

# SRB TECHNOLOGIES (CANADA) INC.

Presentation – May 26, 2021 Rotary Club

## **COMPANY**

- SRB Technologies (Canada) Inc. has been in operation since 1990.
- Employ 40 people.
- Lease 15,000 square feet of a building.



AERIAL PHOTOGRAPH OF THE FRONT OF SRBT'S FACILITY

#### **TRITIUM LIGHT SOURCE**

- SRBT is the original developer of the tritium light source.
- Capsule with luminescent powder and filled with tritium.
- Produces light on a continuous basis.



VARIOUS TYPES OF TRITIUM LIGHT SOURCES PRODUCED BY SRBT

## **PRODUCTS**

- Our products are fail safe.
- Our products require no maintenance.
- Our products do not use:
  - Electricity
  - Power
  - Batteries
  - Wiring

## **PRODUCTS (Continued)**



VARIOUS TYPES OF PRODUCTS PRODUCED BY SRBT

# **PRODUCTS (Continued)**



PICTURE OF A SOLDIER WITH OUR ILLUMINATED TORCH

# **PRODUCTS (Continued)**

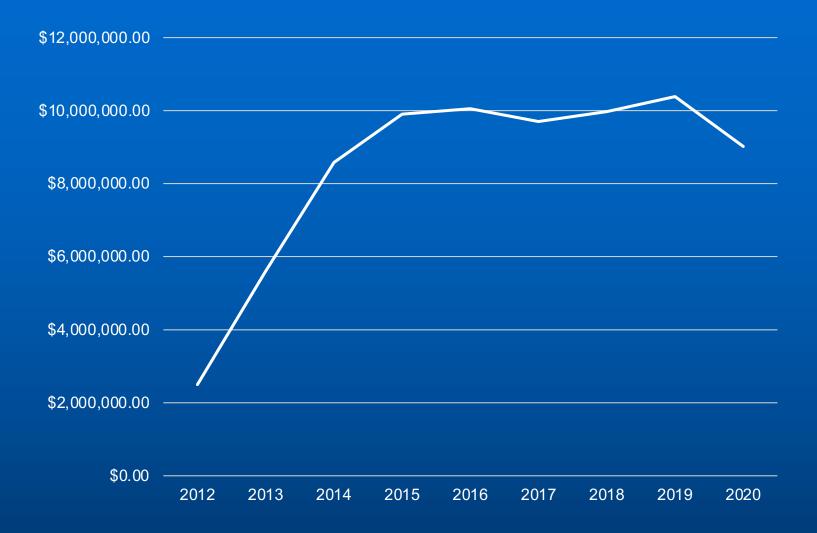


FACE SHIELDS PRODUCED BY SRBT

### MARKETS

- We supply over 200 customers.
- Our products are used in 3 major markets:
  - Aerospace Industry (Bombardier, Airbus, Boeing)
  - Construction Industry
  - Defense Industry (US Army, British Ministry of Defence)
- Licensed to ship to 19 countries in 2020.
- Made 827 shipments of product in 2020.
- 63% of our products are shipped outside of Canada:
  - United States (55%)
  - United Kingdom (3%)
  - Switzerland (1%)
  - Netherlands (1%)
  - Mexico (1%)

### **ANNUAL SALES**



#### **SUPPLIERS**

- SRBT spent over \$6,000,000 worth of goods and services in 2020.
- 170 suppliers of goods and services:
  - Majority of suppliers are located in Ontario.
  - Over 50 local suppliers (CNL, EIP, ETM).

# LOCAL ADVANTAGES

- Low taxes and rental rates compared to larger centers.
- Available workforce (High unemployment rate).
- Loyal community.
- Elected officials involved at the Municipal, Provincial and Federal level.
- Lots of funding opportunities.

#### **GROWTH STRATEGY**

Based on our stable and experienced workforce:

- Despite our growth the workforce averages just under 12.5 years of experience at the facility with an average age of just under 42 years old.
- Members of the Health Physics team possess a combined 123 person-years working at SRBT (over 15 years on average per member).
- President and Vice-President, who have owned the company since 2012, have a combined 54 years of experience managing and operating the facility.
- Carefully hired skilled staff from other facilities with specific expertise, good values and work ethic.

## LICENSED BY THE CANADIAN NUCLEAR SAFETY COMMISSION

- SRBT is licensed by the Canadian Nuclear Safety Commission (CNSC) to process tritium.
- In July 2015 CNSC renewed SRBT's license for a period of 7 years.
- Longest license in our history.
- The CNSC recognized that SRBT have and will continue to operate the facility safely.
- Over the current licence term we have continued to:
  - Operate the facility safely
  - Further lower emissions
  - Improve the effectiveness of our programs
  - Have regular interaction with the public

# **INDEPENDENT OVERSIGHT**

- Canadian Nuclear Safety Commission (CNSC).
- Ontario Ministry of the Environment, Conservation and Parks.
- Annual ISO 9001 Registrar.
- Frequent Internal Audits.
- Ontario Power Generation (OPG) audits.
- Annual Pembroke Fire Department Inspections.
- Annual Fire Protection Consultant Inspections.
- Quarterly Underwriters Laboratories (UL) audits.
- Numerous customer audits.

# **KEY TRAINING ACTIVITIES**

- Radiation Safety Training.
- Yearly Fire Extinguisher Training.
- Fire Responder Training.
- Transportation of Dangerous Goods Training.
- Health and Safety Training.

#### **ANNUAL RADIATION WORKER DOSE**

#### Maximum dose to a member of staff < 2% of the regulatory limit:

DOSE	2016 <sub>mSv</sub>				2020 mSv	LIMIT <sub>mSv</sub>
Maximum	0.34	0.46	0.48	0.57	0.43	
Average	0.049	0.045	0.044	0.065	0.077	50

ANNUAL WORKER DOSE METRICS

#### **ANNUAL MAXIMUM PUBLIC DOSE**

### Maximum dose to the public < 1% of the regulatory limit:

DOSE	2016 <sub>mSv</sub>	_				
Maximum	0.0046	0.0033	0.0038	0.0022	0.0024	1.0000

ANNUAL MAXIMUM PUBLIC DOSE

#### **ANNUAL AIR EMISSIONS OF TRITIUM**

### Annual emission of tritium to atmosphere < 7.5% of licence limit:

Emissions	2016	2017	2018	2019	2020	LIMIT
	<sub>GBq</sub>	<sub>GBq</sub>	<sub>GBq</sub>	<sub>GBq</sub>	<sub>GBq</sub>	<sub>GBq</sub>
Tritium	28,945	24,822	33,180	31,769	25,186	448,000

TOTAL ATMOSPHERIC RELEASES

### **ENVIRONMENTAL MONITORING**

An independent third party also collects and analyzes samples as dictated by SRBT's Environmental Monitoring Program:

- 40 air monitoring stations within 2 km of the facility.
- 36 wells (29 monitoring and 7 residential/business).
- 8 precipitation monitors.
- Produce sampling from local gardens and local market.
- Local milk.
- Muskrat River.

Data is used to calculate the maximum dose to a member of the public as a result of the emissions from SRBT.

#### **EMERGENCY MANAGEMENT AND FIRE PROTECTION**

- In addition to performing regular fire drills we conducted a fullscale emergency exercise in 2015 with another planned in 2021.
- Emergency exercises are conducted with the Pembroke Fire Department, the City of Pembroke, and observed by CNSC staff.



**EMERGENCY EXERCISE, FEBRUARY 9, 2015** 

### **PUBLIC INFORMATION PROGRAM**

Various direct Interaction with the Public

- Information pamphlet will be sent to various stakeholders and those living within 10 kilometers of the facility including 13,000 residences, businesses and establishments in Pembroke and Laurentian Valley.
- We conducted 188 plant tours between 2016 and the end of 2020.

#### **PUBLIC INFORMATION PROGRAM (Continued)**



www.SRBT.com

#### **PUBLIC INFORMATION PROGRAM (Continued)**

- Website is frequently updated:
  - Public notifications regularly posted.
  - Licence and Licence Conditions Handbook posted.
  - Annual Compliance Reports posted.
  - Monitoring results posted, including passive air samplers, air emissions, produce sampling, and groundwater.
  - Details of main Presentations and meetings posted.
  - Information on tritium and radiation posted.
  - Emergency Preparedness information posted.
  - Community support and involvement initiatives.
- We are also on Facebook, Instagram, Twitter, LinkedIn, Reddit and TikTok.

# **FINANCIAL GUARANTEE**

- CNSC-approved Financial Guarantee in 2020 based on previous revision of Preliminary Decommissioning Plan.
- Hired contractors directly involved with decommissioning of similar facilities to determine decommissioning costs of \$727,327.
- \$735,622 is currently held in escrow and building interest.

## **ACHIEVEMENT AWARDS**

In the last few years SRBT has received industry recognition for demonstrating its ability for its technical innovation and expertise in delivering high quality products all over the world:

- In May 2016 at the second annual Spring Business Leadership Conference in Pembroke, SRBT accepted the Business Innovation Award from Algonquin College.
- In May 2017 at the Chamber of Commerce Awards gala in Petawawa Ontario, SRBT accepted the Professional Services Award – Technical and Engineering award.
- In November 2017 at the Ontario Export Awards in Toronto Ontario, SRBT accepted the Ontario Export Award – Consumer Products & Technology Category.

## **FUTURE OUTLOOK**

- Committed to expand market for existing products.
- Committed to development of new products.
- Committed to expand our own manufacturing capabilities.
- Committed to research of emission reduction initiatives.
- Committed to the reduction of doses and environmental effects as a result of our operation.
- Committed to communication with the general public, environmental groups, Indigenous groups and the Nuclear Community.

