



Record of Decision

DEC 22-H8

In the Matter of

Applicant SRB Technologies (Canada) Inc.

Subject Application to Renew the Class IB Nuclear
Substance Processing Facility Operating
Licence for the Gaseous Tritium Processing
Facility in Pembroke, Ontario

Public Hearing
Date April 27, 2022

Record of
Decision Date June 21, 2022

RECORD OF DECISION – DEC 22-H8

Applicant: SRB Technologies (Canada) Inc.

Address/Location: SRB Technologies (Canada) Inc.
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Pembroke, Ontario K8A 6W5

Purpose: Application to Renew the Class IB Nuclear Substance Processing Facility Operating Licence for the Gaseous Tritium Processing Facility in Pembroke, Ontario

Application received: June 30, 2021

Date of public hearing: April 27, 2022

Location: Virtual Hearing

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I. Maharaj

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Intervenors		
See appendix A		

Licence: Renewed

Table of Contents

1.0	INTRODUCTION	1
2.0	DECISION	3
3.0	APPLICABILITY OF THE <i>IMPACT ASSESSMENT ACT</i>	4
4.0	ISSUES AND COMMISSION FINDINGS	5
4.1	Completeness of Licence Application	5
4.2	Safety and Control Areas	6
4.2.1	<i>Management System</i>	7
4.2.2	<i>Human Performance Management</i>	8
4.2.3	<i>Operating Performance</i>	9
4.2.4	<i>Safety Analysis</i>	10
4.2.5	<i>Physical Design</i>	11
4.2.6	<i>Fitness for Service</i>	12
4.2.7	<i>Radiation Protection</i>	13
4.2.8	<i>Conventional Health and Safety</i>	14
4.2.9	<i>Environmental Protection</i>	16
4.2.10	<i>Emergency Management and Fire Protection</i>	20
4.2.11	<i>Waste Management</i>	22
4.2.12	<i>Security</i>	23
4.2.13	<i>Packaging and Transport</i>	24
4.2.14	<i>Conclusions on Safety and Control Areas</i>	25
4.3	Indigenous Engagement and Consultation	26
4.3.1	<i>Conclusion on Indigenous Consultation and Engagement</i>	29
4.4	Other Matters of Regulatory Importance	29
4.4.1	<i>Public Engagement</i>	29
4.4.2	<i>Decommissioning Plans and Financial Guarantee</i>	31
4.4.3	<i>Cost Recovery</i>	32
4.4.4	<i>Nuclear Liability Insurance</i>	33
4.5	Licence Length and Conditions	33
4.5.1	<i>Licence Length</i>	33
4.5.2	<i>Licence Conditions</i>	35
4.5.3	<i>Delegation of Authority</i>	35
4.5.4	<i>Conclusion on Licence Length and Conditions</i>	36
5.0	CONCLUSION	36
	Appendix A – Intervenors	A

1.0 INTRODUCTION

1. SRB Technologies (Canada) Inc. (SRBT) has applied to the Canadian Nuclear Safety Commission¹ (CNSC) for the renewal of the operating licence for its gaseous tritium processing facility located in Pembroke, Ontario. The facility is situated in the traditional unceded territory of the Algonquin Anishinaabeg peoples. The current operating licence, NSPFOL-13.00/2022, expires on June 30, 2022. SRBT applied to renew the licence for a period of 15 years, with no changes to the authorized activities.
2. The SRBT gaseous tritium light source (GTLS) manufacturing facility is a Class IB facility pursuant to the [Class I Nuclear Facilities Regulations](#)². At this facility, SRBT processes tritium gas to produce GTLSs and manufactures radiation devices containing these sources. SRBT distributes GTLS and radiation devices in Canada and internationally. SRBT has been operational since 1990 and currently employs 38 people. SRBT's facility occupies leased space in an industrial building and includes a fenced area behind the building that encloses the ventilation stacks. The area surrounding SRBT is primarily used for industrial and commercial purposes. The closest residences are located in a small residential area, approximately 250 meters from the facility.

Issues

3. The Commission is required to determine whether and what requirements the [Impact Assessment Act](#)³ (IAA) imposes in relation to the activities sought to be authorized in SRBT's application to renew the operating licence for its Class IB nuclear substance processing facility. Satisfying any such requirements can be a prerequisite to licensing.
4. Pursuant to paragraph 24(4)(a) and (b) of the [Nuclear Safety and Control Act](#)⁴ (NSCA), the Commission must be satisfied that:
 - a) SRBT is qualified to carry on the activity that the licence would authorize; and
 - b) in carrying on that activity, SRBT would make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed.

¹ The *Canadian Nuclear Safety Commission* is referred to as the "CNSC" when referring to the organization and its staff in general, and as the "Commission" when referring to the tribunal component.

² SOR/2000-204.

³ S.C. 2019, c. 28, s. 1.

⁴ S.C. 1997, c. 9.

5. As an agent of the Crown, the Commission recognizes its role in fulfilling the Crown's constitutional obligations, along with advancing reconciliation with Canada's Indigenous peoples. The Commission's responsibilities include the duty to consult and, where appropriate, accommodate Indigenous interests where the Crown contemplates conduct which may adversely impact potential or established Aboriginal or treaty rights⁵. As such, the Commission must determine what engagement and consultation steps and accommodation measures are called for respecting Indigenous interests.

Public Hearing

6. On August 30, 2021, a [Notice of Public Hearing and Participant Funding](#) was published for this matter.
7. Pursuant to section 22 of the NSCA, the President of the Commission established a Panel of the Commission over which she would preside, including Commission Members Dr. S. Demeter and Ms. I. Maharaj, to decide on the application. The Commission, in making its decision, considered information presented for a public hearing held virtually on April 27, 2022. The public hearing was conducted in accordance with the [Canadian Nuclear Safety Commission Rules of Procedure](#)⁶ (the Rules). During the public hearing, the Commission considered written submissions and heard oral presentations from SRBT ([CMD 22-H8.1](#), [CMD 22-H8.1A](#) and [CMD 22-H8.1B](#)) and CNSC staff ([CMD 22-H8](#), [CMD 22-H8.A](#)). The Commission also considered oral and written submissions from 16 intervenors (see Appendix A for a list of interventions). The hearing was webcast live via the CNSC website, and [video archives](#) are available on the CNSC's website.

Participant Funding Program

8. Pursuant to paragraph 21(1)(b.1) of the NSCA, the Commission has established a [Participant Funding Program \(PFP\)](#) to facilitate the participation of Indigenous Nations and communities, members of the public and stakeholders in Commission proceedings. In October 2021, up to \$50,000 in funding was made available through the CNSC's PFP to review SRBT's licence renewal application and associated documents, and to provide the Commission with value-added information through topic-specific interventions. A Funding Review Committee (FRC), independent of the CNSC, reviewed the funding applications received and made recommendations

⁵ *Haida Nation v. British Columbia (Minister of Forests)*, 2004 SCC 73; *Taku River Tlingit First Nation v. British Columbia (Project Assessment Director)*, 2004 SCC 74

⁶ Statutory Orders and Regulations (SOR)/2000-211.

on the allocation of funds. Based on the recommendations from the FRC, the CNSC awarded a total of \$39,218 to 5 applicants:

- Algonquins of Pikwakanagan First Nation – up to \$10,375
- David Winfield – up to \$1,500
- The Algonquins of Ontario – up to \$17,743
- Concerned Citizens of Renfrew County – up to \$8,100
- Anna Tilman – up to \$1,500

2.0 DECISION

9. Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Decision*, the Commission concludes the following:

- the [*Impact Assessment Act*](#) (IAA) does not impose any obligation upon the Commission in this matter
- the contemplated activities do not present any novel adverse impact on any potential or established Aboriginal claim or right⁷
- the Commission’s responsibility to uphold the honour of the Crown and its constitutional obligations with regard to engagement and consultation respecting Indigenous interests has been satisfied
- SRBT is qualified to carry on the activity that the licence will authorize
- SRBT, in carrying on these activities, will make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed.

Therefore,

the Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, renews the Class IB Nuclear Substance Processing Facility Operating Licence issued to SRB Technologies (Canada) Inc. for its gaseous tritium light source manufacturing facility located in Pembroke, Ontario. The renewed licence, NSPFL-13.00/2034, is valid from July 1, 2022 until June 30, 2034.

⁷ “Aboriginal” is the term used in this document when referring to the Crown’s duty to consult as that is the term used in S. 35 of the Constitution Act, 1982. In all other cases, “Indigenous” is the preferred terminology and used accordingly.

10. The Commission directs that, at the mid-point of the 12-year licence period, SRBT shall present to the Commission a comprehensive midterm update on its licensed activities. This midterm presentation will take place in a public Commission meeting, in the vicinity of the community that hosts SRBT, and include public participation. The Commission will plan to offer participant funding for this proceeding, to take place in 2028, as determined by the Commission's scheduling for that year.
11. The Commission includes in the licence the conditions as recommended by CNSC staff in [CMD 22-H8](#). The Commission also delegates authority for the purposes of licence condition 3.2, as recommended by CNSC staff. Licence conditions and the delegation of authority are further discussed in section 4.5 of this *Record of Decision*.
12. With this decision, the Commission directs CNSC staff to report on the performance of SRBT and its gaseous tritium processing facility, as part of the [Regulatory Oversight Report for Uranium and Nuclear Substance Processing Facilities in Canada](#). CNSC staff shall present this report at a public proceeding of the Commission, where members of the public will be able to participate. The Commission directs CNSC staff to inform the Commission, as part of the *Regulatory Oversight Report*, of any changes made to the Licence Condition Handbook (LCH). CNSC staff may bring any matter to the Commission's attention, as required.

3.0 APPLICABILITY OF THE *IMPACT ASSESSMENT ACT*

13. In coming to its decision, the Commission was first required to determine whether any requirement under the IAA applied to the licence renewal application and whether an impact assessment of the proposal was required.
14. The IAA came into force on August 28, 2019. Pursuant to the IAA and the [Physical Activities Regulations](#) made under it, impact assessments are to be conducted in respect of projects identified as having the greatest potential for adverse environmental effects in areas of federal jurisdiction. A licence renewal is not a project designated under the [Physical Activities Regulations](#).
15. The Commission is satisfied that there is no requirement under the IAA for an impact assessment to be completed. The Commission is also satisfied that there are no other applicable requirements of the IAA to be addressed in this matter.⁸ The

⁸ The IAA can impose other requirements on federal authorities in respect of authorizing projects that are not designated as requiring an impact assessment, including projects that are to be carried out on federal

Commission notes that the NSCA provides a strong regulatory framework for environmental protection and the health and safety of persons. Environmental protection is further discussed in section 4.2.9 of this *Record of Decision*.

4.0 ISSUES AND COMMISSION FINDINGS

16. In making its licensing decision, the Commission considered a number of issues and submissions relating to SRBT's qualification to carry out the licensed activities. The Commission also considered the adequacy of the proposed measures for protecting the environment, the health and safety of persons, national security and international obligations to which Canada has agreed.
17. The Commission decision focuses on the issues relevant for this application, specifically:
 - Completeness of the licence application
 - SRBT's performance in relevant safety and control areas (SCAs)
 - Indigenous engagement and consultation
 - Other matters of regulatory importance
 - Licence length and conditions, including the delegation of authority

4.1 Completeness of Licence Application

18. [SRBT](#) submitted a licence renewal application for its gaseous tritium light source manufacturing facility on [June 30, 2021](#). In its consideration of this matter, the Commission examined the completeness of the application and the adequacy of the information submitted by SRBT, as required by the NSCA, the [General Nuclear Safety and Control Regulations](#)⁹ (GNSCR), and the *Class I Nuclear Facilities Regulations*, and other applicable regulations made under the NSCA, including the [Radiation Protection Regulations](#)¹⁰, the [Nuclear Security Regulations](#)¹¹, and the [Packaging and Transport of Nuclear Substances Regulations](#)¹².

lands, or projects outside of Canada. This licence renewal does not engage any such applicable IAA requirements.

⁹ SOR/2000-202.

¹⁰ SOR/2000-203.

¹¹ SOR/2000-209.

¹² SOR/2015-145.

19. The GNSCR call on an applicant for a licence renewal to provide information regarding any changes in information to the CNSC as part of its application. Section 5 provides:

An application for the renewal of a licence shall contain

- (a) the information required to be contained in an application for that licence by the applicable regulations made under the Act; and
 - (b) a statement identifying the changes in the information that was previously submitted.
20. SRBT's [application](#) provides clause-by-clause responses to the requirements set out in the GNSCR and other regulations under the NSCA. CNSC staff reported that SRBT's application complies with the regulatory requirements.
21. Based on the evidence presented, the Commission agrees and concludes that SRBT's licence renewal application is complete and complies with the regulatory requirements respecting an application for licence renewal. SRBT's application and supporting documents identify how SRBT will meet regulatory requirements and CNSC staff's assessment demonstrates to the Commission's satisfaction how SRBT has adequately addressed the licence renewal application requirements. The Commission notes that SRBT's application is for the renewal of an existing licence to continue operating a Class IB facility, with no substantive changes to the licensing basis, and that section 7 of the GNSCR provides that "An application ...for the renewal... of a licence may incorporate by reference any information that is included in a valid, expired or revoked licence."

4.2 Safety and Control Areas

22. The Commission examined CNSC staff's assessment of SRBT's performance in all applicable [safety and control areas](#) (SCAs) for the purpose of evaluating this application. The Safeguards and Non-Proliferation SCA is not relevant for this application, as SRBT does not currently possess any nuclear material of foreign origin or foreign obligation¹³. SRBT maintains a small inventory (less than 10 kg) of depleted uranium that is used in its pyrophoric uranium tritium traps. The IAEA has granted an exemption from safeguards for this material; therefore, IAEA reporting requirements and related verification activities for this material are suspended until the material is de-exempted at the end of its lifecycle.¹⁴

¹³ Foreign obligations are discussed and defined in [REGDOC-2.13.1 Safeguards and Nuclear Material Accountancy](#)

¹⁴ International Atomic Energy Agency, [INFIRC/164](#), *The Text of the Agreement Between Canada and the Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons*, 2 June 1972, paragraph 37(c).

23. Throughout the current licence period, CNSC staff rated SRBT's overall performance in all applicable SCAs as "satisfactory" or "fully satisfactory".¹⁵

4.2.1 Management System

24. The Commission examined SRBT's management system which covers the framework that establishes the processes and programs required to ensure that the gaseous tritium light source manufacturing facility achieves its safety objectives, continuously monitors its performance against these objectives, and fosters a healthy safety culture.
25. SRBT's application summarizes information about its management system, including:
- governing management system document
 - organization and organizational structure
 - safety committees and the implementation and maintenance of programs, processes and procedures
 - safety culture assessments

SRBT also provided information about the comprehensive review and revision of its management system, which brought it into full compliance with the requirements of Canadian Standards Association (CSA) Standard N286-12, *Management system requirements for nuclear facilities*^{16,17}, in December 2016. In addition, SRBT noted its ongoing commitment to monitoring and implementing future regulatory changes in this area, as well as industry best-practices.

26. CNSC staff reported that SRBT has implemented a management system that meets regulatory requirements, in accordance with CSA N286-12. CNSC staff submitted that it assessed SRBT's performance in this SCA through one detailed desktop review in 2017 and one inspection in 2021. CNSC staff stated that all findings and recommendations from these compliance verification activities were deemed to be low safety significance and were adequately addressed by SRBT.
27. The Commission finds that the information provided by SRBT and CNSC staff analysis demonstrate that SRBT has acceptable programs in place to ensure that its facility achieves its safety objectives and fosters a healthy safety culture, and that SRBT's management system meets the requirements of CSA N286-12. The

¹⁵ Changes between "satisfactory" and "fully satisfactory" reflect changes in the CNSC's rating methodology, which occurred after the 2018 reporting year, and do not necessarily reflect a significant change in SRBT's performance.

¹⁶ CSA N286-12, *Management System Requirements for Nuclear Facilities*, CSA group, 2012.

¹⁷ The CSA Group makes its nuclear series standards freely viewable to members of the public on its [website](#) by means of a guest account.

Commission concludes that SRBT has the appropriate organization and management structures in place to carry on the licensed activities. The Commission comes to this conclusion on the following basis:

- The Commission agrees with CNSC staff's assessment that SRBT has a management system in place to operate the facility, and that the management system meets the requirements of CSA N286-12
- The Commission is satisfied that the evidence presented by SRBT demonstrates that SRBT has made a continued commitment to maintaining and improving its management system in accordance with regulatory requirements
- The Commission is satisfied that the evidence presented by SRBT demonstrates that SRBT has an acceptable safety culture and a process in place to monitor safety culture in the organization through different avenues, such as Safety Culture Committee, Safety Culture Review and Safety Culture Surveys

4.2.2 Human Performance Management

28. The Commission assessed SRBT's human performance management programs. Human performance management encompass activities that ensure that SRBT staff are sufficient in number in all relevant job areas and have the necessary knowledge, skills, procedures, and tools in place to safely carry out their duties.
29. SRBT submitted that, during the current licence term, it implemented a systematic approach to training (SAT) to all licensed activities, in full compliance with the requirements of [REGDOC-2.2.2, Personnel Training](#). SRBT also noted improvements to its training programs through the application of an expanded training needs analysis and refresher training processes. SRBT stated that no significant safety-related events found human performance deficiencies as a root cause, demonstrating the effectiveness of its training programs.
30. CNSC staff submitted that SRBT maintains training documentation and a SAT-based training approach that are in full compliance with the requirements of REGDOC-2.2.2. During the current licensing period, CNSC staff conducted two inspections focused on SRBT's training program. CNSC staff noted that SRBT has adequately implemented or addressed all findings from the compliance inspections. CNSC staff also confirmed that SRBT did not report any safety-significant events that had a root cause in human performance throughout the current licence term.
31. The Commission concludes that SRBT has appropriate human performance management programs in place for the conduct of the requested licensed activities. The Commission is satisfied that SRBT's employees are appropriately trained and qualified in accordance with CNSC requirements, including CNSC REGDOC-2.2.2,

Personnel Training. The Commission comes to this conclusion on the following basis:

- The Commission agrees with CNSC staff's assessment that SRBT has a SAT-based training program in place that meets regulatory requirements
- The Commission agrees with CNSC staff's assessment that SRBT has effectively implemented programmatic requirements and good operating practices
- The Commission is satisfied that SRBT has addressed all corrective actions adequately

4.2.3 Operating Performance

32. The Commission examined SRBT's operating performance at its facility. This includes an overall review of the conduct of the licensed activities and the activities that enable effective performance, as well as improvement plans and significant future activities at its facility.
33. SRBT stated that, throughout the current licence term, it adhered to all established operating limits and conditions. SRBT noted that its Compliance Manager, which is independent from production staff, conducted 83 internal audits over the current licence period, and that SRBT implemented actions to address non-conformances reports and opportunities for improvement stemming from the internal audits.
34. With respect to reportable events, SRBT noted that, during the current licensing term, it experienced 10 reportable events. SRBT stated that these events were of very low safety significance with respect to safety impact on workers, environment, and members of the public. SRBT noted the reportable events and the accompanying event reports are openly shared on its [website](#).
35. CNSC staff submitted that SRBT has operated its facility in compliance with CNSC regulatory requirements, which was confirmed through routine compliance verification activities, including 13 inspections conducted during the current licensing period. CNSC staff noted that all non-compliances were found to be of low safety significance, and that SRBT adequately addressed and corrected all inspection findings. In addition, CNSC staff submitted that SRBT maintains comprehensive procedures across all of its programs. CNSC staff stated that it periodically reviews procedures to ensure that they reflect actual practices.
36. Taking into consideration all the evidence submitted on SRBT's operating performance, the Commission concludes that SRBT remains qualified to carry out the activities under the proposed licence term. The evidence presented demonstrates that SRBT has operated its facility in accordance with regulatory requirements over

the current licence period and that its programs and procedures meet regulatory requirements. SRBT's overall performance supported by the satisfactory analysis of its compliance with the regulatory requirements in relation to its operating performance provides a reasonable basis for the Commission's conclusion that SRBT will continue to ensure that appropriate operation performance-related programs are in place at its facility to provide for the protection of the health and safety of persons and the environment. The Commission comes to this conclusion on the following basis:

- The Commission agrees with CNSC staff's assessment that SRBT meets the regulatory requirements of the operating performance SCA
- The Commission agrees with CNSC staff's assessment that SRBT operated in accordance with regulatory requirements over the current licence period

4.2.4 Safety Analysis

37. The Commission assessed safety analysis at SRBT's facility, which supports the overall safety case for the facility. Safety analysis includes a systematic evaluation of the potential hazards associated with the conduct of the licensed activity or the operation of a facility and considers the effectiveness of preventive measures and strategies in reducing the effects of such hazards.
38. SRBT described its safety analysis program and noted that the facility Safety Analysis Report was fully revised in 2017 to align with regulatory guidance on its format and content. The revised report included an expanded set of limiting scenarios supported by conservative assumptions, improved tritium dispersion modelling, and integrated safety analysis from nearby industrial facilities. SRBT noted that the revised results show that the effective doses to both nuclear energy workers and the general public are lower than the regulatory limits for normal operations. SRBT also added that the revised facility Safety Analysis Report is publicly available on the SRBT [website](#).
39. Based on the results of desktop reviews and compliance inspections, CNSC staff confirmed that SRBT's safety analysis program meets regulatory requirements. CNSC staff evaluated SRBT's Safety Analysis Report against the International Atomic Energy Agency (IAEA) SSR-4, *Safety of Nuclear Fuel Cycle Facilities*¹⁸, and reported that SRBT adequately assessed the hazards associated with licensed activities and demonstrated an adequate level of protection of a broad range of operating conditions.

¹⁸ IAEA Specific Safety Requirements, SSR-4, *Safety for Nuclear Fuel Cycle Facilities*, 2017.

40. The Commission is satisfied that the information provided by SRBT and CNSC staff demonstrates that SRBT's safety analysis program for its facility meets regulatory requirements. On the basis of the information presented, the Commission concludes that the systematic evaluation of the potential hazards and the preparedness for reducing the effects of such hazards is adequate for the operation of the facility and the activities under the proposed license. The Commission comes to this conclusion on the following basis:
- The Commission agrees with CNSC staff's assessment that SRBT's facility Safety Analysis Report is adequate
 - The Commission agrees with CNSC staff's assessment that SRBT meets the regulatory requirements for the safety analysis SCA

4.2.5 Physical Design

41. The Commission considered the physical design of facilities at the SRBT facility, including the activities to design systems, structures and components meet and maintain the design basis of the facility. The design basis is the range of conditions, according to established criteria, that the facility must withstand without exceeding authorized limits for the planned operation of safety systems.
42. SRBT stated that it continues to maintain its facility in accordance with its design basis, and that new or changing structures, systems and components have been installed using a comprehensive and documented Engineering Change Request process. Furthermore, SRBT noted that in 2016 it completed a non-nuclear expansion of its facility, dedicated to plastic injection molding, plastics machining and 3D printing, which added the capability of manufacturing face shields and providing support in response to the global COVID-19 pandemic. SRBT also noted a number of improvements that were carried out under this SCA, such as the replacement of old wood fumehoods, and the decontamination and dismantling of out-of-service tritium processing systems.
43. The Commission enquired about the aging building infrastructure, the upgrades and refurbishment activities and how these factors relate to the requested licence term length. A representative from SRBT responded that SRBT has made continuous improvements to the building since operations began in 1990 and noted that SRBT has a robust maintenance program in place. The SRBT representative explained that SRBT assesses safety-related components, structures, and systems to determine the frequency of their scheduled maintenance and maintains an up-to-date master equipment list which supports aging management activities and noted that it has zero preventive maintenance backlog.

44. CNSC staff confirmed that SRBT is meeting regulatory requirements for the physical design SCA. CNSC staff reported that information related to site characterization and facility design is documented in the SRBT Safety Analysis Report. CNSC staff added that SRBT has completed a number of upgrades to existing systems during the current licensing period, following the SRBT Engineering Change Request process, which meets the requirements of CSA N286-12. Through document reviews and one onsite inspection performed during the current licensing period, CNSC staff confirmed that SRBT has appropriately implemented regulatory requirements for the physical design SCA.
45. Taking into account all the evidence submitted, the Commission concludes that SRBT continues to implement and maintain an effective design program at its facility, and that the design is adequate for the requested licence period. The information provided demonstrates that SRBT has adequate resources in place to safely manage and implement design changes that are within the licensing basis and that SRBT meets regulatory requirements. The Commission comes to this conclusion on the following basis:
- The Commission is satisfied that SRBT has an adequate process in place to safely manage and implement design changes that are within the licensing basis
 - The Commission agrees with CNSC staff's assessment that SRBT's physical design program meets regulatory requirements

4.2.6 Fitness for Service

46. The Commission considered the measures in place to maintain the fitness for service of the SBRT facility. Fitness for service covers activities that are performed to ensure that systems, structures and components at the SRBT facility continue to effectively fulfill their intended purpose.
47. SRBT reported that it implements a comprehensive and effective maintenance program, which voluntarily incorporates best practices from CNSC [REGDOC-2.6.2, *Maintenance Programs for Nuclear Power Plants*](#). SRBT's maintenance activities are performed either in-house by qualified and authorized staff or by contracted, qualified, third-party contractors. SRBT noted that it has a designated Maintenance Committee tracking all activities related to this area, which led to a very low rate of corrective maintenance required during the current licensing term.
48. CNSC staff submitted that SRBT has acceptable preventative maintenance and in-service inspection programs in place at its facility to ensure structures, systems and components remain effective over time. CNSC staff stated that it reviewed and assessed SRBT's fitness for service program in 2019 and confirmed that it meets regulatory requirements. In addition, CNSC staff stated that SRBT reviews its fire

protection systems as required by CSA N393-13, *Fire protection for facilities that process, handle or store nuclear substances*.¹⁹

49. The Commission is satisfied that the information provided demonstrates that SRBT has appropriate programs in place to ensure that the equipment at its facility will remain fit for service throughout the proposed licence period. The information provided demonstrates that SRBT reviews its fire protection systems in accordance with CSA N393-13, *Fire protection for facilities that process, handle or store nuclear substances*. The Commission comes to this conclusion on the following basis:

- The Commission agrees with CNSC staff's assessment that SRBT's governing documents for the conduct of maintenance meet regulatory requirements
- The Commission agrees with CNSC staff's assessment that SRBT's fitness for service program meets regulatory requirements

4.2.7 Radiation Protection

50. As part of its evaluation of the adequacy of the measures for protecting the health and safety of persons, the Commission considered the past performance of SRBT in radiation protection. The Commission considered the information provided by SRBT and CNSC staff to assess whether SRBT's facility radiation protection program satisfies the requirements of the [Radiation Protection Regulations](#). The Commission also considered whether SRBT's radiation protection program ensures that radiation doses to persons and contamination are monitored, controlled and kept as low as reasonably achievable (ALARA), with social and economic factors taken into consideration.

51. SRBT reported that, over the current licensing period, no regulatory limits and action levels were exceeded, and the maximum annual effective dose for a Nuclear Energy Worker was 0.87 millisieverts (mSv) in 2015, which was well below the regulatory dose limit.²⁰ SRBT stated that doses to SRBT workers remained low over the current licence period. CNSC staff confirmed that SRBT's effective dose trends have been maintained well below regulatory dose limits.

52. SRBT submitted that it invested over \$500,000 in upgrades of the tritium detection and quantification equipment, which has been effective at ensuring that tritium exposures remain as low as reasonably achievable. Additionally, SRBT provided information on its comprehensive contamination and hazard control program, which

¹⁹ CSA N393-13, *Fire protection for facilities that process, handle, or store nuclear substances*, CSA group, 2013.

²⁰ The regulatory dose limits for nuclear energy workers are 50 mSv in any one year and 100 mSv in a five-year dosimetry period. The regulatory dose limit for members of the public is 1 mSv in one calendar year.

has been implemented to limit the spread of contamination inside and outside of its facility.

53. CNSC staff submitted that SRBT has an acceptable radiation protection program, in compliance with regulatory requirements. CNSC staff assessed the compliance of SRBT's radiation protection program through various verification activities, including desktop reviews of annual compliance reports, and two focused inspections in 2017 and 2020. CNSC staff reported that all findings were of low safety significance and were adequately addressed by SRBT. CNSC staff noted that SRBT implemented positive enhancements and appropriate corrective actions to improve procedural documentation. CNSC staff confirmed that no action levels were exceeded during the current licensing period.
54. The Commission concludes that, given the mitigation measures and safety programs that are in place and will be in place to control radiation hazards, SRBT provides, and will continue to provide for, the adequate protection of the health and safety of persons and the environment throughout the proposed licence period. The Commission is satisfied that the total effective doses received by SRBT workers and the releases of contaminants or radioactive materials from the SRBT facility over the current licence period were below the regulatory limits. The Commission is satisfied that SRBT's radiation protection at its facility meets the requirements of the *Radiation Protection Regulations*. The Commission comes to this conclusion on the following basis:
- The Commission agrees with CNSC staff's assessment that SRBT has implemented a radiation protection program that meets the requirements of the *Radiation Protection Regulations*
 - The Commission is satisfied that SRBT did not exceed any action levels during the licence period
 - The Commission is satisfied that SRBT has adequately addressed all action items raised during radiation protection-related inspections over the current licence period
 - The Commission is satisfied that radiation doses to workers at SRBT were well below regulatory limits during the current licence term

4.2.8 Conventional Health and Safety

55. The Commission examined the implementation of a conventional health and safety program at the SRBT facility, which covers the management of workplace safety hazards. The conventional health and safety program is mandated by provincial statutes for all employers and employees to minimize risk to the health and safety of workers posed by conventional (non-radiological) hazards in the workplace. This program includes compliance with applicable labour codes and conventional safety training.

56. SRBT provided the Commission with detailed information regarding its conventional health and safety program, including the results of implementing various conventional safety processes and policies throughout all levels of the organization.
57. SRBT and CNSC staff discussed SRBT's lost-time injury reports, noting that, for the current licensing period, only 3 lost-time incidents were reported in 2017. SRBT noted that these lost-time incidents were low in impact and significance to the workers. CNSC staff reviewed these incidents and reported that the corrective actions implemented by SRBT to prevent future recurrence were adequate. The Commission asked SRBT to comment on the three lost-time incidents that occurred in 2017, when no lost-time injuries occurred throughout all other years in the current licensing period. A representative from SRBT stated that 2017 was an outlier year; however, SRBT used the opportunity to reassess and make improvements to its processes and programs and take corrective actions to prevent future reoccurrence.
58. In its submission, CNSC staff reported that SRBT is required to implement and maintain a conventional health and safety program, in accordance with the [Canada Labour Code Part II](#)²¹, and the associated [Canada Occupational Health and Safety Regulations](#)²², which applies to all work performed by SRBT employees and contractors. CNSC staff reported that SRBT maintains a Health and Safety Policy and Hazard Prevention Program and implements a Workplace Health and Safety Committee, in accordance with the *Canada Labour Code Part II*. SRBT added that its Workplace Health and Safety Committee consists of both management and employee representatives.
59. CNSC staff stated that, over the licence period, it conducted annual on-site verification activities and one focused inspection in 2019 verifying SRBT's conventional health and safety program. CNSC staff reported that all inspection findings were classified as low safety significance, and SRBT adequately addressed all enforcement actions associated with this inspection. In addition, SRBT reported that in 2017, Employment and Social Development Canada conducted an unannounced safety inspection of the SRBT facility, which did not result in any safety issues or compliance findings.
60. The Commission concludes that SRBT's conventional health and safety program satisfies regulatory requirements. The Commission is satisfied that the evidence provided demonstrates that the health and safety of workers and the public was adequately protected during the operation of the facility for the current licence period, and that the health and safety of persons will continue be adequately protected during throughout the proposed licence period. The Commission comes to its conclusion on the following basis:

²¹ R.S.C., 1985, c. L-2.

²² SOR/86-304.

- The Commission agrees with CNSC staff's assessment that SRBT's conventional health and safety program meets regulatory requirements
- The Commission is satisfied that SRBT adequately addressed inspection findings over the current licence term
- The Commission is satisfied that SRBT has a low incidence of lost-time injuries, and implemented adequate corrective actions in response to the lost-time injuries reported in 2017

4.2.9 Environmental Protection

61. The Commission examined information provided by SRBT on its environmental protection programs at its facility. Environmental protection programs are intended to identify, control, and monitor all releases of radioactive and hazardous substances, and aim to minimize the effects on the environment which may result from the licensed activities. These programs include effluent and emission control, environmental monitoring, and estimated doses to the public.
62. SRBT provided the Commission with detailed information regarding its environmental monitoring and protection program, noting that it meets the requirements of the CSA N288 suite of standards. SRBT stated that tritium releases from the facility are in gaseous or liquid effluent form, and are small, controlled and within the licence limits. SRBT noted that, during the current licence period, there were no exceedances of regulatory limits, licence limits, or action levels in this area.
63. SRBT also reported on its full-scale Environmental Risk Assessment (ERA), performed in accordance with CSA standard N288.6 *Environmental risk assessments at Class I nuclear facilities and uranium mines and mills*²³, which was accepted by CNSC staff in 2021. SRBT noted that data collection to support its ERA was conducted in collaboration with the Algonquins of Pikwakanagan First Nation, which resulted in selection of new species (i.e., Lake Sturgeon, Blanding's turtle and the Butternut Tree) being included in the sample pool.
64. SRBT also noted that it conducts yearly intercomparison exercises with qualified third-party laboratories for all of its monitoring programs, in order to provide confidence in the environmental data collected. SRBT stated that all exercises during the current licence term met acceptance criteria.
65. Regarding atmospheric tritium emissions, SRBT reported that its derived release limits (DRLs)²⁴ have been calculated in accordance with the CSA standard N288.1 *Guidelines for modelling radionuclide environmental transport, fate, and exposure*

²³ CSA N288.6 *Environmental risk assessments at Class I nuclear facilities and uranium mines and mills*, CSA group, 2012.

²⁴ Derived release limits (DRLs) for SRBT represent the amount of a tritium oxide that, if released to the atmosphere, would result in an effective dose of 1 milli Sievert (mSv) to a member of the public.

*associated with the normal operation of nuclear facilities*²⁵, and were revised in 2021 to include the latest meteorological data for the site and updated characteristics for public receptors. SRBT noted that its licence limits for atmospheric and annual average releases of tritium oxide are 80 times and 600 times lower, respectively, than the calculated DRLs.

66. In its submission, CNSC staff reported that SRBT implements an environmental protection program in accordance with [REGDOC-2.9.1, *Environmental Protection: Environmental Principles, Assessments and Protection Measures*](#), and applicable CSA N288 series. CNSC staff conducted an Environmental Protection Review (EPR) demonstrating that human health and the environment around the SRBT facility are protected.
67. Several intervenors raised questions on the tritium emissions from the SRBT facility and the impact these releases have on local residents and the environment. A. Tilman ([CMD 22-H8.3](#), [CMD 22-H8.3A](#)) expressed the view that, given the 12-year half-life of tritium, there could be issues with considering annual tritium emissions rather than cumulative release data. The Commission requested clarification on the cumulative release data provided by the intervenor. The intervenor explained that the calculation of cumulative data was based on tritium releases to air and did not account for dispersion or dilution.
68. The Commission asked CNSC staff for clarification regarding airborne tritium monitoring. CNSC staff responded that SRBT has been monitoring tritium in ambient air, precipitation, down spout runoff, and local produce. CNSC staff explained that the data from the monitoring activities considers all the processes that tritium goes through, in addition to radioactive decay and dispersion (e.g., chemical dispersion and hydraulic dispersion). SRBT added that tritium in ambient air has been monitored monthly using 40 passive air stations located around the facility and eight precipitation monitors, and the results have been reported yearly, as part of its annual compliance report. A representative from SRBT also provided clarification on the airborne tritium values reported on a yearly basis, and the fact that these values represent cumulative average values for all the monitoring stations and would only be indicative of a trend. The representative from SRBT also noted that the trends observed showed that releases were either stable or decreasing over time, and such trends were justifiable when accounting for the different processes that tritium undergoes. The Commission is satisfied that the environmental monitoring results reflect the dispersion and deposition of releases, and that the trends of monitoring results are stable.

²⁵ CSA N288.1 *Guidelines for modelling radionuclide environmental transport, fate, and exposure associated with the normal operation of nuclear facilities*, CSA group, 2020.

69. Several intervenors also commented on the validity of Health Canada's Canadian Drinking Water Standard for tritium of 7,000 Becquerels per litre (Bq/L)²⁶ and expressed concerns about potential health impacts on local residents. In response to this topic, the Commission asked CNSC staff to comment on the meaning of the limit, and CNSC staff's benchmarking against international drinking water guidelines or standards for tritium. CNSC staff responded that the CNSC does not set the standard for tritium in drinking water in Canada; the [quality of drinking water](#) is set by Health Canada. CNSC staff explained that the value of 7,000 Bq/L was derived based on a referenced effective dose of 0.1 mSv per year. In terms of benchmarking, CNSC staff noted that the World Health Organization limit for tritium in drinking water is set at 10,000 Bq/L, and other countries have similar levels. These values have been set at a level that protects people and the environment.
70. On the topic of drinking water quality guidelines, the Commission asked CNSC staff to clarify if drinking water tritium measurements are undertaken. CNSC staff answered that SRBT monitors 29 monitoring wells on a regular basis, as well as seven residential or business wells. In its submission, SRBT reported a maximum tritium measurement in drinking water of 232 Bq/L during the current licensing period, with an average value of 41 Bq/L. These values are well below the limit of 7,000 Bq/L. CNSC staff also noted that the highest tritium concentration recorded in the municipal water in Pembroke was 18 Bq/L.
71. On the issues raised by several intervenors regarding potential health effects associated with tritium exposure, the Commission requested further information from CNSC staff. CNSC staff stated that its review of scientific and published data has found that no detectable increases in cancer risk and birth defects from tritium have been reported for Canadian nuclear facilities. CNSC staff explained that its assessment is based on reviews of public health reports for Renfrew County, as well as other jurisdictions, for excess cancers and other health outcomes, as well as published epidemiological studies related to tritium exposures.
72. With respect to the dose to the public and potential health risks, CNSC staff reported that SRBT has been applying International Commission on Radiological Protection (ICRP) biokinetic models to calculate the dose to public. CNSC staff noted that the dose to the public from the SRBT facility is below background radiation exposure levels, and that no health effects are expected at these levels. SRBT submitted that the maximum effective dose to a member of the public, calculated via the Environmental Monitoring Program, was 6.8 µSv per year in 2015, and has decreased to 2.0 µSv per year in 2021, showing a decreasing trend over the current

²⁶ Health Canada, *Guidelines for Canadian Drinking Water Quality*, Summary Table 3, https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/pdf/pubs/water-eau/sum_guide-res_recom/summary-table-EN-2020-02-11.pdf, September 2020.

licensing period. SRBT noted that these values are well below the public dose limit of 1 mSv (or 1,000 μ Sv) per year, defined by the *Radiation Protection Regulations*.

73. The Concerned Citizens of Renfrew County ([CMD 22-H8.10](#)) commented on the International Nuclear Workers Study (INWORKS), which states that at very low doses, the correlation between tritium doses and health effects were no longer statistically significant. The intervenor noted his distrust of the tritium releases reported by SRBT and disbelief that statistically non-significant results could imply that effects are negligible. In response to the Commission's questions regarding the interpretation of the INWORKS study, CNSC staff provided further information on the applicability of the study, as well as a study carried out on populations residing within a 25 km radius of Ontario nuclear power plants. According to CNSC staff, both studies show that there are no health effects at low radiation doses. Furthermore, the Ontario nuclear power plant study showed no evidence of a relationship between the radiation exposure from nuclear power plants and disease outcome in either children within the 25 km radius or nuclear power plant workers.
74. The Concerned Citizens of Renfrew County ([CMD 22-H8.10](#)) also suggested that, based on the levels of organically bound tritium measured in the sewage sludge in Pembroke, studies on tritium effects on the local population were warranted. The Commission sought further information regarding tritium in sewage sludge. CNSC staff responded that, based on highly conservative assumptions that all the tritium in the sewage came from local residents, the calculated doses to persons were estimated between 1 and 3 μ Sv per year, which are well below the regulatory dose limit for a member of the public of 1 mSv (or 1,000 μ Sv) per year. CNSC staff further noted that studies performed on wastewater treatment plant workers also found doses well below 1 mSv per year.
75. The Commission enquired about SRBT's plans to continuously reduce air emissions and liquid effluents. A representative from SRBT replied that SRBT has been continuously researching new technologies and methods to reduce releases. In addition, the representative from SRBT noted that applying a systematic approach to training program and implementing efficiencies in processing operations resulted in reduced releases over the current licence term.
76. The Commission concludes that, based on the results and information provided, and given the mitigation measures and programs that are in place to control hazards, SRBT will provide adequate protection to the health and safety of persons and the environment throughout the proposed licence period. The Commission is satisfied that SRBT's environmental protection programs for its facility meet, or are being updated to meet, the specifications of the most recent version of CNSC [REGDOC-2.9.1, *Environmental Protection: Environmental Principles, Assessments and Protection Measures*](#), and that releases to the environment from the SRBT facility during the current licence period were well below licence limits. The

Commission is satisfied that the measures implemented at the SRBT facility are adequate for the purposes of environmental protection of aquatic species under the NSCA. The Commission comes to this conclusion on the following basis:

- The Commission is satisfied that SRBT has addressed all enforcement actions associated with CNSC staff's environmental protection SCA inspections to CNSC staff's satisfaction
- The Commission is satisfied that SRBT has maintained an environmental management system in compliance with REGDOC-2.9.1
- The Commission agrees with CNSC staff's assessment that SRBT's environmental monitoring program meets regulatory requirements
- The Commission is satisfied that environmental monitoring data has shown that public dose remained well below the regulatory limit throughout the current licence period
- The Commission is satisfied that SRBT has completed a revised Environmental Risk Assessment in 2021 that meets regulatory requirements

4.2.10 Emergency Management and Fire Protection

77. The Commission considered SRBT's emergency management and fire protection programs, which cover the measures for preparedness and response capabilities implemented by SRBT in the event of emergencies and non-routine conditions at its facility. These measures include nuclear emergency management, conventional emergency response, and fire protection and response.
78. SRBT submitted that it maintains and practices a comprehensive Emergency Plan (EP), which is in compliance with [REGDOC-2.10.1, Nuclear Emergency Preparedness and Response](#). CNSC staff confirmed that SRBT's nuclear emergency preparedness and response plan meets the requirements of REGDOC-2.10.1 In addition, to ensure continuous emergency response capacity, SRBT has been maintaining a collaborative relationship with the City of Pembroke and the Pembroke Fire department.
79. SRBT submitted that its Fire Protection Program meets the requirements of CSA N393-13, *Fire protection for facilities that process, handle, or store nuclear substances*, and noted that the program has been reviewed by independent external organizations such as the Pembroke Fire Department and a qualified third-party contractor in fire protection of nuclear facilities. SRBT explained that its fire protection program was informed by a comprehensive Fire Hazard Analysis, which documented the physical facility and its expected conditions, and evaluated the probability and risk associated with the occurrence of a fire.

80. SRBT reported that in October 2021 it conducted a full-scale, multi-scenario emergency exercise in conjunction with the Pembroke Fire Department, the City of Pembroke, and local paramedics. CNSC staff assessed this exercise as part of a compliance inspection. SRBT noted that although no CNSC non-compliances were identified, the exercise resulted in several recommendations and opportunities for improvement for all organizations involved, which are currently being addressed and implemented. CNSC staff also noted that, during the exercise, SRBT implemented preventive measures to minimize the risk of COVID-19 transmission, following Canada Public Health COVID-19 guidelines.
81. CNSC staff reported that SRBT meets the CNSC regulatory requirements in this SCA, including compliance with the [*National Fire Code of Canada, 2005*](#)²⁷, the [*National Building Code of Canada, 2005*](#)²⁸ and CSA N393-13. CNSC staff submitted that, over the licence period, it conducted three inspections focused on Emergency Preparedness and Fire Response, and that the identified non-compliances had a low safety significance. CNSC staff noted that all non-compliances were adequately addressed by SRBT. In addition, CNSC staff submitted that SRBT had a third-party Fire Protection Program audit in 2018, which found that its program complies with the [*National Fire Code of Canada, 2005*](#) and CSA N393-13.
82. Taking into consideration all the evidence submitted by SRBT and CNSC staff, the Commission is satisfied that SRBT has qualified emergency response personnel onsite, and that SRBT's emergency preparedness program meets CNSC regulatory requirements, including the [*National Fire Code of Canada, 2005*](#), the [*National Building Code of Canada, 2005*](#) and CSA N393-13. The Commission concludes that the information presented demonstrates that SRBT's nuclear and conventional emergency management program and the fire protection measures in place are adequate to protect the health and safety of persons and the environment. The Commission comes to this conclusion on the following basis:
- The Commission agrees with CNSC staff's assessment that SRBT's emergency preparedness program meets regulatory requirements
 - The Commission agrees with CNSC staff's assessment that SRBT's fire protection program meets regulatory requirements
 - The Commission is satisfied that SRBT has an acceptable fire hazards analysis which indicates that it has implemented adequate fire mitigation measures

²⁷ *National Fire Code of Canada 2015*, National Research Council Canada, 2015.

²⁸ *National Building Code of Canada 2015*, National Research Council Canada, 2015.

4.2.11 Waste Management

83. The Commission assessed SRBT's site-wide waste management program. Waste management covers waste-related programs that form part of a facility's operations up to the point where the waste is removed from the licensed site for storage, treatment, or disposal at another licensed location, and includes waste minimization, segregation, characterization, and storage programs.
84. SRBT reported that its waste management program complies with the CSA N292 series of standards on radioactive waste and has been founded on principles of good radioactive waste management such as waste minimization, accurate characterization, classification and segregation, safe storage strategies, and risk-informed disposal and clearance processes. SRBT added that material containing or potentially containing very low quantities of tritium is eligible to be disposed through the conditional clearance process, with conditional clearance criteria established as per CSA Standard N292.5-11, *Guideline for the exemption or clearance from regulatory control of materials that contain, or potentially contain, nuclear substances*.²⁹
85. CNSC staff submitted that SRBT maintains a waste management program in compliance with applicable CSA Group standards N292.0-14, *General principles for the management of radioactive waste and irradiated fuel*³⁰, N292.3-14, *Management of low- and intermediate-level radioactive waste*³¹, and N292.5-11, *Guidelines for the exemption or clearance from regulatory control of materials that contain, or potentially contain, nuclear substances*. CNSC staff noted that SRBT has also been providing end-users with a service to return used tritium signs, which includes receipt, dismantling, re-use (if appropriate), and/or dispositioning as low-level radioactive waste through a licensed radioactive waste service provider.
86. Several intervenors raised concerns about conditional and unconditional clearance levels for waste, and the release of radioactive material to landfill. To address these concerns, the Commission enquired about the waste that meets clearance criteria. A representative from SRBT described SRBT's methodology to segregate and characterize waste to conservatively estimate the total amount of specific activity, which is then compared to the conditional clearance levels to determine if the waste can be disposed of with no additional regulatory control or if it needs to be classified as low-level waste and dispositioned of through a licensed waste management facility. The representative from SRBT noted that the conditional clearance levels

²⁹ CSA N292.5-11, *Guideline for the exemption or clearance from regulatory control of materials that contain, or potentially contain, nuclear substances*, CSA group, 2011.

³⁰ CSA N292.0-14, *General principles for the management of radioactive waste and irradiated fuel*, CSA group, 2014.

³¹ CSA N292.3-14, *Management of low- and intermediate-level radioactive waste*, CSA group, 2014.

currently used by SRBT (i.e., 0.15 MBq/g for a maximum of 5,000 kg waste to any pathway per year) were revised in 2018 to meet the requirements of CSA Standard N292.5-11 and have been set such that they have negligible dose impact to workers or the public. The SRBT representative added that unconditional clearance levels apply to waste that is no longer under regulatory control, and that waste categorized below conditional clearance levels can be dispositioned of through various pathways, including recycling, reusing, or landfill.

87. The Commission requested further information on the waste returned for processing at SRBT. A representative from SRBT noted that receiving returned GTLSs that no longer meet the brightness standard has been part of SRBT's business model. The SRBT representative explained that the returned GTLSs are dismantled and either reused for applications that require lower brightness or disposed of through a licensed low-level waste management facility. The SRBT representative noted that, on average, over the course of a year, approximately 25% of the manufactured inventory is eventually returned as waste.
88. Taking into consideration all the evidence submitted by SRBT and CNSC staff, the Commission is satisfied that SRBT has sufficient measures in place to safely manage waste at its facility. The Commission comes to this conclusion on the following basis:
- The Commission agrees with CNSC staff's assessment that SRBT has implemented a waste management program that meets regulatory requirements
 - The Commission is satisfied that SRBT has a waste management program in place founded on principles of good radioactive waste management

4.2.12 Security

89. The Commission examined SRBT's security program at its facility, which must comply with the applicable provisions of the [General Nuclear Safety and Control Regulations](#) (GNSCR) and the [Nuclear Security Regulations, Part 2](#)³² (NSR).
90. SRBT submitted that it implements and maintains a facility security program, which describes the measures in place to ensure compliance with the NSR. SRBT also noted that it revised its facility security program document in 2021, which CNSC staff reviewed and accepted. Additionally, SRBT stated that it did not experience any security-related events or issues throughout the current licence term.

³² SOR/2000-209.

91. CNSC staff stated that SRBT has implemented and maintained a security program that meets regulatory requirements under the GNSCR, Part 2 of the NSR, and [REGDOC-2.12.3, Security of Nuclear Substances: Sealed Sources and Category I, II and III Nuclear Material, Version 2.1](#) to prevent the loss, unauthorized removal and sabotage of nuclear substances, nuclear materials and prescribed equipment or information. CNSC staff also noted that, during the current licensing period, it conducted two security-focused inspections, in 2015 and 2018, and classified all findings from these inspections as low safety significance. CNSC staff reported that SRBT had adequately addressed all enforcement actions associated with these inspections. In addition, CNSC staff confirmed that the revised facility security program document meets all applicable regulatory requirements.
92. The Commission is satisfied that the evidence provided demonstrates that SRBT has adequate programs and measures in place to provide for the physical security of its facility during the proposed licence period. The evidence shows that SRBT's performance with respect to maintaining security at the SRBT facility has been acceptable over the current licence period and that SRBT meets CNSC regulatory requirements, including the REGDOC-2.12.3, *Security of Nuclear Substances: Sealed Sources and Category I, II and III Nuclear Material, Version 2.1*. The Commission comes to this conclusion on the following basis:
- The Commission agrees with CNSC staff's assessment that SRBT's facility security program document meets regulatory requirements
 - The Commission is satisfied that SRBT has addressed all findings associated with CNSC staff's security SCA inspections to CNSC staff's satisfaction

4.2.13 Packaging and Transport

93. The Commission examined SRBT's packaging and transport program at its facility. Packaging and transport covers the safe packaging and transport of nuclear substances and radiation devices to and from the licensed facility. SRBT must adhere to the [Packaging and Transport of Nuclear Substances Regulations, 2015](#)³³ (PTNSR, 2015) and Transport Canada's [Transportation of Dangerous Goods Regulations](#)³⁴ (TDGR) for all shipments.
94. SRBT provided information on its packaging and transport program. SRBT specified that the Logistics Manager, supported by several trained and qualified production technicians, manages the shipment of radioactive materials and all import and export activities. SRBT also reported that, over the current licence term, it shipped 8,878 shipments containing nuclear substances, with 5 reportable events, none of which resulted in a significant safety impact to persons or the environment. In addition, SRBT noted that all events were reported to CNSC staff and detailed event reports were posted on its public website.

³³ SOR/2015-145.

³⁴ SOR/2001-286.

95. CNSC staff reported that SRBT's packaging and transport program complies with the PTNSR, 2015 and the TDGR for all shipments, and covers elements of package design and maintenance, and the registration for use of certified packages. CNSC staff added that the packaging and transport events reported during the current licensing period had no impact to the health and safety of the public, workers, or the environment. CNSC staff also reported that it assessed SRBT's performance through a packaging and transportation inspection in 2018, and that there were no notices of non-compliance identified.
96. The Commission is satisfied that the evidence provided demonstrates that SRBT has adequate programs and measures in place to meet regulatory requirements regarding packaging and transport and is of the opinion that SRBT will continue to meet these requirements over the proposed licence period. The Commission is satisfied that the evidence demonstrates that SRBT's performance with respect to packaging and transport has met CNSC regulatory requirements, including the PTNSR, 2015, over the licence period, and that SRBT has reported events in accordance with regulatory requirements. The Commission comes to this conclusion on the following basis:
- The Commission agrees with CNSC staff's assessment that SRBT's packaging and transport program meets regulatory requirements
 - The Commission is satisfied that the packaging and transportation events reported by SRBT during the licensing period had no impact to the health and safety of the public, workers, or the environment

4.2.14 Conclusions on Safety and Control Areas

97. Based on the evidence provided, the Commission is satisfied that SRBT has adequate programs and measures in place with respect to the SCAs to ensure that the health and safety of workers, the public and the environment will be protected over the proposed licence term. The Commission is further satisfied that SRBT has measures in place to provide for the maintenance of national security and to implement international obligations to which Canada has agreed. The Commission comes to its conclusion on the following basis:
- The Commission agrees with CNSC staff's rating of SRBT's performance as "satisfactory" or higher over the current licence term
 - The Commission agrees with CNSC staff's assessment that SRBT's performance in the 13 applicable SCAs demonstrates that SRBT has the programs, resources, and measures in place to ensure the health and safety of persons and the environment, and the maintenance of security and Canada's international obligations

4.3 Indigenous Engagement and Consultation

98. The Commission considered the information provided by CNSC staff and SRBT regarding Indigenous consultation and engagement activities in respect of this application. Indigenous consultation refers to the common law duty to consult with Indigenous Nations and communities pursuant to section 35 of the [Constitution Act, 1982](#).³⁵
99. The common law duty to consult with Indigenous Nations and communities is engaged when the Crown contemplates action that may adversely affect established or potential Aboriginal and/or treaty rights. The CNSC, as an agent of the Crown and as Canada's nuclear regulator, recognizes and understands the importance of building relationships and engaging with Canada's Indigenous Nations and communities. The CNSC ensures that its licensing decisions under the NSCA uphold the honour of the Crown and consider potential impacts to claimed or established Aboriginal and/or treaty rights pursuant to section 35 of the *Constitution Act, 1982*.
100. The duty to consult is engaged wherever the Crown has "knowledge, real or constructive, of the potential existence of an Aboriginal right or title and contemplates conduct that might adversely affect it".³⁶ Licensing decisions of the Commission, where Indigenous interests may be adversely impacted, can engage the duty to consult, and the Commission must be satisfied that it has met the duty prior to making the relevant licensing decision.

Indigenous Engagement by CNSC Staff

101. CNSC staff provided the Commission with information about six Indigenous Nations and communities that were identified as having a potential interest in the SRBT licence renewal, and about the consultation activities that were carried out with the identified groups. These communities were identified due to the proximity of their communities, treaty areas, and/or traditional territories and homelands to the SRBT facility, or due to previously expressed interest in being kept informed, and included:
- the Algonquins of Ontario
 - Algonquins of Pikwakanagan First Nation
 - Algonquin Anishinabeg Nation Tribal Council
 - Kitigan Zibi Anishinabeg First Nation
 - Kebaowek First Nation
 - the Metis Nation of Ontario

³⁵ Schedule B to the Canada Act 1982 (UK), 1982, c 11.

³⁶ *Haida Nation v. British Columbia (Minister of Forests)*, 2004 SCC 73 at para 35.

102. CNSC staff noted that participant funding was available to facilitate participation in the licence application review process, and that engagement throughout the licence application review process included written communication, follow-up phone calls, as well as in-person meetings, if requested by the Indigenous Nations and communities. In addition, CNSC staff was available to provide ongoing updates, additional information, and answer questions, as requested by the Indigenous Nations and Communities. In particular, CNSC staff stated that staff met with:
- Kebaowek First Nation in October 2021 to provide additional information on the licence renewal application
 - the Metis Nation of Ontario, Region 6 Consultation Committee in March 2022 to update on the licence renewal process
 - the Algonquins of Pikwakanagan First Nation as a follow-up to the comments and questions provided regarding SRBT's ERA and CNSC staff's EPR report

Indigenous Engagement by SRBT

103. The Commission examined the information submitted by SRBT regarding its ongoing engagement with Indigenous Nations and communities near the SRBT facility. SRBT asserted its commitment to continue building relationships with Indigenous Nations and communities in the vicinity of its facility, and to use such relationships to inform continuous improvement of their operations, reduce environmental impacts and ensure the safety and health of the people living in the areas surrounding the SRBT facility.
104. SRBT submitted a description of activities involving Indigenous Nations and Communities during the current licensing period, including:
- outreach with local Indigenous Nations and communities to help foster sustainable and meaningful long-term relationships
 - the provision of licence renewal application documentation to identified Indigenous Nations and communities
 - vegetation sampling campaigns conducted in collaboration with the Algonquins of Pikwakanagan First Nation (AOPFN)
 - learning opportunities provided by Indigenous knowledge holders, which provided SRBT team members with valuable information on sampling species selection for the ERA

Submissions by Indigenous Nations and Communities

105. The Commission received written interventions from the Algonquins of Pikwakanagan First Nation (AOPFN) ([CMD 22-H8.8](#)) and the Algonquins of Ontario (AOO) ([CMD 22-H8.15](#)).

106. In its written submission, the AOPFN expressed that it seeks deeper engagement with SRBT and the CNSC, including entering a long-term relationship agreement with SRBT. The AOPFN submitted that it wants Indigenous Knowledge (referred to as Algonquin Knowledge) to be considered in the decision-making process. The AOPFN made 13 recommendations, including for the CNSC and SRBT to adhere to the [*United Nations Declaration on the Rights of Indigenous Peoples*](#) (UNDRIP). The AOPFN's written submission also provided a summary of the role of Indigenous Knowledge, Indigenous consultation and engagement, and involvement in the monitoring process that SRBT is conducting.
107. On the topic of the long-term relationship agreement, SRBT outlined during the public hearing and in their supplementary submission ([CMD 22-H8.1A](#)) that it has initiated discussions with the AOPFN regarding Cultural Awareness Training for all employees and establishing the framework of a long-term relationship agreement. The Commission further enquired if the intervention was the driver for the current long-term relationship agreement discussions. An SRBT representative told the Commission that the current discussions are a progression from the AOPFN's involvement in the ERA and the subsequent sampling campaigns. The SRBT representative added that the long-term relationship agreement will consist of short-term commitments, such as the Cultural Awareness Training for staff, and other long-term commitments which are under discussion.
108. The Commission enquired about the inclusion of Indigenous Knowledge with respect to the seasonality of data collection and monitoring performed by CNSC staff and SRBT. CNSC staff reported that the CNSC's Independent Environmental Monitoring Program (IEMP) sampling occurs between May and October, and the results are primarily used to verify that the environment is protected. CNSC staff added that, in response to the AOPFN submission, discussions have taken place to look at future opportunities for engagement with the IEMP. In addition, CNSC staff noted that engagement with Indigenous nations and communities will continue during sampling campaigns.
109. On this topic, a representative from SRBT noted that SRBT engaged AOPFN during a sampling campaign for the revision to its ERA, and that this campaign was repeated for the first time in 2021 as a validation step. The SRBT representative noted that SRBT would continue to work with AOPFN to incorporate further Indigenous Knowledge into its sampling campaigns, with seasonality being one aspect that could be considered.
110. The Commission asked if SRBT had involved AOPFN in other aspects beside sampling campaigns, such as planning activities, to incorporate Indigenous Knowledge. An SRBT representative told the Commission that the process has been evolving, and that there is further work to be done. The representative added that the Cultural Awareness training will provide an opportunity to better understand the

AOPFN's needs. The SRBT representative also spoke about the engagement activities carried out with the AOPFN with respect to the licence renewal process and future engagement activities such as tours of the SRBT facility.

4.3.1 Conclusion on Indigenous Consultation and Engagement

111. The Commission acknowledges the current efforts and commitments made by SRBT in relation to Indigenous engagement and CNSC staff's efforts in this regard on behalf of the Commission. Based on the information presented on the record for this hearing, and having heard the submissions of all hearing participants, the Commission is satisfied that this licence renewal will not result in changes to SRBT operations that would cause adverse impacts to any potential or established Indigenous and/or treaty rights.³⁷ The Commission is also of the opinion that the engagement activities taken for the review of the SRBT licence renewal application have been adequate.
112. The Commission is satisfied with CNSC staff's efforts to engage with Indigenous Nations and communities who may have interest in the SRBT facility, as described. The efforts made by CNSC staff in this regard are key to the important work of the Commission toward reconciliation and relationship-building with Canada's Indigenous Nations and communities. The Commission expects CNSC staff to continue to build meaningful long-term relationships with Indigenous Nations and communities as part of the CNSC's reconciliation efforts.

4.4 Other Matters of Regulatory Importance

4.4.1 Public Engagement

113. The Commission assessed SRBT's public information and disclosure program (PIDP). A public information program is a regulatory requirement for licence applicants and licensed operators of Class I nuclear facilities. The Commission also assessed how SRBT's PIDP met the specifications of [*REGDOC-3.2.1, Public Information and Disclosure*](#).
114. SRBT submitted that it implements and maintains a PIDP which is designed to meet the requirements of REGDOC-3.2.1, and its Public Disclosure Protocol outlines the goal for transparency and openness with the community and staff. SRBT noted it has a Public Information Committee in place, led by Senior management, and its public information program has been developed to reach population within

³⁷ *Rio Tinto Alcan v. Carrier Sekani Tribal Council*, 2010 SCC 43[2010] 2 S.C.R. 650 at paras 45 and 49.

Pembroke and immediate surrounding area. SRBT provided the Commission with information regarding its PIDP and its website, such as:

- documents, including the ERA, facility safety analysis report, event reports, annual compliance and performance reports, CNSC inspection reports, preliminary decommissioning plan, environmental monitoring data that are publicly shared on its website
- annual pamphlet distribution
- public presentations
- facility tours
- presence on social media
- engagement with stakeholders during the licence renewal process
- participation in various community activities

115. CNSC staff submitted that SRBT's PIDP meets the specifications of REGDOC-3.2.1. CNSC staff reported that, during the current licence period, SRBT has been successful in meeting its public disclosure and reporting obligations. CNSC staff noted that SRBT has made improvements to its website content, adopted social media platforms, and documented its areas of community engagement (e.g., tours, media, stakeholder relations, community events). CNSC staff also noted that SRBT proactively publishes on its website documents such as the Annual Compliance Reports, Preliminary Decommissioning Plan, Environmental Risk Assessment and Safety Analysis Report.
116. The Commission enquired about the type of surveys carried out via SRBT's website and the feedback received from the public. An SRBT representative reported that, being in a small town, SRBT has developed close relationships with its employees and their families, and the City of Pembroke, its councillors and staff. The SRBT representative added that SRBT is an active participant in local events such as the Renfrew County Science Fair and Algonquin College, where they distribute pamphlets, make presentations or interact with local residents, answering their questions. In terms of formal surveys, SRBT notes that it has not received any questions or concerns from local residents.
117. One intervenor, D. Winfield ([CMD 22-H8.14](#)), expressed the view that the format and length of the annual compliance report (ACR) is not conducive for public understanding. The Commission requested CNSC staff to provide information regarding the ACR and the information that is required to be part of the ACR. CNSC staff explained that a [REGDOC-3.1.2 Reporting Requirements for Non-Power Reactor Class I Nuclear Facilities and Uranium Mines and Mills](#) sets out CNSC expectations for Class 1B facilities in Canada, which ensures that reporting is consistently carried out against the Safety and Control Areas metrics. An SRBT representative added that its ACR meets two purposes:

- compliance with regulatory requirements
- providing the public with open and transparent information about SRBT activities

The SRBT representative further noted that the ACR targets various stakeholders, and that SRBT has found it valuable to not only provide the minimum information required in REGDOC-3.1.2, but also provide additional information of interest to the public and the CNSC staff.

118. Based on the information presented for this hearing, the Commission is satisfied that SRBT's PIDP meets regulatory requirements, including CNSC REGDOC-3.2.1, and is of the opinion that SRBT will continue to communicate to the public information about the health, safety and security of persons and the environment and other issues related to its facility. The Commission comes to this conclusion on the following basis:

- The Commission is satisfied that SRBT met its public disclosure and reporting obligations throughout the current licence term
- The Commission agrees with CNSC staff's assessment that SRBT's PIDP meets the requirements of REGDOC 3.2.1

The Commission commends SRBT on its Public Information and Disclosure Program, and its transparency and openness to share information about its facility and activities.

4.4.2 Decommissioning Plans and Financial Guarantee

119. The Commission requires that SRBT have operational plans for the decommissioning and long-term management of waste produced during the lifespan of its facility. In order to ensure that adequate resources are available for safe and secure future decommissioning of the SRBT facility site, the Commission requires that an adequate financial guarantee for realization of the planned activities be put in place and maintained in a form acceptable to the Commission throughout the licence period.

120. SRBT reported to the Commission that it continues to manage and maintain an acceptable preliminary decommissioning plan (PDP), which was revised in 2019 to align with CSA Standard N294-09, *Decommissioning of Facilities Containing Nuclear Substances*³⁸, and accepted by CNSC staff in 2020. SRBT further reported that the Commission [accepted](#) a revised financial guarantee valued at \$727,327 in 2020.³⁹

³⁸ CSA N294-09, *Decommissioning of Facilities Containing Nuclear Substances*, CSA group, 2009.

³⁹ Record of Decision, [DEC 20-H105](#), *Application for Acceptance of a Revised Financial Guarantee for SRB Technologies (Canada) Inc.*, December 8, 2020.

121. CNSC staff confirmed that SRBT's financial guarantee meets the requirements in Regulatory Guide G-206, [Financial Guarantees for the Decommissioning of Licensed Activities](#), which was in effect when the revised financial guarantee was submitted for review and approval. CNSC staff noted that for the 2024 revision of the financial guarantee, SRBT will be required to implement CNSC [REGDOC-3.3.1, Financial guarantees for decommissioning of nuclear facilities](#), which came in effect in January 2021 and superseded G-206.
122. One intervenor, A. Tilman ([CMD 22-H8.3](#), [CMD 22-H8.3A](#)), questioned the timing for the decommissioning plans and the adequacy of the financial guarantee at that time. With respect to this intervention, the Commission enquired about the end-of-life of the facility and the related timelines. An SRBT representative responded that the PDP contains an extensive list of activities related to decommissioning and environmental remediation activities. Additionally, the SRBT representative noted that there are no foreseeable plans to shut down the facility. Additionally, CNSC staff submitted that the PDP is revised at a minimum every 5 years, or upon request by the Commission or a person authorized by the Commission, and the next scheduled update of SRBT's PDP and associated cost estimate is in 2024.
123. The Commission is satisfied that the preliminary decommissioning plan and related financial guarantee for decommissioning SRBT's facility are in place and are acceptable for the purpose of this licence renewal. The Commission does not need to make any new decisions regarding SRBT's preliminary decommissioning plan and related financial guarantee as part of this licence renewal application.

4.4.3 Cost Recovery

124. The Commission examined SRBT's standing under the [Canadian Nuclear Safety Commission Cost Recovery Fees Regulations](#)⁴⁰ (CRFR) requirements for its facility. Paragraph 24(2)(c) of the NSCA requires that a licence application be accompanied by the prescribed fee, as set out by the CRFR and based on the activities to be licensed.
125. SRBT submitted that it remained in good standing with respect to the payment of all CNSC cost recovery fees during the current licence term and will ensure the obligations will continue to be met during the proposed licence term. CNSC staff confirmed that SRBT is in good standing with the CRFR requirements.
126. Based on the information submitted by SRBT and CNSC staff, the Commission is satisfied that SRBT has satisfied the requirements of the CRFR for the purpose of this licence renewal.

⁴⁰ SOR/2003-212.

4.4.4 Nuclear Liability Insurance

127. CNSC staff submitted that the [*Nuclear Liability and Compensation Act*](#) (NLCA) does not apply with respect to SRBT. Material in SRBT's possession is excluded from the definition of nuclear material under the NLCA. As a result, SRBT's operations do not meet the criteria to be designated as a nuclear installation and are not under the purview of the NLCA. Based on this information, the Commission is satisfied that the NLCA does not apply with respect to SRBT.

4.5 Licence Length and Conditions

128. The Commission considered SRBT's application for the renewal of its facility operating licence for a period of 15 years. SRBT's currently holds a 7-year licence, NSPFOL-13.00/2022, that expires on June 30, 2022.

4.5.1 Licence Length

129. SRBT is requesting a 15-year term for the renewed operating licence. CNSC staff recommended the renewal of the licence for a period of 15 years, until June 30, 2037, submitting that SRBT is qualified and capable to carry on the licensed activities authorized by the licence. CNSC staff noted that SRBT's performance has been consistently satisfactory or above over the current licence term, and that reporting processes are in place to monitor performance over the proposed licence period.
130. One intervenor has expressed concern about the proposed licence term and recommended a shorter period of 5 years. The Commission asked CNSC staff to comment on the impact of the licence term and if there are any other instances where a similar licence length has been issued. CNSC staff responded that in the past, licence terms varied; however, the new regulatory oversight processes in place such as yearly Regulatory Oversight Reports, public outreach activities, standardization of event reporting and the mechanisms in place to bring significant events to the Commission, support the current proposal for a longer licence term. CNSC staff also noted that a risk-informed process formed the basis for CNSC staff's recommendation for the proposed licence term. The SRBT's facility is rated as a medium-risk facility, which is significantly less complex than other Class I nuclear facilities. CNSC staff submitted that:
- SRBT is a mature licensee with well established programs and management system
 - the hazards at the SRBT facility are well understood and characterized
 - SRBT has consistently performed satisfactory or fully satisfactory over the past two licensing terms, across all SCAs

- the potential risks from physical stressors and radiological and hazardous releases are negligible, resulting in no significant adverse effects
 - the licensed activities are expected to remain stable over the proposed licence period
131. The Commission asked several intervenors to comment on the proposed licence term. A representative from the Canadian Nuclear Association (CNA) noted that SRBT's continuous improvement and consistent performance supports the increased licence term, and the longer licence term would also provide business benefits. Another intervenor echoed the CNA representative's comments and added that the SRBT operations have low complexity when compared to a nuclear power plant, or research reactor, and long-term stability is important, particularly for staff retention.
132. One intervenor, A. Tilman ([CMD 22-H8.3](#), [CMD 22-H8.3A](#)), commented on the future demand for SRBT's products. In response, the Commission enquired on the future vision and prospects for SRBT's products. A representative from SRBT stated that SRBT's business is expected to remain stable, noting that its products and market are unique. This contributes to the Commission's confidence in SRBT's ability to meet its obligations over a longer licence term.
133. The Commission also asked CNSC staff to comment on the impact of the licence length on public engagement and information. CNSC staff noted that the licence length does not impact public engagement and information, as those activities are carried out independent of licence length, such as the Regulatory Oversight Reports. In addition, CNSC staff noted that it has several avenues to bring information to the public, including webinars, information sessions, and the CNSC website. CNSC staff also noted that its compliance activities and reporting to the Commission about SRBT's performance are independent of the licence term.
134. Based on the information examined by the Commission, the Commission concludes that a 12-year licence term, with a mid-point public participation review, is appropriate. The Commission's decision is based on the following:
- the extension beyond the current 7-year licence reflects the Commission's acknowledgement of SRBT's performance and transparency with respect to sharing information with the public
 - SRBT has mature programs in place
 - the public will have the opportunity to provide feedback to the Commission on SRBT's operations periodically during the 12-year licenced period
 - at mid-point through the 12-year licence period, SRBT will present, in a public Commission meeting which will include public participation, a comprehensive update of its licensed activities

- the Commission has weighed SRBT's improved performance and the benefits of predictability, against a level regulatory oversight and public participation appropriate to the nature of SRBT's operations

4.5.2 Licence Conditions

135. CNSC staff's CMD includes a proposed draft licence with a format that incorporates the CNSC's standardized licence conditions applicable to the SRBT facility. CNSC staff noted the following:

- there are no changes to the proposed licensed activities from the current licence
- licence condition 12 Waste Management is revised to "The licensee shall maintain a decommissioning plan", to align with the most recent standardized licence condition wording
- the licence format and numbering are updated to reflect CNSC's standard licence format

136. The Commission accepts the proposed licence, as submitted by CNSC staff in [CMD 22-H8](#), with the changes to include administrative updates and revised wording for the licence conditions to the most recent standardized language. The Commission finds that the proposed changes to the licence conditions are appropriate, minor, and do not impact the licenced activities.

4.5.3 Delegation of Authority

137. In order to provide adequate regulatory oversight of changes that are administrative in nature, and do not require a licence amendment nor Commission approval, CNSC staff recommended that the Commission delegate authority for certain approval or consent, as contemplated in licence conditions that contain the phrase "a person authorized by the Commission," to the following CNSC staff:

- Director, Nuclear Processing Facilities Division
- Director General, Directorate of Nuclear Cycle and Facilities Regulation
- Executive Vice-President and Chief Regulatory Operations Officer, Regulatory Operations Branch

138. The Commission delegates its authority for the purposes of licence condition 3.2 Reporting Requirements, as recommended. The Commission is satisfied that this approach is reasonable and consistent with the current licence.


4.5.4 Conclusion on Licence Length and Conditions

139. Based on the information examined by the Commission, the Commission is satisfied that a 12-year licence is appropriate for SRBT. The Commission accepts the licence conditions as recommended by CNSC staff, and the standardized licence and licence condition handbook. The Commission also accepts CNSC staff's recommendation regarding the delegation of authority for the purpose of licence condition 3.2, and notes that it can bring any matter to the Commission as required.

5.0 CONCLUSION

140. The Commission has considered SRBT's licence renewal application for its Class IB gaseous tritium processing facility. The Commission has also considered the information and submissions of SRBT, CNSC staff, and all participants, as set out in the material available for reference on the record, as well as the oral and written interventions provided or made by the participants at the hearing.
141. The Commission reiterates that its decisions are independent, objective and risk-informed, taking into consideration all of the information provided on the record. The Commission notes that assertions and statements that are not supported by or grounded in credible evidence, and which could result in unnecessary public concerns are not constructive and may prevent effective exchange of information on important and complex issues put forward to the Commission.
142. Based on its consideration of the evidence on the record of this hearing, the Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, renews the Class IB Nuclear Substance Processing Facility Operating Licence issued to SRB Technologies (Canada) Inc. for its facility located in Pembroke, Ontario. The renewed licence, NSPFL-13.00/2034, is valid from July 1, 2022 until June 30, 2034. The Commission directs that, at the mid-point of the 12-year licence period, SRBT shall present to the Commission a comprehensive midterm update on its licensed activities, as part of a public Commission meeting.

Velshi,
Rumina



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Rumina Velshi
President,
Canadian Nuclear Safety Commission

June 22, 2022

Date

Appendix A – Intervenors

Intervenors – Oral Presentations	Document Number
Anna Tilman	CMD 22-H8.3 CMD 22-H8.3A
Canadian Nuclear Association	CMD 22-H8.9
Concerned Citizens of Renfrew County Area	CMD 22-H8.10
David J. Winfield	CMD 22-H8.14
Intervenors – Written Submissions	Document Number
Renfrew County Regional Science Fair	CMD 22-H8.2
Steel Fire Equipment Ltd.	CMD 22-H8.4
City of Pembroke	CMD 22-H8.5
Seiler Instrument & Mfg Co., Inc.	CMD 22-H8.6
Main Street Community Services	CMD 22-H8.7
Algonquins of Pikawakanagan First Nation	CMD 22-H8.8
Isolite	CMD 22-H8.11
Cheryl Gallant, MP, Renfrew-Nipissing-Pembroke	CMD 22-H8.12
Betalight b.v.	CMD 22-H8.13
Algonquins of Ontario	CMD 22-H8.15
Pembroke Fire Department	CMD 22-H8.16
John Yakabuski, MPP, Renfrew-Nipissing-Pembroke	CMD 22-H8.17