



SRB TECHNOLOGIES (CANADA) INC.

Presentation

For

Pembroke City Council

In Support Of Application To Renew
Nuclear Substance Processing Facility Operating Licence
For A Period Of 10 Years

1.0 INTRODUCTION

SRB Technologies (Canada) Inc. currently:

- Employs 45 people.
- Located in an industrial park on the outskirts of Pembroke.
- Leases 12,000 square feet of a building.
- Closest residence is approximately 250 m from the facility.



FIGURE A: AERIAL PHOTOGRAPH OF THE FRONT OF SRB'S FACILITY

INTRODUCTION (Continued)

- SRB is licensed by the Canadian Nuclear Safety Commission (CNSC) to process tritium.
- Process tritium for the manufacturing of gaseous tritium light sources.
- A gaseous tritium light source is a glass capsule coated with luminescent powder and filled with tritium.
- Interaction between the particles emitted by the tritium and the luminescent coating produces light on a continuous basis.



FIGURE B: VARIOUS TYPES OF TRITIUM LIGHT SOURCES PRODUCED BY SRB

INTRODUCTION (Continued)

- Products ensure the safety and security of people all over the world.
- Supplier of aircraft signs for many aerospace manufacturers.
- We manufacture many vital products used by Canadian and other NATO peacekeeping troops worldwide.



FIGURE C: PICTURE OF A SOLDIER WITH OUR ILLUMINATED TORCH

INTRODUCTION (Continued)

- Other lighting technologies require wiring, power or batteries.
- Our lighting products do not use electricity thereby reducing energy consumption.
- Our products aid the environment against Global Warming.



FIGURE D: VARIOUS TYPES OF PRODUCTS PRODUCED BY SRB

2.0 PURPOSE OF THE APPLICATION

- Requesting same licensed activities and conditions.
- No new methods or processes are required.
- Operating existing equipment with same trained staff.
- Propose to operate to the same release limit and action levels.
- Requesting a renewal for a period of 10 years.

3.0 BACKGROUND

- Significant improvements were made leading up to issuance and during the term of the current licence, including:
 - A number of programs and procedures were improved.
 - Made a number of organizational improvements.
 - Continued to observe a strong safety culture.
 - Did not operate during any type of precipitation.
 - Implemented many effective emission reduction initiatives.
 - Instituted a greatly enhanced Public Information Program.
 - Instituted an enhanced Environmental Monitoring Program with sampling and analysis performed by an independent third party.

4.0 TRITIUM PROCESSED (PRODUCTION OUTPUT)

- Production and tritium processed were highest ever in 2013:

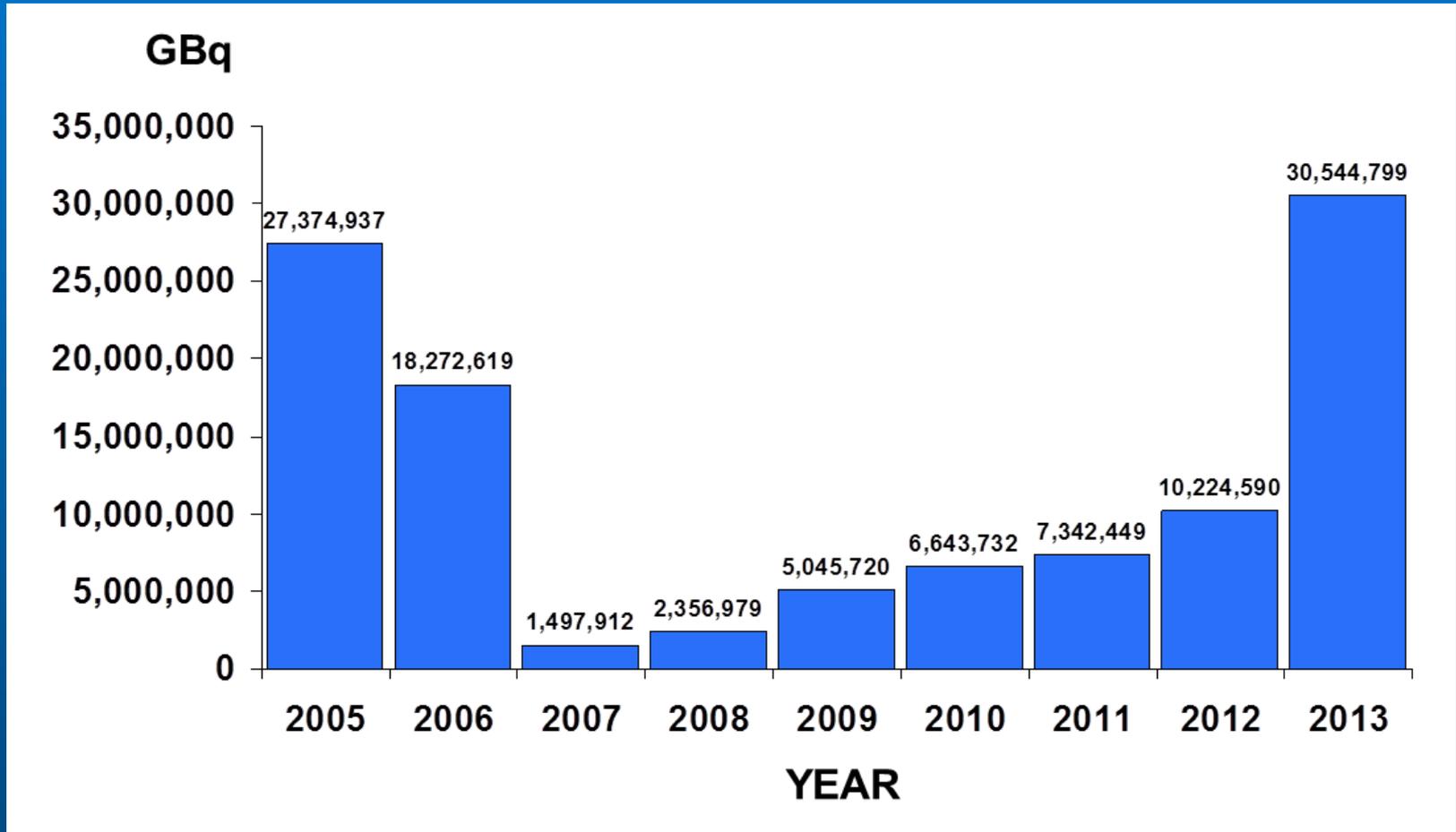


FIGURE E: TRITIUM PROCESSED

5.0 AIR EMISSIONS

- Air emissions have been reduced by 93% from what they were in 2005:

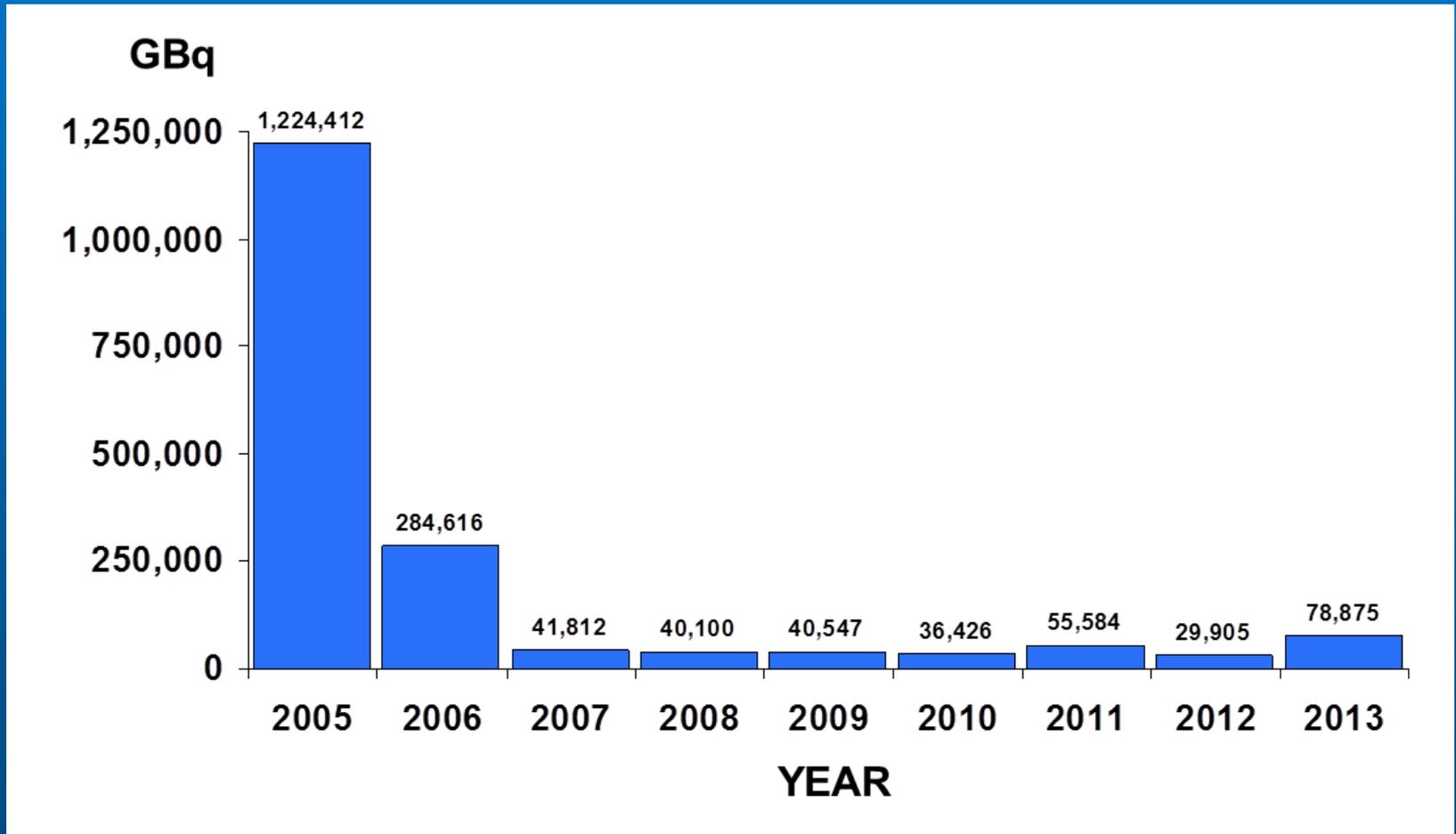


FIGURE F: AIR EMISSIONS

6.0 RELEASED TO PROCESSED RATIO

- Implemented many effective emission reduction initiatives:

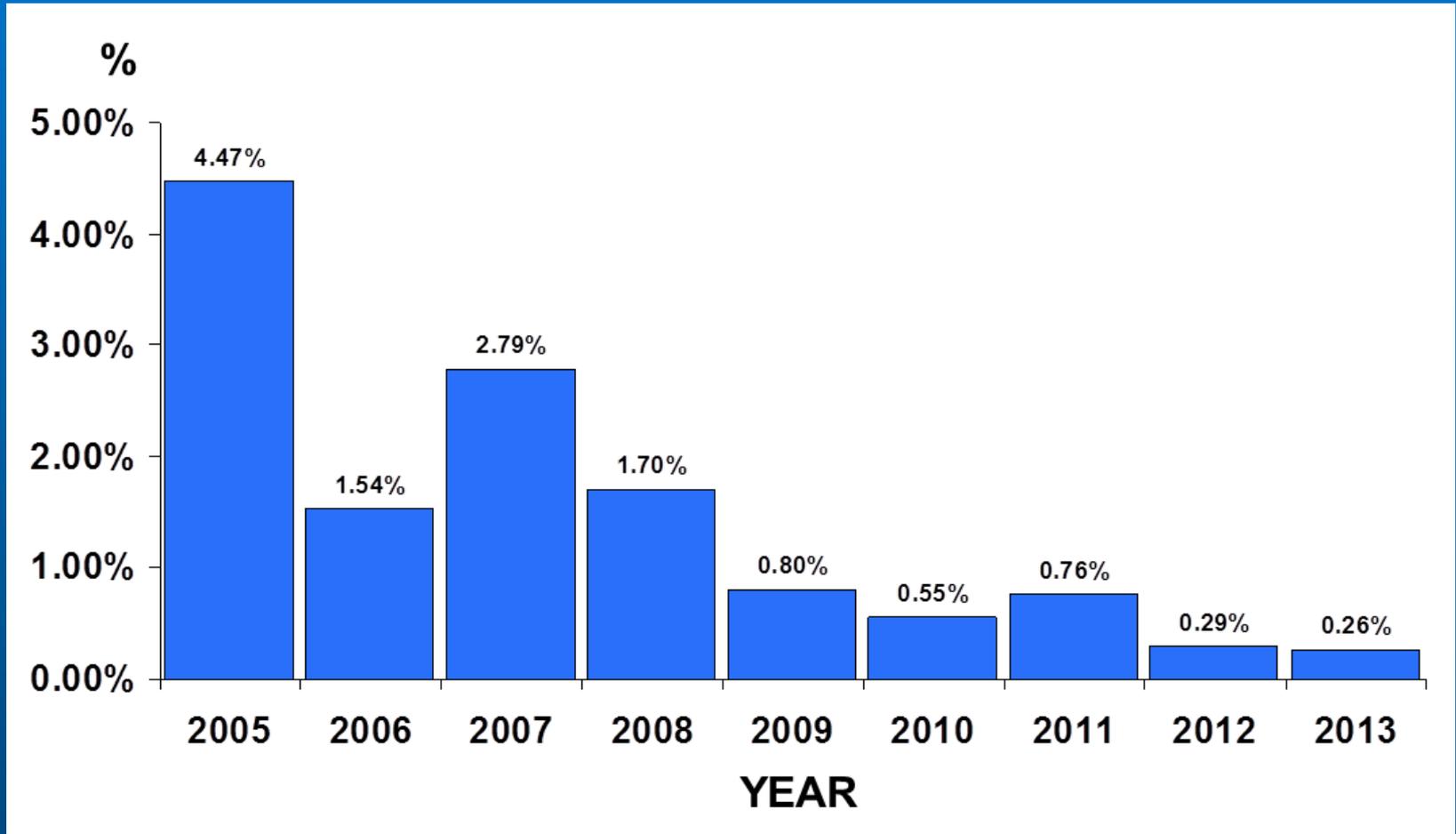


FIGURE G: RELEASED TO PROCESSED RATIO

7.0 LIQUID EMISSIONS

- Liquid emissions have remained well below the 200 GBq limit:

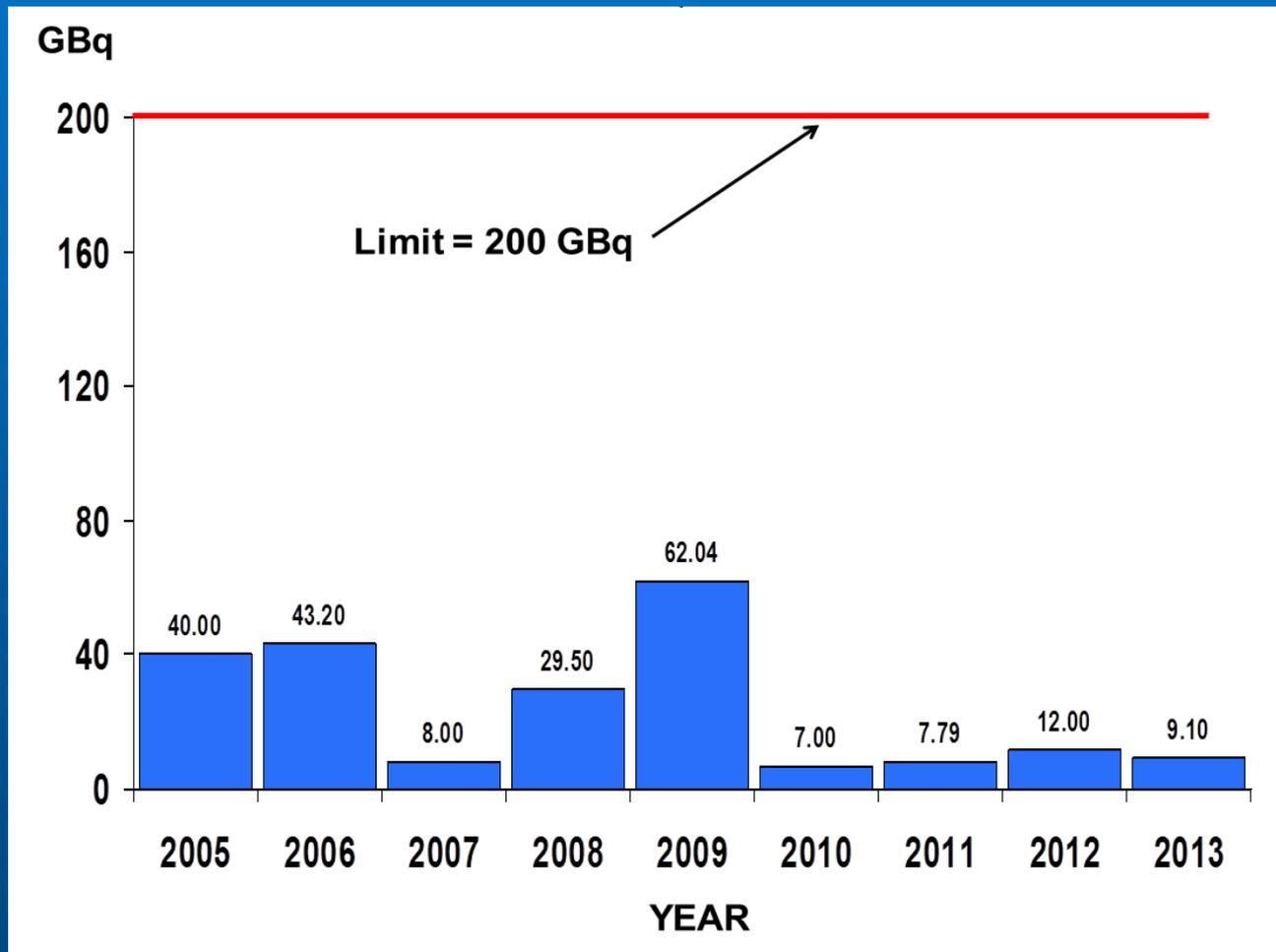


FIGURE H: LIQUID EMISSIONS

8.0 MAXIMUM DOSE TO THE PUBLIC

- The maximum annual dose to a member of the public as a result of the emissions from SRB is well below the regulatory limit of 1 mSv:

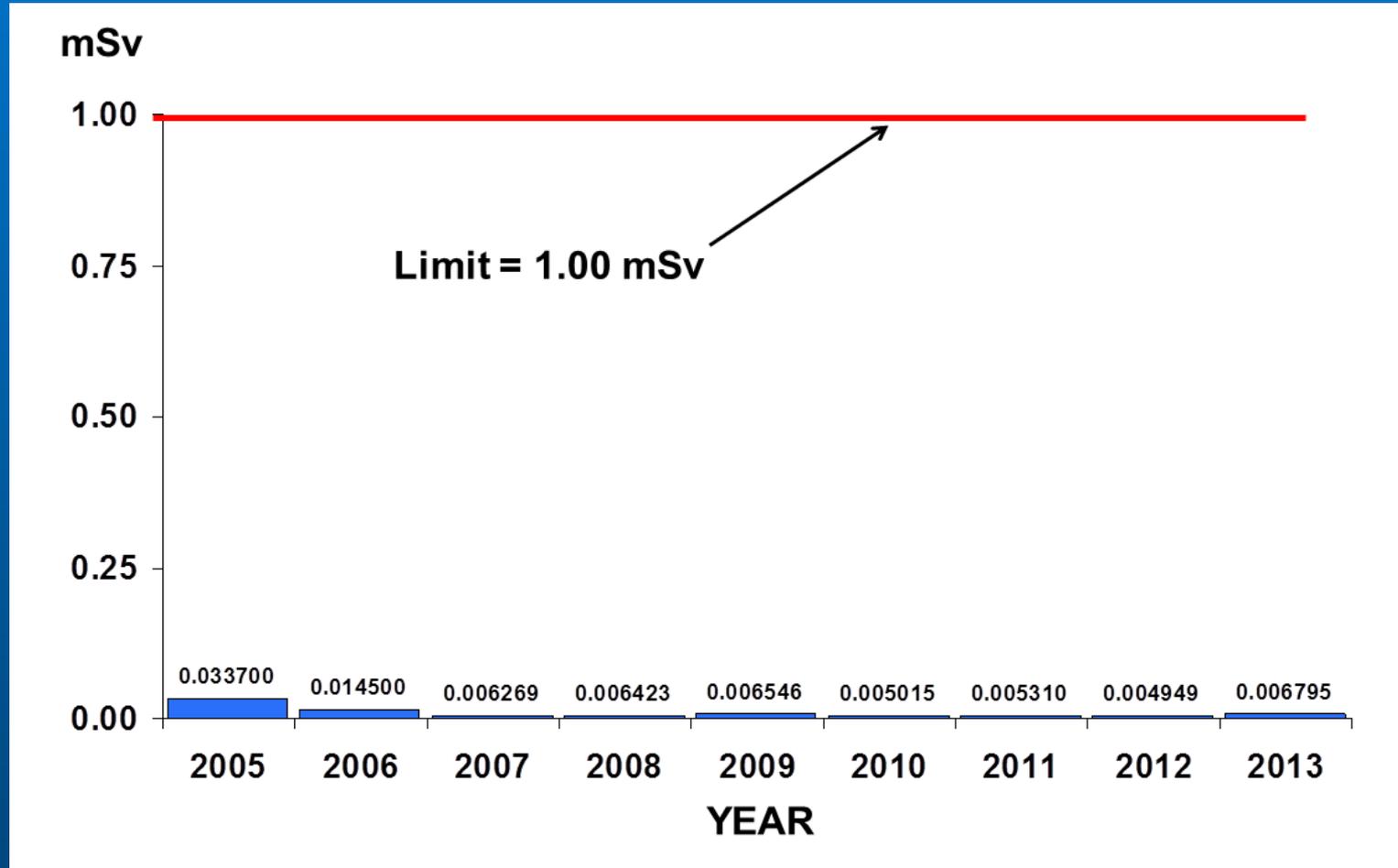


FIGURE I: PUBLIC DOSE

9.0 MAXIMUM DOSE TO SRB STAFF

- The maximum annual doses to SRB staff are well below the regulatory limit of 50 mSv:

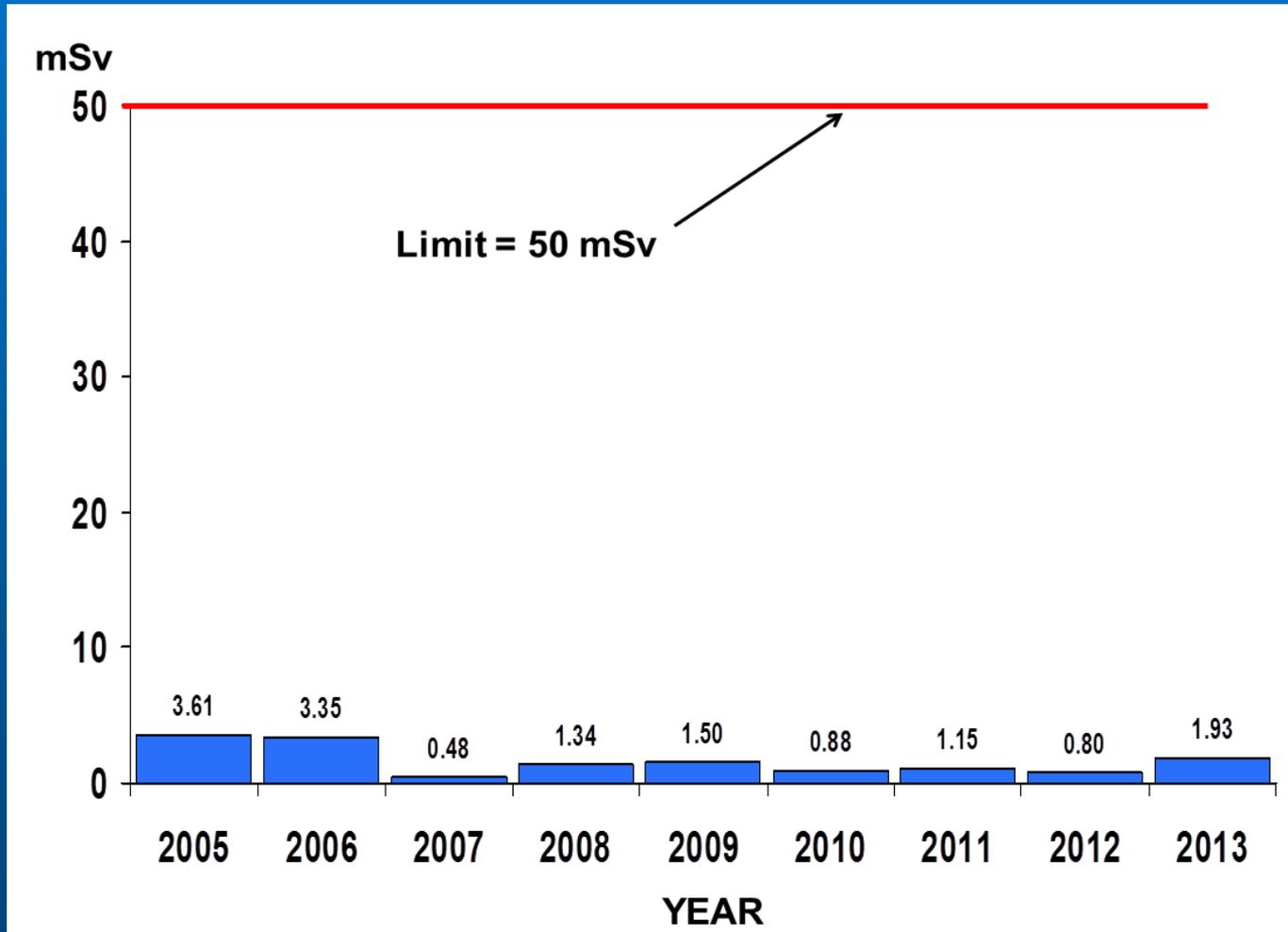


FIGURE J: MAXIMUM DOSE TO SRB STAFF

10.0 ORGANIZATION

- The company is now wholly-owned by the President and Vice President who are Canadian residents, reside locally and have a full time hands on role at the facility and together have more than 40 years of experience in the manufacture of tritium light sources and devices.
- Workforce is stable and includes same core staff that was in place when the current licence was issued in 2010.
- By the end of 2013 our workforce had an average experience of just under 8 years with an average age of just over 39 years of age.
- The six members of the Health Physics Team have an average work experience of just under 16 years with the company for a combined 94 years of work experience directly with the company.

ORGANIZATION (Continued)

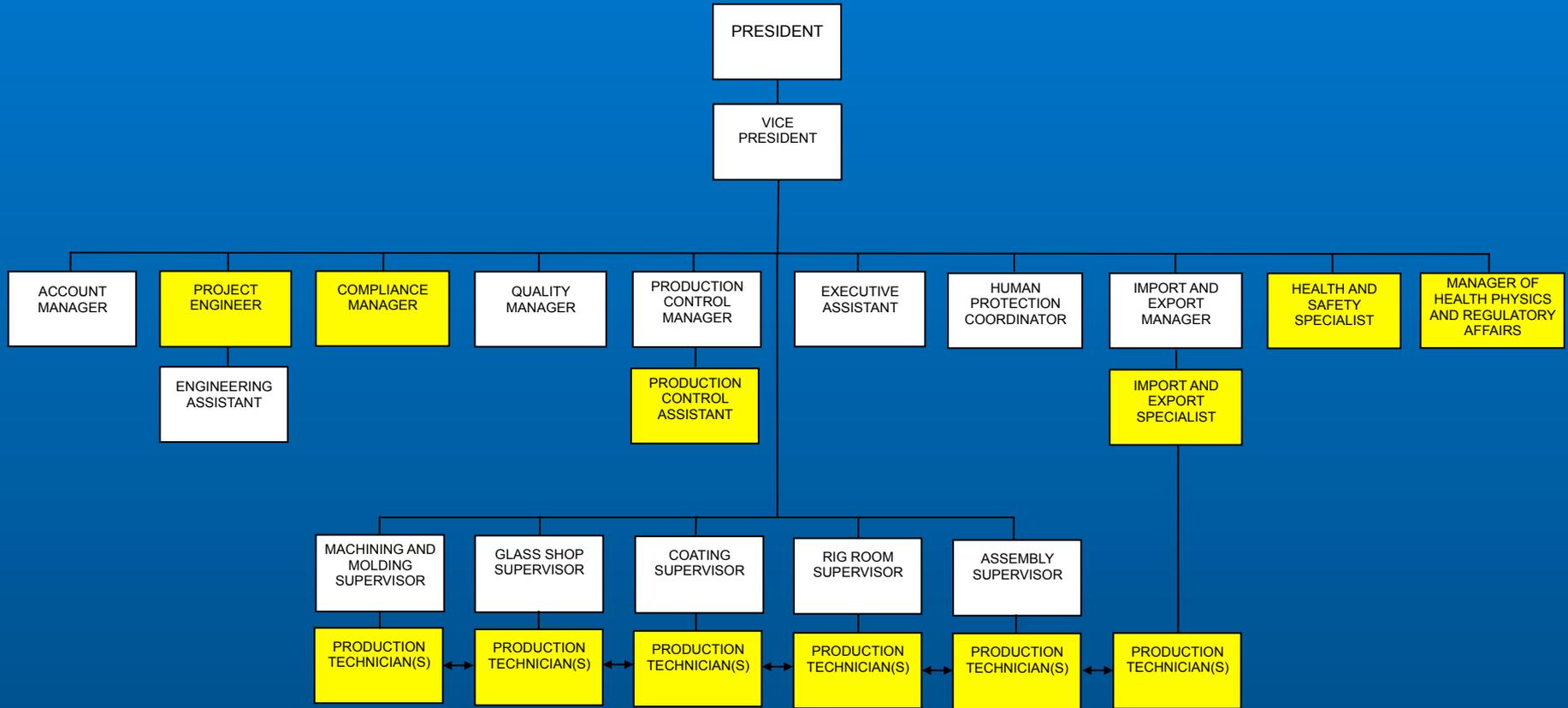


FIGURE K: ORGANIZATIONAL CHART

11.0 OVERSIGHT

- CNSC performs regular compliance inspections and desktop reviews.
- SRB is registered to ISO 9001 and our registrar, BSI Management Systems performs full audits of our operations.
- SRB are also regularly audited by a number of customers in the military and aerospace industry.
- Underwriters Laboratory (UL) performs regular site visits to ensure products meet UL listing requirements.
- Compliance Manager is dedicated to performing internal audits to ensure regulatory compliance.
- Improvements are promptly made as a result of any audit or inspection finding.

12.0 EMISSIONS AND ENVIRONMENT MONITORING

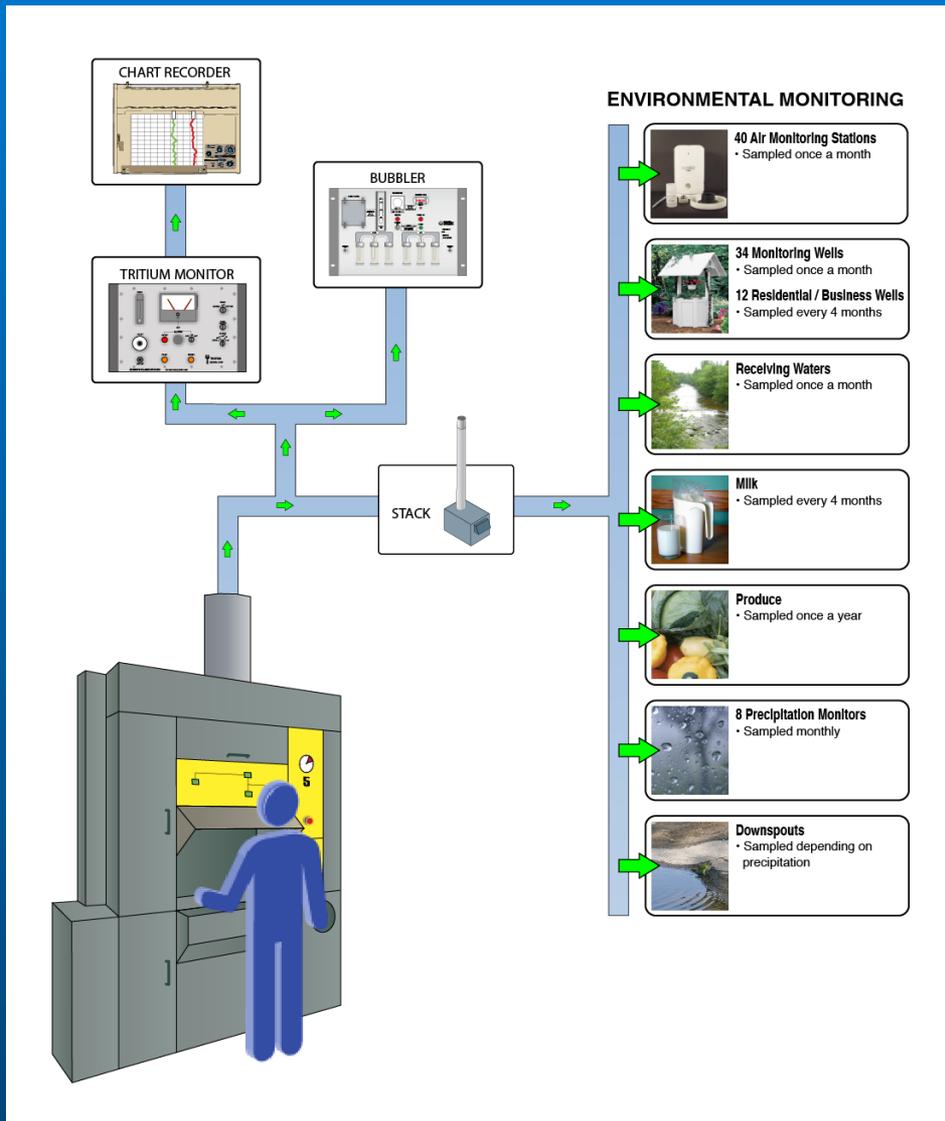


FIGURE L: EMISSIONS MONITORING ELEMENTS

13.0 ENHANCED PUBLIC INFORMATION PROGRAM

- SRB Technologies (Canada) Inc. is committed to:
 - Maintaining two-way communication channels to address the questions and concerns of people within our target audience in a timely and clear manner
 - Sending a press release to the Local Media, CNSC Staff and Local Elected Officials within 1 business day after becoming aware of any Regulatory limit or licence limit exceedance
 - Posting on our website within 5 business days after notifying the CNSC of any Regulatory limit or licence limit exceedance, action level exceedance, major events, incidents or issues with the operations
 - Posting on our website within 5 business days after making any licence renewal or amendment application to the CNSC

ENHANCED PUBLIC INFORMATION PROGRAM (Continued)

- Posting on our website results of our Environmental Monitoring Quarterly Report within 5 business days after issuance to CNSC Staff
- Posting on our website all Annual Compliance Report and associated amendments and/or addendums within 5 business days after issuance to CNSC Staff
- Posting on our website before March 31st a yearly update of our pamphlet
- Posting on our website before March 31st a yearly update of our brochure
- Formally meeting with representatives of local interest groups to discuss licence renewals or amendments

ENHANCED PUBLIC INFORMATION PROGRAM (Continued)

- Conducting regular tours of our operations for members of the community to increase public knowledge and understanding of our operations without compromising security
- Performing presentations pertaining to our operations for members of the community to increase public knowledge and understanding of our operations
- Reviewing at least on a quarterly basis what is believed to be the public perception regarding the operations and make modifications to Public Information Program as deemed necessary
- Continuing to collaborate with other members of the nuclear industry

14.0 DECOMMISSIONING PLAN AND FINANCIAL GUARANTEE

- A value for the future decommissioning of SRB was approved by the Commission for our facility on June 26, 2008.
- This full value for decommissioning of **\$550,476.00** was funded by installments made by SRB to an Escrow Account every 6 months with the last installment being made in early 2014.
- SRB hired consultants Doug McNab of D&J Consulting and Terry Donahue of RadSafe Canada Ltd., to revise SRB's decommissioning value based on their knowledge of decommissioning other CNSC licensed facilities. These consultants were recently directly involved in the full Decommissioning of Shield Source Inc. which was a CNSC licensed facility with operations very similar to that of SRB.
- The revised value for decommissioning is **\$652,488.00**. SRB thereby proposes to fund the increase of **\$102,012.00** by making six equal installments to the Escrow Account in October and April of each year, over a three year period.

15.0 BENEFITS OF A 10 YEAR LICENCE TERM

- SRB is requesting a licence with a term of 10 years. The term of the licence is crucial to many aspects of our operations and will allow SRB to:
 - Allocate resources that would otherwise be dedicated to relicensing to be dedicated to researching technological advancements to further reduce the ratio of tritium that is released to the environment during routine processing.
 - Attract and retain qualified staff
 - Secure long term contracts with customers and suppliers.
 - Secure financing to help introduce and fund further emission reduction initiatives and the purchase of modern safety equipment, radiation and environmental protection equipment and tools.
 - Grow the decommissioning fund to its full value.

16.0 CONCLUSION

- Throughout the term of the current licence, SRB has operated the facility safely and in accordance with the provisions of the licence and the Nuclear Safety Control Act (NSCA) and Regulations.
- SRB has demonstrated its commitment and integrity by the work described in this submission.
- SRB has demonstrated that it will continue to make improvements in the future by various initiatives, goals and targets based on input and concerns raised by the CNSC, members of the public and our employees.
- SRB has demonstrated that it has met all the conditions and reporting requirements of the current licence.
- For these reasons we are requesting that the Commission renew our licence for a period of 10 years.