 overdue CAPA December 2025 - 0 overdue compliance action items
EHS Management System Effectiveness	• Ensure timely closure of CAPAs (100% completion to target date) • No overdue compliance action items • No EHS critical training overdue (0)	Tracked month by month basis through Leadership Team. December 2025 - 0 overdue CAPA December 2025 - 0 overdue compliance action items
Minimize the number and extent of occupational injuries	• Medical Treatment Incidents = 0 • Lost time Incidents = 0	• Medical Treatment Incidents = 1 • Lost time Incidents = 0
Minimize the use and release of hazardous materials to the environment and ensure adherence to permissible levels	• Radioactive materials emissions to < 2.0% of the Derived Release Limits (DRL) (Ottawa). • No (0) reportable releases of radioactive and non-radioactive hazardous materials to the environment (sanitary or storm sewer, air, groundwater, land)	• Radioactive materials emissions = 0.044% of the Derived Release Limits (DRL) (Ottawa). •1 reportable release related to sanitary by-law exceedance. This was investigated and determined to be a result of the Third Party improperly handling the sample.

Actively limit radiation doses to employees as per ALARA principle	• Maximum employee dose rate < 6.5 mSv/yr	• 3.72 mSv/yr
Maintain a healthy safety culture. *	• Actively participate in the behavioural based safety culture program (discussions and training as applicable) • Immediately report, and where possible, take appropriate corrective action on near-misses and hazard identifications o Target: 30 safety walkthroughs over the year** • IMMEDIATELY REPORT (within the same shift) work-related injuries and suspected ergonomic symptoms (early onset pain) to your manager	• There was a total of 43 safety walkthroughs conducted in 2025 **

* Some Health and Safety Targets have been established to promote safety culture only and are therefore not measurable.
** This metric includes walkthrough conduct at all of Nordion sites and not just the facility located in Ottawa.

2.3.2 Effectiveness in Implementing Operational Controls and Improving Safety Culture

EHS operational controls are documented in a specific series of documents (SE-OP and SE-HS series) and safety critical steps are added into routine production procedures. These procedures are routinely updated using Nordion's change control process when safety improvements are identified or during the document's scheduled periodic review.

In 2025, Nordion continued the practice of regular safety awareness campaigns to encourage safety discussions within the organization and to encourage employees to report near misses and hazard identifications.

2.3.3 Reportable Events

A list of CNSC reportable incidents, their causes and corrective actions is provided in Appendix A.

2.3.4 Sealed Source Tracking

Nordion has a process for reporting the transfer, receipt, export or import of sealed sources if the activity exceeds the threshold limits and within the specified timeframes as detailed in Nordion's LCH.

2.3.4.1 Sealed Source Tracking Activities

Throughout 2025, Nordion provided reporting to the CNSC for all Co-60 sealed source shipments and receipts.
In 2025, there were no incidents related to sealed source reporting.

2.3.4.2 Sealed Source Tracking Improvements

SE-OP-079 "Sealed Source Reporting" was updated to update a CNSC email address.

2.3.5 Non-production Sealed and Unsealed Source Inventory

The inventory of non-production sealed and unsealed sources is provided in Appendix B.

2.3.6 Annual Production

Activities relating to the procurement, possession, processing, and shipping of radioactive materials are conducted under Nuclear Substance Processing Facility Licence, NSPFL-11A.00/2050.

Data relating to the production of sealed sources and acquisition of finished sealed sources is provided in Appendix C.

2.4 Safety Analysis

2.4.1 Validation and Maintenance of Overall Safety Case

The overall Nordion safety case for the facility is effectively maintained in the primary Final Safety Analysis Reports (FSARs) for Cobalt Operations and the Cobalt Pools. When modifications are made, an assessment is performed, and details are captured in the primary FSARs for the facility. The overall safety case for the facility is then validated by the EHS Committee.

2.4.2 Modifications and Changes to Facility that May Affect Safety Analysis

In 2025, there were no modifications that affected the facility's safety analysis.

2.5 Physical Design

The FSAR review process identifies areas of continuous improvement to ensure that the overall design basis for the facility is both validated and maintained. In 2025, there were no significant design issues identified through these reviews. Overall, Nordion's facility design has been maintained.

Facility modifications and additions occurring in the leased areas (BWXT Medical) did not impact the ability of the facility structures, systems and components to meet and maintain their design basis.

2.6 Fitness for Service

2.6.1 Effectiveness of Maintenance and Testing Programs

Nordion has a system in place for the maintenance and control of equipment that supports the facility. The program provides guidelines for the documentation and maintenance of the system to ensure responsibilities are identified, filing systems are maintained, and all necessary controls are in place for facility calibration and maintenance.

Nordion uses an Advanced Maintenance Management System (AMMS) to control Nordion's calibration and maintenance activities. The AMMS is used to catalogue all equipment requiring calibration or maintenance, record equipment information, schedule maintenance, and issue work orders.

Detailed processes and rules governing the preventative maintenance program are available in Facilities Master Plan documents.

The AMMS provides the necessary oversight to ensure equipment integrity. All equipment inspections and preventative maintenance schedules are dictated using the AMMS.

Unscheduled repairs are reviewed on an annual basis by the Facilities department to assess for trends in equipment failures. Recurring failures are reviewed by EHS Compliance for the determination of any additional corrective actions.

This continues to prove effective as during 2025, there were no major equipment failures.

2.6.2 Effectiveness of Aging Management Strategies

Every year a detailed review is carried out to discuss aging equipment at the site. This annual business plan review considers three criteria: safety of the facility, regulatory requirements, and site improvements. When approved, the work identified during the aging equipment review is executed as a project. Projects are prioritized and funds are allocated as required. This aging equipment review process, overseen and approved by the Senior Management team, Finance and EHS Committee, has been effective in keeping the Nordion facility up to date with current technology.

2.7 Radiation Protection

2.7.1 Dose Control Data

2.7.1.1 Occupational External Dosimetry

Table 3 provides dosimetry data for employees grouped in various ranges of exposure. In 2025, a total of 160 employees were monitored. Only the Whole-Body and extremity doses are provided. The skin and lens of the eye doses are typically equivalent to the whole-body dose for routine work since Nordion processes Co-60, a high-energy gamma emitter. However, skin dose may be different if there are skin contamination events. These are discussed in Section 2.7.4. Of the 160 employees monitored, 50 were active area employees and 110 were non-active area employees. Of the 110 non-Active Area personnel, 13 support industrial irradiators (containing Co-60) work at customer sites. These individuals are included in the Class 1B licence dosimetry as they may also receive dose from work at the Nordion facility during the dosimetry year.

Table 3
Personnel Dosimetry

Number of Employees										
Dose Range (mSv)	Whole Body									
	2021	2022	2023	2024	2025					
0	18	44	10	25	35					
0.01 - 1.00	61	52	107	95	90					
1.01 - 5.00	28	35	40	39	35					
5.01 - 10.00	0	0	0	0	0					
Dose Range (mSv)	Right Hand					Left Hand				
	2021	2022	2023	2024	2025	2021	2022	2023	2024	2025
0	14	10	14	7	10	13	10	12	9	9
0.01 - 1.00	7	12	12	13	9	7	10	14	11	11
1.01 - 5.00	15	19	22	21	22	16	21	21	21	21
5.01 - 10.00	2	0	0	1	0	2	0	1	1	0
10.01 - 20.00	0	0	0	0	0	0	0	0	0	0
>20	0	0	0	0	0	0	0	0	0	0

Table 4
Average, Maximum and Minimum Worker Effective Doses (mSv)

		2021	2022	2023	2024	2025	CNSC Regulatory Limit
NEWs	Average	0.8	0.71	0.76	0.71	0.60	n/a
	Average*	0.96	1.07	0.81	0.85	0.77	n/a
	Maximum	4.3	4.29	4.58	4.28	3.67	50/yr 100/5yr
	Minimum	0	0	0	0	0	n/a
	Number of NEW monitored	107	131	157	159	160	
Contractors	Average	0.04	0.03	0.02	0.02	0.02	n/a
	Average*	0.06	0.04	0.05	0.05	0.03	n/a
	Maximum	0.30	0.29	0.26	0.18	0.17	1/yr
	Minimum	0	0	0	0	0	n/a
	Number of NEW monitored	53	40	51	80	87	

* This average is calculated excluding zero dose values.

Table 5
Minimum, Maximum and Average Worker Extremity Doses (mSv)

		2021	2022	2023	2024	2025	CNSC Regulatory Limit
NEWs	Average	1.56	1.32	1.35	1.67	1.29	n/a
	Maximum	7.73	4.94	5.23	7.03	3.62	500/yr
	Minimum	0	0	0	0	0	n/a
	Number of NEW monitored	38	42	48	42	41	

Table 4 and 5 provides maximum and average doses to NEWs and contractors.

Contractor doses continue to be well managed and controlled. The change in average dose and maximum dose has slightly decreased since 2024.

Table 4 and 5 shows continued good performance in whole-body and extremity dose relative to the CNSC Regulatory Limit.

The above analysis of trends demonstrates doses are well managed at Nordion and adherence to the principle in the execution of duties by Nordion personnel.

2.7.1.2 Internal Occupational Radiation Doses

Nordion's bioassay program includes whole-body counting if air contamination monitoring indicates a need. In 2025, Nordion had a contamination event that had the potential for employee inhalation of Co-60 (see section 2.7.4). Four

employees were sent for off-site whole-body monitoring. Three employees had Co-60 inhalation doses of 0.0056 mSv, 0.0033 mSv, and 0.0019 mSv. The fourth employee had no measurable uptake of Co-60. These doses are approximately less than 3% of the typical monthly doses received by these employees.

2.7.2 Significance of Results for the Dose Control Data

The employee group with the highest average dose (2.54 mSv per employee) is the Cobalt production technicians. For this group, the average dose in 2025 (2.54 ± 0.76 mSv) was slightly less than the 2024 average dose for the same group (2.60 ± 1.12 mSv) and well below the regulatory limits and Nordion internal actions levels.

The other group that accounts for Nordion's doses are the Monitoring, Decontamination, and Shipping group. The average dose in 2025 was 1.66 ± 1.14 mSv. This represents a decrease from 2024 (2.48 ± 1.15 mSv) which is primarily a result of new employees that started in 2025 and therefore did not have a full year of dosimetry.

Non-active area personnel include 13 personnel that are part of Nordion's installation and services team that performs work at customer sites. This group has the highest average dose for non-active area personnel. In 2025, the installation group had an average dose of 0.97 ± 0.73 mSv, with a max dose of 2.49 mSv. Results overall demonstrate continued and consistent performance of Nordion employees in accordance with ALARA.

2.7.3 Dose to the Public

In 2025, dose represents the dose to the public from Nordion activities only. The dose to the public from Nordion activities remain well controlled and well below the limit of 1 mSv/year. Table 6 shows the calculated doses to the public from 2021 to 2025.

Table 6
Dose to Public

Year	(mSv)
2021	0.00185
2022	0.00156
2023	0.00095
2024	0.00102
2025	0.00044

2.7.4 Contamination Control Data

Nordion has robust controls in place to monitor and control contamination. The contamination control program for the Active Area includes routine sampling and daily monitoring of the floors, benches, fume-hoods, gloveboxes, support/service areas, and on a weekly basis, change-rooms and inactive floors. Regular sampling, by wipe testing, of the corridors and office areas is conducted several times daily to ensure areas are maintained contamination free and, should contamination be found, to decontaminate immediately to the levels specified in the decontamination procedure. In addition, equipment and personnel leaving the Active Area are monitored for contamination.

During 2025 operations, there were 15 instances where contamination was identified in accordance with Nordion robust monitoring program and subsequently contained within the Active Area. Of the 15 contamination incidents, 7 were related to contamination found on clothing, 3 were found on the skin, and 6 were related to contamination found on equipment or floors. One of the 15 incidents involved more than one type of contamination, clothing and skin. The calculated skin doses for the three contamination incidents were 0.076 mSv, 7.15 mSv, and 0.02 mSv. These doses are below Nordion actions levels and below CNSC regulator limits.

The distribution of contamination incidents from 2021 to 2025 is shown in Table 7 and illustrated in Figure 1.

In July of 2025, Nordion had a contamination event that resulted in air concentrations of Co-60, contained within the active area, that exceeded Nordion's administrative level. During an in-cell filter change, the procedure was not properly followed, and the nuclear ventilated system (NVS) was able to draw contaminated air out of Cell 4 and into the general active area zone resulting in contamination of objects and employees involved in the work. The contaminated air was contained to the active area and properly ventilated through the NVS. As such there was no release to the environment. Controls, including appropriate PPE, were in place as per Nordion's procedures. As noted in section 2.7.1.2, four employees were sent for whole-body monitoring and there was no significant dose attributed to inhalation. The contamination was restricted to Nordion's active area only, where contamination may be expected to occur and controls are in place. This event is included in Appendix A as a reportable event.

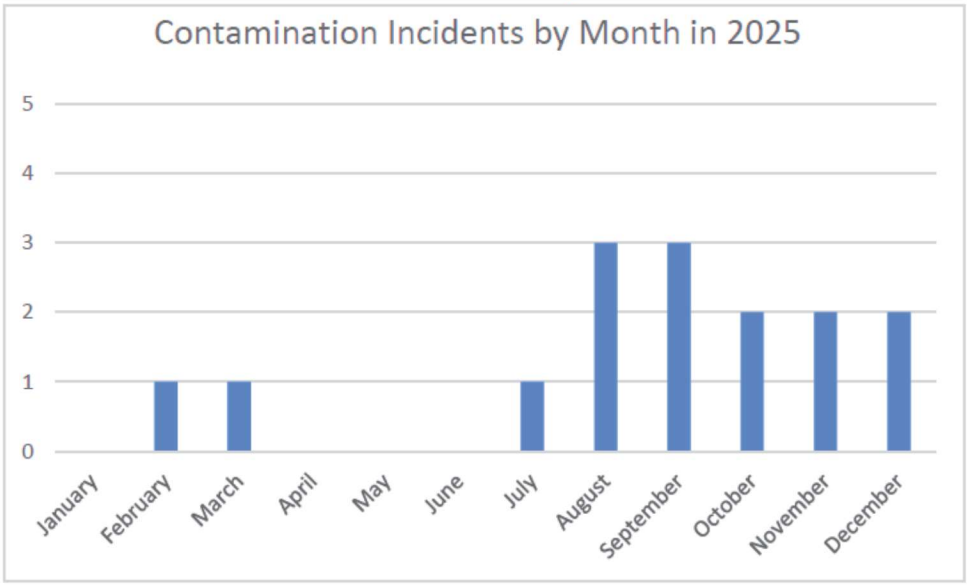
The main isotope identified during the contamination events is Co-60. The number of contamination events in 2025 is lower than in 2024. All events were reviewed by surveyors and the noted contamination events did not result in any increased doses to personnel. Nordion will continue to monitor contamination events to assess areas for potential improvement.

Nordion's contamination control program continues to be well managed and meet the conditions of the licence.

Table 7
Contamination Incidents by Contamination Level

Year	Not recorded	<500 cpm	>500 cpm, <2,000 cpm	>2,000 cpm, <10,000 cpm	> 10,000 cpm, < 50,000 cpm	>50,000 cpm	Total Co60 Contamination Incidents
2021	0	0	3	4	1	1	9
2022	0	5	1	7	3	0	16
2023	1	2	5	16	10	4	38
2024	0	1	1	10	12	3	27
2025	0	1	1	9	3	1	15

Figure 1
Contamination Incidents by Month in 2025



2.7.5 Facility Radiological Conditions

The radiation survey program involves radiation measurements within the Active Area, and on the perimeter and exterior of the building. Within the Active Area, radiation surveys are generally conducted daily, throughout all the labs and rooms. Areas where radiation fields are above 0.025 mSv/hr (2.5 mrem/hr) are posted with radiation warning signs, indicating the radiation fields. In addition, surveys are conducted at employee work areas, at cells, and fume-hoods, during production and test operations, to ensure radiation fields during processing are within acceptable levels. Special surveys are conducted on new processes/equipment to provide information on the safety performance of new operations.

On a monthly basis, radiation surveys have been conducted on the perimeter of the Active Areas and within the Inactive Office Areas. The monthly survey also includes measurement of radiation fields outside the Kanata Operations Building (KOB) to ensure conditions have not changed in the operations that may impact the environment/exterior exposure. All the monthly surveys were conducted in 2025, and doses remained within regulatory limits.

Air is continuously monitored at various locations in the facility. In addition to having the capability of alarming locally, Continuous Air Monitors are monitored and logged at the Surveyor's control panel and on the building monitoring system.

For work known to have the possibility of creating air borne contamination, or when air borne contamination is identified, a zone is demarcated and signage is posted requiring respirators to be worn. Respirator requirements are removed only once air monitoring measurements are below the required levels. In 2025, all breathing air sampling was performed in accordance with procedures and results indicated that processes were in control. Facility radiological conditions were stable in 2025. Contamination incidents are discussed in Section 2.7.4.

2.7.6 Exceeding Regulatory Limits or Action Levels

In 2025, there was no exceedance of Nordion's action limits.

2.7.7 Radiation Protection Program Effectiveness

The Radiation Protection (RP) Program is reviewed by conducting process audits and process safety audits. Data and performance of the RP Program is also reviewed regularly at EHS Committee meetings. The RP Protection program continued to operate effectively in 2025.

2.7.8 Radiation Protection Program Improvements

There were no significant changes to the RP program in 2025. The RP program continued to operate effectively in 2025.

2.7.9 Radiation Protection Program Performance

The objectives, goals and targets of the RP Program are shown in Table 2 of Section 2.3.1. The targets for maximum NEW dose and environmental releases were met in 2025. These targets are tracked as key performance indicators at EHS Committee meetings and in Monthly Operational reports. The targets are reviewed yearly at the Annual Joint EMS and MSFS Review. See Section 3.2 Table 15 for a summary of the initiatives and targets for the upcoming year.

2.7.10 Continuous Improvements under ALARA Performance

Dosimetry data is reviewed at EHS Committee meetings to ensure doses are monitored and any appropriate actions to ensure ALARA are implemented. All activities in the ALARA program are outlined in Nordion's internal procedure "Keeping Radiation Exposures and Doses as Low as Reasonably Achievable" (SE-RP-002). Safety is integrated into the design aspects of new builds, from design objectives, design review and to performing Hazard Risk Analysis and Third-Party Reviews of process flows. In 2025, Nordion updated several tasks that had the potential to result in air borne releases to require the use of respirators throughout the entirety of the procedure. Previously, the use of respirators was based on air sampling performed during the task.

2.7.11 Radiation Devices and Instruments Performance

Performance of the following equipment, alarms and monitoring devices is checked at various frequencies throughout the year. Maintenance is performed for any tests that are out of specification. Investigations are performed for any findings that may have a safety significance.

In 2025, the following testing was performed:

- NVS High Efficiency Particulate Air (HEPA) filters are required to be tested yearly. All HEPA filters were tested within the annual frequency and HEPA specifications were met.
- The emergency generators were tested monthly and confirmed to be operational.
- The radiation evacuation alarm was tested weekly and confirmed to be fully functional.
- The radiation alarms throughout the facility were tested on a weekly basis in 2025. The tests verified that the alarms sound at the pre-set alarm levels and that the alarms register on the Building Management System (BMS).
- The sprinkler system fire system was tested monthly in 2025 and found to be operational. All dry systems were tested and verified in good operating condition in 2025 as required by the National Fire Protection Association.
- The fire alarm panels were tested monthly and found to be fully functional.
- Handheld contamination monitoring equipment was maintained twice a year. Hand & Foot and Whole-body area monitors were checked weekly. Area monitors were checked daily.
- Air sampling equipment was tested on a weekly basis.
- Radiation measurement instruments were tested on a monthly, bi-annual, or annual basis as required by application. Radiation instruments that did not meet the calibration check specifications were sent for repair and service or were

replaced. Nordion maintained an inventory of radiation survey instruments to ensure sufficient radiation instruments were available at all times.

There were no trends identified in 2025 relating to radiation instruments out of calibrations testing or failures of radiation instruments.

2.7.12 Radiation Protection Training Program and Effectiveness

See Section 2.2.1 and 2.2.2.

2.8 Conventional Health and Safety

2.8.1 Conventional Health and Safety (H&S) Program Effectiveness

The Conventional H&S Program is reviewed by conducting program audits, process audits, regular inspections by both employees and management, and a review of revised safety programs is performed by the Workplace H&S Committee. The Workplace H&S Committee is also responsible for reviewing the Hazard Prevention Program. In addition, the EHS Committee sets targets each year that are used to monitor the effectiveness of the safety program.

Near Miss Reports and Hazard Identification Reports were tracked and reported monthly to senior management and were provided to the EHS Committee for review.

Process safety audits are conducted annually as part of the internal audits discussed in section 2.1.3.

See Section 2.1.3 for a description of audits and inspections for 2025.

2.8.2 Conventional H&S Committee

The Nordion Workplace H&S Committee is represented by union and management and typically meets monthly.

The Nordion Workplace H&S Committee met eleven times in 2025. The 2025 accomplishment for this Committees was their continued review of new or changes to existing EHS policies and programs. In addition, the Workplace H&S Committee continued to review ergonomics as a standing agenda item for each meeting.

2.8.3 Conventional H&S Program Improvements

Improvements to the Conventional H&S Program in 2025 included the following:

- Continued to implement behavioural based safety awareness campaign
- Hosted a Safety Week in June 2025 to continue to raise safety awareness
- Maintained an early injury intervention program to minimize ergonomic risks

2.8.4 Conventional H&S Occurrences

During 2025, there was one medical treatment incident and no lost time injury at the Nordion facility. The details are summarized in Table 8 below. Figure 2 illustrates the Number of Incidents by year, and the Number of Days Lost by year respectively. The lost time injury statistics are shown in Table 9.

Table 8
Medical Treatments Incidents

Medical Treatment Injury	Actions Taken
An employee was carrying several reams of paper. Another employee opened the door and stepped out to grab the paper from the first employee. As the second employee stepped backwards, their heel caught the lip of the carpet edge (transition strip) and they fell backwards. They tried to use their hand to catch themselves. Their wrist was injured as a result of the fall.	As a result of this injury, Nordion implemented a revised process that paper would be delivered directly to area by using proper equipment e.g. carts. This injury did not result in any lost time.

Figure 2
Number of Medical Treatments and Lost Time Incidents by Year

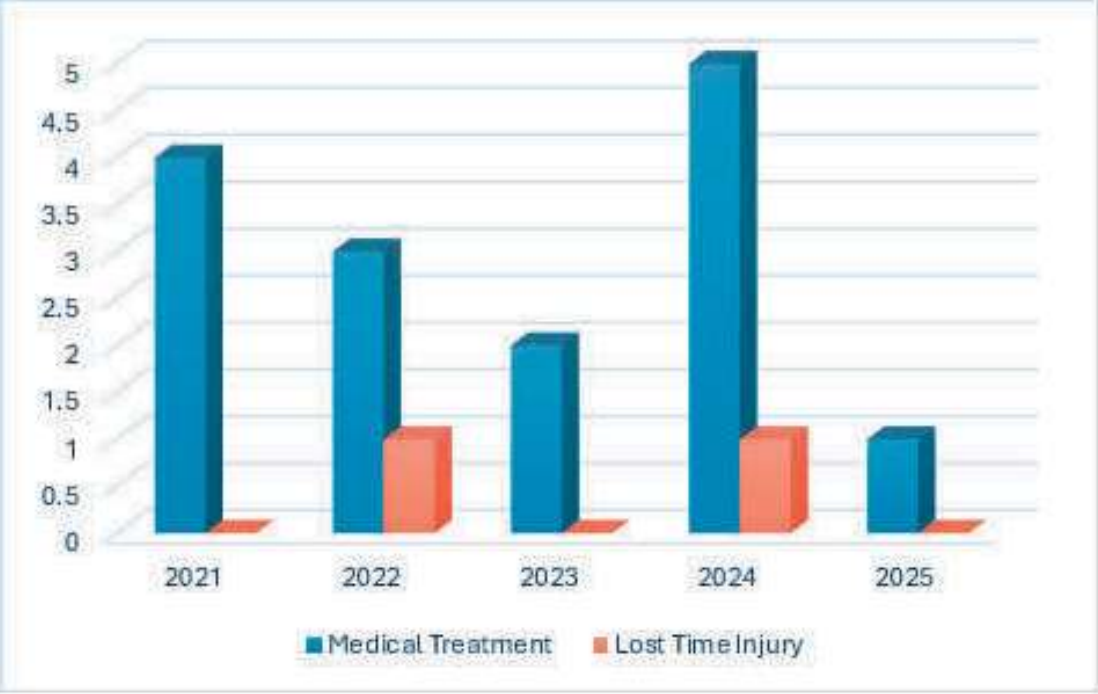


Table 9
Nordion Lost Time Injury Statistics for 2025

# Lost-Time Injuries[1]	0
Severity Rate[2]	0
Frequency Rate[3]	0

1 An injury that takes place at work and results in the worker being unable to return to work for a period of time.

2 The accident severity rate measures the total number of days lost to injury for every 200,000 person-hours worked at the site. Severity = [(# of days lost in last 12 months) /(# of hours worked in last 12 months)] x 200,000.

3 The accident frequency rate measuring the number of LTIs for every 200,000 person-hours worked at the site. Frequency = [(# of injuries in last 12 months) / (# of hours worked in last 12 months)] x 200,000

2.9 Environmental Protection

2.9.1 Air and Water Release Monitoring

The environmental monitoring program is designed to monitor and measure effluent releases to the environment and to determine radiation levels in areas exterior to the KOB. The program includes the following elements:

a) Continuous monitoring of process ventilation, exhausts ductwork, and stack emissions by use of in-situ detectors and samplers and computerized recording
b) Weekly air sampling and analyses for KOB exhaust stack emissions
c) Holding tanks for Active Area liquid effluent to allow sampling, analysis, and authorized release of liquid effluent
d) Environmental TLD program
e) Soil sampling
f) Groundwater sampling

Ventilation and stack sampling is conducted weekly. Stack air is monitored using cellulose filter paper that traps radioactive particulates. These are replaced weekly and measured using gamma spectroscopy.

2.9.1.1 Airborne Effluent

In 2025, there were air releases of Co-60 equal to 0.000362% of the DRL (see Table 10). No Action Levels were exceeded. There was no significant contribution to the dose to public from air releases in 2025.

Table 10
Airborne Releases

Year	Co-60 (GBq/yr)
2021	0.00004
2022	0.0003
2023	0.000001
2024	0.00081
2025	0.00091
Action Levels (GBq/week)	0.001

	Co-60
DRL (GBq/yr)	250
% DRL	0.000362

2.9.1.2 Liquid Effluent

Allowable liquid effluent releases to the environment are limited to values defined in SE-OP-013 "Water Effluent Monitoring". The 5-year variation in activities released is listed in Table 11. Each release of liquid effluent in 2025 was well below the values in SE-OP-013. All liquid effluent releases in 2025 were below the Nordion internal limits and well within CNSC licensed limits. A summary of liquid releases, expressed as a % DRL, is provided in Table 11.

The City of Ottawa is informed whenever a release to the sanitary sewer takes place. In addition, a monthly summary report of the activity levels released is provided to the City of Ottawa.

Note that liquid release activity measurements have an uncertainty of ±10%.

Liquid effluent from the active area is contained in delay tanks prior to release to the sanitary sewer. In 2025, the delay tank was released on [redacted]. Water from each release was analyzed and releases were within Nordion's limits.

Based on Nordion's derived release values (DRLs), the overly conservative estimation of the dose to a member of the public would be 0.00044 mSv.

Table 11
Liquid Releases (GBq/yr)

Year	Litres	Co-60	Nb-95	Zr-95	Cs-137
2021	152762	0.0046	0.002	0.002	0.001
2022	101337	0.038	0.002	0.001	0.001
2023	142560	0.026	0.0005	0.0009	0.0006
2024	187185	0.0285	0.0009	0.0010	0.0006
2025	147612	0.0148	0.0005	0.0007	0.0004

Nordion SE-OP-013 (20) Constraints on each delay tank release (pH or GBq/Release)				
pH	**Co-60**	**Nb-95**	**Zr-95**	**Cs-137**
6-8	<0.0012	<0.00004	<0.00005	<0.00004

	Co-60	Nb-95	Zr-95	Cs-137
DRL (GBq/yr)	35.4	3,250	2,060	24.8
% DRL	4.18E-02	1.55E-05	3.49E-05	1.81E-03

2.9.1.3 Environmental TLDs

The approximate locations of environmental TLDs are listed in Table 12. The existing environmental TLD placement corresponds roughly to the historical locations of these dosimeters. The dosimeters are deployed to generally cover the points of a compass and preferentially to the east of the facility, which is the direction of the prevailing winds. Several TLDs are also placed in residences of Nordion employees. In 2025, one of the environmental TLDs was received late from the residence and the result was not available at the time of this report.

All environmental TLD readings for 2025 were well below the public limit of 1 mSv. Negative numbers are the result of the use of control TLD subtracted from the respective environmental TLDs. The similarity in the recorded dose in these locations year over year, taken with the absence of any significant contamination found in soil illustrates that the variation between locations and between years is due to variations in natural background radiation at these different times and locations.

Table 12
Environmental TLDs Results

Location	2021 (mSv)	2022 (mSv)	2023 (mSv)	2024 (mSv)	2025 (mSv)
16	0.2	0.135	0.08	0.071	0.062
17	0.096	0.137	0.154	0.157	0.17
18	0.04	0.358	0.159	0.339	0.308
19	0.074	0.08	0.022	0.008	-0.037
20	0.065	0.088	0.085	0.048	-0.085
32	-0.03	0.105	-0.001	-0.061	0.022
33	-0.04	0.044	-0.038	-0.091	-0.056
38	0.109	-0.053	-0.045	-0.040	0.004
57	-0.037	0.07	-0.026	0.005	*
58	-0.048	0.084	0.098	0.095	0.16

* Late submission. Result is not available.

2.9.2 Significance of Air and Water Release Monitoring Results

As in previous years, air releases remain several orders of magnitude lower than liquid effluent releases.

Nordion's releases remain well below the allowed DRL and do not present a negative impact to people or the environment.

2.9.3 Exceeding Regulatory Limits or Action Levels

There were no instances of exceeding CNSC environmental regulatory limits or action levels in 2025.

2.9.4 Spills to the Environment

There was a watermain break in September of 2025 that resulted in clean water from the water main near the back portion of the property causing increased sediment entering the creek as it flowed across soil into the creek. The was reported to the Ministry of the Environment and the CNSC. This break was isolated as soon as it was identified and was subsequently repaired. There was no know impacts to the creek.

2.9.5 Environmental Protection Program Effectiveness

A review of the performance related to the Environmental Protection Program and the EMS is conducted on an annual basis. In 2025, this review was held during the Annual EHS Program Review in June 2025.

See Section 2.1.3 for a description of audits and inspections for 2025.

2.9.6 Environmental Protection Program Activities

Activities which took place in 2025 included the following:

- Nordion staff conducted ten fire and environmental inspections of the facility to identify areas for improvement and/or concerns.

2.9.7 Environmental Protection Program Improvements

- In 2025, SE-ENV-001 "Environmental Management System Manual" was updated to reflect a minor change in the ISO 14001 requirements.

2.9.8 Environmental Protection Program Performance

A description of the 2025 Environmental Protection Program Initiatives is provided in Table 13, along with the results/outcomes.

A summary of initiatives and targets for 2026 is provided in Table 14.

Table 13
2025 Environmental Objectives and Targets

Objective	Target	Status
Conduct an audit of a supplier whose goods and/or services could have a significant impact on environmental, health and safety	Complete one supplier audit in accordance with SE-ENV-019 "Environment, Health and Safety Supplier Assessment Program" by the end of December 2025	Completed
Investigate energy reduction opportunities	Estimated savings of 7,500 kWh per year	Complete, an estimated 46,311 kWh energy savings annually as a result of lighting retrofits.

Table 14
2026 Environmental Objectives and Targets

Objective	Target
Conduct an audit of a supplier whose goods and/or services could have a significant impact on environmental, health and safety	Complete one supplier audit in accordance with SE-ENV-019 "Environment, Health and Safety Supplier Assessment Program" by the end of December 2026
Investigate energy reduction opportunities	Estimated savings of 7,500 kWh per year

2.9.9 Groundwater and Soil Sampling and Monitoring

2.9.9.1 Soil Sampling

Soil samples were taken at 19 locations around the Nordion site in July 2025 as part of Nordion's environmental monitoring program. Samples were analyzed as per Nordion's internal procedure on a Multi Channel Analysis (MCA). Background measurements (no sample, empty chamber) were also taken for reference but not subtracted from the measurements directly. The radioisotope primarily analyzed was Co-60. The Minimum Detectable Activity (MDA) is determined for each sample individually.

Very low levels of Co-60 were identified on 4 of the samples, generally on the east and west portions of the property. Co-60 concentrations were between 6.74 Bq/kg and 11.03 Bq/kg at these four locations. These are well below the 100 Bq/kg IAEA clearance levels and below the 14.1 Bq/kg CNSC screening levels. Despite being below the CNSC screening levels, these four locations were resampled in August 2025. Three of the locations identified no measurable Co-60 in the resampling. A location west of the stack and on Nordion's property identified approximately 10 Bq/kg of Co-60. This remained below the CNSC screening levels and does not pose any risk to the environment or he public.

These levels of Co-60 are very low and near the MDA of the measurements. They do not pose any risk to people or the environment. The results are also not systematic. Previous results, which included third-party analysis in 2022 and 2024, has not identified any Co-60 contamination. In addition, the groundwater sampling, detailed in section 2.9.9.2.2, did not identify any contamination of groundwater.

Nordion will continue to monitor soil around its facility.

No other radionuclides attributable to licensed activities were detected in the soil samples.

2.9.9.2 Groundwater Sampling

2.9.9.2.1 Non-Radiological Sampling

Non-radiological groundwater samples were taken in June 2025. See details in Appendix D.

The results of this analysis demonstrated that there were no significant changes to groundwater when compared to previous years. This indicates that Nordion's operations have not had a significant impact on the groundwater.

The boreholes designated for non-radiological sampling are distinct from those used for radiological sampling.

2.9.9.2.2 Radiological Sampling

Nordion monitors groundwater at least once a year.

Samples were taken in July 2025 from the following boreholes (BH) to assess potential radiological contaminants:

- 1991-BH1
- 1991-BH3
- 1991-BH4
- 2012-BH1

Samples were analyzed as per Nordion's internal procedure on a MCA. The radioisotope primarily analyzed was Co-60. The MDA was determined for each sample individually to be less than 3.97 Bq. When accounting for background Co-60 fields present in the facility, all four samples were determined to be less than the MDA. No radionuclides attributable to licensed activities were detected in the water samples.

2.10 Emergency Management (EM) and Fire Protection

2.10.1 Emergency Preparedness Program Effectiveness

Management has assessed the existing program and deemed it effective through historical success in meeting the response objectives during exercises.

Nordion completed all of its inspections and exercises for 2025.

2.10.2 Emergency Preparedness Program Activities

Nordion has an extensive emergency preparedness program to respond to various types of emergency situations, including on-site and off-site emergencies. During 2025, five Emergency Response exercises were conducted to test these emergency response plans and response personnel.

The following activities took place in 2025:

- CNSC performed an inspection of the Emergency Management Program
- Nordion held a CNSC observed major exercise on June 17th, 2025. This exercise included coordination and response from multiple Ottawa Fire Department stations to test the effectiveness of both the internal and external response forces in the event of an emergency on site. This exercise included testing of the following subplans and drill schedules:
  - Emergency Response Plan
  - Fire Safety Plan (KOB/KRMF)
  - Radiation Emergency Response Plan
  - First Aid Program.
- Testing of the Fire Safety Plan in each of the KOB (credited as part of major exercise), RE Building and Heating Plant, including alarm activation and full evacuation.
- Testing of the Chemical Response Plan
- Completed annual Emergency Response Contact List exercise
- Onboarding several new employees to Incident Management System (IMS) positions, support groups and Emergency Response Program (ERP) roles.
- Continued to provide ongoing training and walkthroughs for ERP personnel.

2.10.3 Emergency Preparedness Program Performance

The emergency preparedness program performance was tested during the exercises and drills noted in the previous section. During these exercises and drills, Nordion executed an effective response and was able to complete the exercise in the allotted time. First responders commented on the effective program.

Overall compliance with the EM Program was proven satisfactory. A total of two non-conformances and one recommendation were identified as part of the CNSC Emergency Management Program inspection. All of these findings have since been addressed.

2.10.4 Emergency Preparedness Program Improvements

In 2025, Nordion completed program enhancements to address minor areas for improvement identified in exercises and drills and other continuous improvements. As noted above, these included:

- Onboarding new staff
- Continued training with all IMS, IMS positions and subplan support groups
- Equipment upgrades

2.10.5 Fire Protection Program Effectiveness

Fire exercises/evacuations were conducted in the Heating Plant, the RE Building and the KOB in 2025. There were no significant findings identified as a result of these exercises.

The objective of the fire protection program is to promote life safety, the conservation of property and essential equipment, the protection of the environment and the continuity of operations through provisions of fire prevention and fire protection measures. Nordion met all scheduled activities related to the fire protection program in 2025, described in section 2.10.6.

2.10.6 Fire Protection Program Activities

The Fire Protection Program Activities that took place in 2025 include:

- Testing of the fire safety plans. This test involved evacuation of the Heating Plant and RE buildings by activation of the building fire alarm system, and a full-scale test of the

KOB fire safety plan and emergency response plan which included participation with Ottawa Fire Services.
- Conducting ten fire and environmental inspections
- Conducting an annual facility condition inspection

A fire protection program audit was conducted in 2025 and is conducted every three years as required by Canadian Standards Association (CSA) standard N393, “Fire protection for facilities that process, handle, or store nuclear substances”.

2.10.7 Fire Protection Program Performance

Overall, the Fire Protection Program was assessed to be in compliance with Nordion’s licence commitments.

2.10.8 Fire Protection Program Improvements

Improvements to the Fire Protection Program in 2025 included:

- Completing a minor revision of SE-EHS-007 “Fire Protection Program – Nordion Ottawa Site” to address a finding from the CNSC inspection.

There were no changes to training, methods, instrumentation, or equipment in 2025.

2.11 Waste Management

2.11.1 Effectiveness of Waste Segregation and Minimization

Nordion’s production facilities have been designed and operated in a manner to control, monitor, and prevent radioactive waste from being released to municipal garbage. All waste from the active area generated through operations is screened for radioactive contamination. Any waste that contains radioactive contamination is collected, segregated and sent to a CNSC approved radioactive waste management facility (see section 2.11.3).

Nordion has designated space and processes to safely store radioactive waste that is generated. Space is also designated for storage of containers and management of waste being prepared for shipment to the external waste management facilities. These areas are routinely monitored to ensure doses to employees remain controlled.

Nordion’s non-radiological waste diversion rate in 2025 was 66.7%, up slightly from 64.3% in 2024.

2.11.2 Identification and Characterization of Waste Streams

Due to the nature of radioisotope production that involves decay and contamination products, identification of individual isotopes and their respective quantities in waste material is difficult. Nordion has worked with a radioactive waste management facility to identify waste streams that are determined by the major isotope product in a given facility. Data for the actual waste activity levels are estimated from activity in the production volume and waste streams.

2.11.3 Waste Shipments

Appendix E provides a summary of solid waste material of Co-60 and liquid waste shipped to a licensed waste management facility in 2025.

2.11.4 Waste Management Program Performance

The waste management program was audited in late 2024 and is on a three-year frequency for internal auditing. Nordion has an annual waste audit conducted by a third party (non-hazardous waste only).

2.11.5 Waste Management Program Improvements

Nordion recycled returned Co-60 sources to minimize radioactive waste. Recycling quantities are provided in Appendix E.

2.12 Nuclear Security

Details of Nordion security and any security improvements of 2025 were provided in the Nordion Physical Security Report and Security Plan for 2025, submitted in February 2025. These safeguards and improvements are prescribed information and were reviewed and accepted by CNSC Security.

2.13 Safeguards and Non-proliferation

2.13.1 Safeguards Program Effectiveness

Nordion has a safeguards program that meets the safeguards requirements of the CNSC regulatory document REGDOC-2.13.1-Safeguards and Nuclear Material Accountancy, CNSC *Nuclear Non-Proliferation Import and Export Control Regulations*, the *Nuclear Safety and Control Act* and *General Nuclear Safety and Control Regulations*.

2.13.2 Safeguards Program Performance

In 2025, Nordion performed accounting and reporting of nuclear material as required by REGDOC-2.13.1-Safeguards and Nuclear Material Accountancy. Nordion completed a Physical Inventory Taking of safeguarded material from which there were no findings. Nordion was not selected for an IAEA Physical Inventory Verification in 2025. There was no IAEA Complementary Access conducted at Nordion in 2025.

2.13.3 Safeguards Program Improvements

The request to exempt the final depleted Uranium transport package model 3300 was completed in May 2025.

SE-LIC-016 “Safeguards Program” was updated to align with current practice.

2.14 Packaging and Transport of Nuclear Substances

Nordion routinely ships nuclear substances and radioactive waste materials in Type B, Type A and Excepted packages. Shipments of Nordion’s products are made via road, air, and sea. Shipments of waste are routinely made via road transport.

The Packaging and Transportation Program at Nordion provides a high-level overview of Nordion’s transportation of radioactive materials program. The program applies to employees involved in design, production, use, inspection, maintenance and repair of packages, and the preparation, consigning, handling, loading, carriage, storage during transport, receipt at final destination, and unloading of packages. It applies to various types of packages including Type A, Type B, and Excepted packages. The content of the program was modeled on regulatory requirements listed in the CNSC *Packaging and Transportation of Nuclear Substances Regulations 2015 (PTNSR)*, Transport Canada *Transportation of Dangerous Goods Regulations (TDG)*, IAEA *SSR-6 Regulations for the Safe Transport of Radioactive Material (2018 Edition)*, US DOT 49 CFR, and US NRC 10 CFR part 71.

In 2025, Nordion reported two events related to packaging and transport of nuclear substances. The first event related to shipment of waste in a Type B package that was missing its plug gasket. Due to the nature of the material being shipped, there was no observed contamination as a result of the missing gasket. This was reported as a non-compliance with section 38 of the PTNSR. The other event was provided as a carrier perspective for minor damage to the exterior cardboard box of a Type A packages originally reported by BWXT Medical.

In 2025, SE-OP-014 “Shipping Radioactive Material” was updated to align with current practice.

2.15 Indigenous Engagement

The Nordion facility is situated in the unceded territories of the Algonquin Anishinaabe.

Nordion is committed to engagement with Indigenous Nations.

We sought participation and held conversations with the Algonquins of Pikwakanagan First Nation (AOPFN) regarding Nordion's licence renewal and engagement plans. On April 23, 2025, 3 personnel from Nordion provided an in-person presentation to the Algonquin Advisory Committee at the Golden Lake reserve. Nordion provided an overview of our business, the operations at our facility, and answered questions from the committee. In May 2025, Nordion provided formal responses to some of the questions contained in AOPFN's intervention of Nordion's licence renewal. In June 2025, AOPFN noted that they were reviewing the draft engagement plan Nordion had provided and would reach out. Discussion on the engagement plan continue in 2026.

In early 2025, Nordion reached out to the Kebaowek First Nation (KFN) to schedule an introductory call. An introductory call was held via Zoom on May 7, 2025, between Nordion and the KFN. Later in May, prior to the Commission hearing regarding Nordion's licence, Nordion provided some data to the KFN on typically waste shipments. In mid-June 2025, the KFN provide a draft letter of intent (LOI) for Nordion's review. Nordion began reviewing the LOI both internally and with CNSC staff. The LOI was related to both Nordion's licence renewal and to committing to developing an engagement plan with the KFN. As Nordion's licence hearing has already past when the LOI was provided and given Nordion's commitment to developing an engagement plan with the KFN, Nordion provided the KFN a draft engagement plan in early 2026 for discussion.

2.16 Public Information Program

2.16.1 Public Information Program Activities

Nordion is committed to fully disclosing its activities to the public to maintain transparency to the surrounding community and to the City of Ottawa. Nordion's website is the primary communications vehicle.

In 2025, Nordion published the following information in the "Public Disclosure" web page:

- April: The Ottawa Fire Services was dispatched to Nordion following the activation of the fire alarm which was later identified as a false alarm.
- April: Ottawa Fire Services on site as part of planned tour of the facility
- May: Ottawa Police Services on site to conduct a training exercise on Nordion's property but unrelated to Nordion's programs.
- June: Nordion evacuated the facility as part of an emergency response exercise with the Ottawa Fire Services Personnel.
- Q1, Q2, Q3, and Q4: 2025 Event reports.

There were no specific engagement activities directly with the public in 2025. Nordion continued to post updated regarding our licence renewal to our website and LinkedIn.

Nordion's website includes a feedback survey form in the Social Responsibility section as a mechanism to invite the public to provide feedback on Nordion's Public Information Program and to learn how the public would like the program to evolve. In 2025, there were no questions pertaining to Nordion's public information program received through the general contact form.

Nordion issues news releases to inform the public of company initiatives, achievements, and issues that the business may be facing. In 2025, there were no media articles related to Nordion environment, health and safety issues or topics. As the context of media coverage referring to Nordion was business-oriented, there was no media analysis of public opinion.

In December 2025, Nordion published an ad in the *Community Voice*, a bi-weekly newspaper distributed to 85,000 homes and businesses across Ottawa and the surrounding areas. The ad underlined Nordion's ongoing commitment to protect the safety of employees, the community and the environment, referred to the Kanata facility as a Class 1B nuclear facility, noted that Nordion is certified to ISO 14001, an international standard for environmental management systems; and encouraged the public to contact Nordion with any questions, comments, or concerns.

In 2026, Nordion will conduct both an outreach event and a public survey. The results of these events will be used to further improve the program and will be reported out in the 2026 ACR.

2.16.2 Public Information Program Improvements

There were no significant changes to the Public Information Program in 2025.

The Public Information Program remains effective.

2.17 Financial Guarantee

The Financial Guarantee, as approved by the Commission and based on the Facility's Decommissioning Plan, remains valid and in effect.

3 FUTURE PLANS AND CONCLUDING REMARKS

3.1 Improvement Plans and Future Outlook

There are no forecasted plans for next year that would require CNSC regulatory oversight.

3.2 Safety Performance Objectives for 2026

Nordion's 2026 EHS Program Objectives and Targets and Health and Safety Objectives are shown in Table 15.

Table 15
2026 EHS Program Objectives and Targets

Objective	Measure/Target *
Timely CAPA Closure	• Ensure timely closure of CAPAs (100% completion to target date) • No overdue compliance action items
EHS Management System Effectiveness	• Ensure timely closure of CAPAs (100% completion to target date) • No overdue compliance action items • No EHS critical training overdue (0)
Minimize the number and extent of occupational injuries	• Number of Medical Treatment Incidents = 0 • Lost time Incidents = 0
Minimize the use and release of hazardous materials to the environment and ensure adherence to permissible levels	• Radioactive materials emissions to < 2.0% of the Derived Release Limits (DRL) (Ottawa). • No (0) reportable releases of radioactive and non-radioactive hazardous materials to the environment (sanitary or storm sewer, air, groundwater, land)

Actively limit radiation doses to employees as per ALARA principle	• Maximum employee dose rate < 6.5 mSv/yr
Maintain a healthy safety culture *	• Actively participate in the behavioural based safety culture program) • Immediately report, and where possible, take appropriate corrective action on near-misses and hazard identifications o Target: 30 safety walkthroughs over the year (including Nordion UK sites) • IMMEDIATELY REPORT (within the same shift) work related injuries and suspected ergonomic symptoms (early onset pain) to your Manager

* Some Health and Safety Targets have been established to promote safety culture only and are therefore not measurable.

3.3 Concluding Remarks

Based on the information provided in this report, Nordion continues to demonstrate its capacity to operate in a manner that protects the safety of employees and causes no adverse effects to the public or the environment.