



Oral Presentation

Exposé oral

**Written submission from the
Canadian Nuclear Association**

**Mémoire de
l'Association nucléaire canadienne**

In the Matter of the

À l'égard de

SRB Technologies (Canada) Inc.

SRB Technologies (Canada) Inc.

Application for the renewal of the licence for
SRBT Facility

Demande de renouvellement de permis pour
l'installation de SRBT

Commission Public Hearing

Audience publique de la Commission

April 27 and/or 28, 2022

27 et/ou 28 avril 2022

March 10, 2022

Canadian Nuclear Safety Commission
c/o Louise Levert, Registrar
280 Slater St. PO Box 1046
Ottawa, Ontario K1P 5S9

Subject: Canadian Nuclear Association Intervention in support SRB Technologies application to renew its operating licence for a Class 1B tritium processing facility.

The Canadian Nuclear Association (CNA) has approximately 100 members, representing over 70,000 Canadians employed directly or indirectly in exploring and mining uranium, generating electricity, advancing nuclear medicine, and promoting Canada's worldwide leadership in science and technology innovation. As such, our members have a strong interest in all applications of nuclear technology.

Most Canadian think of nuclear technology as a safe, reliable, non-emitting source of electricity that plays a vital role in helping Canada meet its climate change goals or as a source of life saving medical isotopes, but nuclear technology can also make important industrial contributions. One of those contributions is the production of self-luminous safety signs and devices.

SRB Technologies (SRBT) has operated a tritium processing facility in Pembroke since 1990 and is the world-wide leader in the manufacture and distribution of self-luminous safety signs and devices. SRBT's current seven-year licence will expire on June 30, 2022 and it has applied for a 15-year licence renewal.

As Canada struggled to deal with the global COVID-19 pandemic, it is worth noting that SRBT shifted part of its plastics molding capability towards designing and manufacturing a Canadian-made face shield for use as personal protective equipment. CNA is very proud of the way our industry, led by member companies such as SRBT, stepped up to help Canadians and indeed the world through this pandemic.

Like all members of the Canadian nuclear industry, safety to workers, the public and the environment is paramount to everything SRBT does, and continuous improvement in all aspects of operations and safety management is a core value.

SRBT has a comprehensive and mature management system which provides a high level of safety assurance. SRBT's management system aligns and complies with CSA Standard N286-12. SRBT has continued to improve the management system over time, upgrading elements of the system to meet each new or revised regulatory document incorporated as part of its licencing basis.



SRBT's Safety Analysis Report (SAR) has been maintained and updated to reflect facility changes through the current licence term. The facility has operated in full compliance with the Operating Limits and Conditions contained in the SAR throughout the current licence term.

In our view, it is important to note that during the current licence, the rate of workplace injuries and lost-time accidents has been very low, and there have been no significant or disabling injuries. CNSC inspections have identified very few non-compliances with respect to conventional health and safety, and any action items have been addressed rapidly and effectively. In addition, the Workplace Health and Safety Committee monitors and continuously improves SRBT's conventional health and safety program.

In late 2020, SRBT completed and submitted a full Environmental Risk Assessment (ERA) in accordance with CSA Standard N288.6-12. After addressing comments received from CNSC staff, the ERA was formally accepted in April 2021 and was published on SRBT's website to ensure public access. Recommendations from the ERA have been incorporated into SRBT's Environmental Management System going forward.

As the Commission knows, tritium is the sole significant radionuclide released into the environment during routine facility operations. SRBT has a comprehensive environmental protection program to establish a framework in which releases of tritium are controlled, minimized and monitored at the source. In addition, SRBT implements environmental and groundwater monitoring programs to ensure compliance and safety. Over the course of the existing licence SRBT has increased its in-house capacity to continue to accurately and precisely conduct environmental monitoring activities.

The CNA would like to highlight some environmental results over the current licencing period:

- No nuclear energy worker exceeded 1 mSv of effective dose in any year
- Effective dose to the public did not exceed 10 μ Sv in any year
- Tritium released to atmosphere per year did not exceed 20% of licence limits and did not exceed 0.25% of derived release limit.
- Tritium released as an effluent to sewer did not exceed 7% of licence limits
- Groundwater tritium concentrations have decreased significantly across all wells over the duration of the licence term.
- No environmental tritium measurement exceeded 25% of benchmark values for the duration of the licence term.

Like all members of the Canadian nuclear industry, SRBT maintains a comprehensive Public Information Program to ensure all vital information is shared openly and promptly with interested stakeholders. Strategies used include the SRBT website and social media channels, pamphlet distribution, public presentations and public media.

SRBT provided copies of its licence renewal application to all identified stakeholders as well as anyone requesting information.

SRBT is a member of the Canadian Council for Aboriginal Business and has an active Indigenous Engagement program. SRBT consulted and involved members of the Algonquins of Pikwakanagan First Nation community during the completion of the ERA, including activities such as assisting with the collection of vegetation and environmental sampling activities.

Copies of the licence renewal were shared with Indigenous communities, and SRBT clearly intends to continue to strengthen its relationships with Indigenous communities going forward.

SRBT has applied for a 15-year licence. The CNA believes that SRBT has demonstrated that it is a safe and successful operator that meets and exceeds all regulatory requirements, has effective health, safety, environmental programs and has effective public information and Indigenous engagement programs.

The CNA would highlight that the SRBTs facility does not have components that need to undergo refurbishment for long-term performance assurance, and that the nature of SRBT's operations are fundamentally stable and unchanging except for incremental improvements to reduce impact on worker, the public and the environment.

For these reasons, the CNA strongly supports SRBT's application for 15-year renewal of its operating licence for a Class 1B tritium processing facility.

Please feel free to reach out to me directly if you have any questions

Sincerely,



Steve Coupland

Director of Regulatory and Environmental Affairs
Canadian Nuclear Association