Canadian Nuclear Safety Commission
Commission canadienne de sûreté nucléaire

Directorate of Nuclear Cycle and Facilities Regulation

File No. 4.02.02
e-Doc 5546692

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June 5, 2018

Mr. Stephane Levesque
President
SRB Technologies (Canada) Inc.
320-140 Boundary Road
Pembroke, ON K8A 6W5

Subject: SRB Technologies (Canada) Inc. Inspection Report No. SRBT-2018-02 March 13, 2018

Dear Mr. Levesque,

Please find enclosed Canadian Nuclear Safety Commission (CNSC) staff's final inspection report SRBT-2018-02 for the Compliance Inspection carried out on March 13, 2018 at SRB Technologies (Canada) Inc. (SRBT). As a result of this inspection one Action notice was issued:

Action Notice – SRBT-2018-02-A01: SRBT shall develop and implement an approved Master Equipment List containing the required information as stipulated by procedure MTC-001 Master Equipment List.

A response to this inspection report is requested within **60** business days from the date this report was issued. If you have any questions, or concerns, please do not hesitate to contact me.

Sincerely,

Robert Buhr
Project Officer
Nuclear Processing Facilities Division

Enclosure: CNSC Compliance Inspection Report SRBT-2018-02 (e-Doc 5521359)

c.c.: J. MacDonald, R. Fitzpatrick (SRBT)
K. Murthy, R. Rashapov, F. Dagenais (CNSC)

Canada's Nuclear Regulator

CNSC COMPLIANCE INSPECTION REPORT

Inspection No.: SRBT-2018-02

Inspection Tittle: Type II Packaging and Transport Inspection

Prepared by: Robert Buhr, Lead Inspector
Nuclear Processing Facilities Division
Directorate of Nuclear Cycle and Facilities Regulation

Report Date: June 5, 2018

Security Designation: Unclassified

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Canada

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CANADIAN NUCLEAR SAFETY COMMISSION
COMPLIANCE INSPECTION

Inspection No.: SRBT-2018-02

Licensee:	SRB Technologies (Canada) Inc.
Licence No.:	NSPFOL-13.00/2022
Facility / Site Inspected:	SRB Technologies Tritium Processing Facility
Inspection Date:	March 13, 2018
Inspector:	Robert Buhr Lead Inspector, NPFD
Approved by:	Kavita Murthy Director, NPFD
Safety and Control Areas:	Packaging and Transport Conventional Health and Safety Fitness for Service
Inspector Accompanied by:	
Licensee Staff:	Stephane Levesque – President Jamie MacDonald – Health Physics and Regulatory Affairs Manager Shane Pleau – Import & Export Manager
CNSC Staff:	Francois Dagenais – Transport Officer Rinat Rashapov – Project Officer

EXECUTIVE SUMMARY

Pursuant to subsection 30(1) of the *Nuclear Safety and Control Act* (NSCA), Canadian Nuclear Safety Commission (CNSC) staff conducted a Type II Packaging and Transport Inspection at the SRB Technologies (SRBT) Tritium Processing Facility on March 13, 2018. The purpose and scope of this inspection was to verify SRBT's processes and performance related to the Packaging and Transport, Conventional Health and Safety, and the Fitness for Service Safety and Control Areas (SCA) as per the NSCA, its associated Regulations, SRBT's operating licence and corresponding Licence Conditions Handbook (LCH).

CNSC inspectors' preliminary inspection facts and findings were discussed with licensee staff. A Preliminary Inspection Facts and Findings Report was tabled during the closing meeting held on March 13, 2018.

The inspection team found one area of non-compliance, and therefore one Action Notice has been raised for SRB Technologies (Canada) Inc. to address. The identified enforcement action does not pose an immediate or unreasonable risk to the health and safety of persons, but improvements are required to address the identified issues.

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Type II Packaging and Transport Inspection

1. INTRODUCTION

A Type II Packaging and Transport Inspection at the SRBT Tritium Processing Facility was conducted on March 13, 2018.

The licensee was assessed against provisions of the NSCA, its associated Regulations, the conditions of the licence NSPFOL-13.00/2022 [1], the LCH for SRBT, [2], as well as, applicable facility-specific and programmatic governing documentation.

Criteria for this inspection were derived directly from the set of documents described in the notification letter and compiled into a compliance matrix [3], which had been provided to licensee staff prior to the inspection (Appendix D). Observations, interviews and review of records were undertaken to assess compliance with regulatory expectations.

This report documents the findings and conclusions of the inspection, along with any compliance actions and recommendations arising from these findings. The results of this inspection activity will form part of CNSC staff's evaluation of the licensee's performance.

2. PURPOSE AND SCOPE

The purpose of the inspection was to provide an overall assessment of compliance with the NSCA, its associated Regulations, the operating licence NSPFOL-13.00/2022 [1], its associated LCH [2], as well as, SRBT's programs and procedures.

The scope of the inspection was focused on the following SCA's:

- Packaging and Transport
- Conventional Health and Safety
- Fitness for Service

3. DESCRIPTION OF INSPECTION METHODS

The NSCA, CNSC Regulations, NSPFOL-13/2022 licence conditions, and governing documents were reviewed as part of the preparation for the inspection. Various items were selected for verification and compiled into a compliance matrix. The inspection also included field observations and information provided by licensee staff.

Any number of the following methods of assessment were used during the inspection:

A. Documentation and record review

- Records were verified to be maintained as required by many of the outlined criteria, and a review of selected documents were performed to ensure their accuracy and completeness.

B. Visual assessment and verification

- A physical inspection of the facility with licensee staff was conducted. Observations based on identified compliance criteria were made for verification purposes.

C. Interviews and discussions with licensee staff

- Interviews and discussions with various licensee staff were conducted during the inspection. Questions were posed based on compliance criteria and responses documented for verification purposes.

Selected documentation and records were reviewed during the field verification component of the inspection. These were reviewed in order to determine whether the various records associated with the areas of the inspection are in compliance with associated regulatory and programmatic requirements.

As per CNSC process, at the conclusion of the field verification portion of the inspection, a Preliminary Inspection Facts and Findings report [4] was provided to SRBT representatives. This report was provided for purposes of outlining observations made by the inspection team at an overall level, based on a preliminary review of the criteria set identified in the compliance matrix and observations made.

Based on criteria identified in the compliance matrix [3], regulatory requirements and compliance expectations were determined to be met or not met, and reported as inspection findings. CNSC staff may identify compliance actions and recommendations in relation to an inspection finding; Appendix A outlines definitions of compliance action.

4. INSPECTION RESULTS

The following findings and subsequent compliance action are the result of CNSC staff's inspection at SRBT. This section of the report has been structured to show the link from the initial inspection findings to the resulting compliance action as shown below:

- Compliance verification criteria used to identify the deficiency;
- A description of the observed deficiency;
- An analysis linking the compliance verification criteria or regulatory requirement to the observed deficiency; and
- Detailed compliance action or recommendation requiring the licensee to address the deficiency.

The findings documented in this report were arrived at by assessing the facts and observations, gathered by CNSC staff during the inspection activities, with the related compliance criteria and regulatory requirements, as detailed in the compliance matrix. Where improvements are necessary, a compliance action has been issued as detailed in this section of the inspection report.

Compliance criteria that was met during the inspection is also listed in the compliance matrix. Follow-up activities were also performed on actions issued in previous inspections.

4.1 Fitness for Service

Criteria

- SRB Technologies (Canada) Inc. Nuclear Substance Processing Facility Operating Licence NSPFOL-13.00/2022 Licence Condition 9.1 "*The licensee shall implement and maintain a fitness for service program"*.
- SRB Technologies (Canada) Inc. Nuclear Substance Processing Facility Operating Licence NSPFOL-13.00/2022 Licence Condition 9.1 Compliance Verification Criteria: *"The licensee shall comply with the Canada Labour Code Part II."*
- SRB Technologies (Canada) Inc. Maintenance Program.

Fact

CNSC staff observed that the Master Equipment List (MEL) was not complete and was not being maintained as required by SRBT's Maintenance Program and MTC-001 MEL.

Analysis/Findings

CNSC staff reviewed SRBT's preventive maintenance activities as part of SRBT's Maintenance Program (Rev 6). CNSC staff noted that the MEL was not complete and was not being maintained as required by SRBT's Maintenance Program and MTC-001 MEL. The reviewed draft at the time of the inspection listed some equipment but was incomplete and not yet approved for use.

According to the MTC-001, equipment shall be recorded onto a MEL, sorted first by classification, and then by system and shall include a description of the components, manufacturer, reference to operating and maintenance manuals, SRBT staff member responsible for maintaining the equipment and a link to the critical spare parts (when applicable).

Compliance Action

Action Notice – SRBT-2018-02-A01: SRBT shall develop and implement an approved Master Equipment List containing the required information as stipulated by procedure MTC-001 Master Equipment List.

5. CONCLUDING STATEMENTS

CNSC staff performed a Type II Packaging and Transport Inspection at SRBT, in order to verify compliance with the NSCA, its associated Regulations, the conditions of the licence and the LCH.

The purpose of the inspection was to provide an overall assessment of compliance with the NSCA, its associated Regulations, the operating licence NSPFOL-13.00/2022 [1], its associated LCH [2], as well as, SRBT's programs and procedures. The scope of the inspection focused on packaging and transport, conventional health and safety and the fitness for service SCA's.

As a result of these findings, and following further analysis of records provided and Inspection facts and findings, Inspectors found one non-compliance with the criteria assessed from the compliance matrix, and therefore one Action Notice has been raised for SRBT to address. The identified enforcement action does not pose an immediate or unreasonable risk to the health and safety of persons, but improvements are required to address the identified issues.

SRBT is requested to submit a response to this inspection report **60** business days from the date the report was issued. The response must include corrective measures and proposed completion dates, including the date by which the corrective measure will be documented (if required), implemented, and verified for adequacy and effectiveness.

6. REFERENCES

[1] Class 1B Nuclear Substance Processing Facility Operating Licence, SRB Technologies (Canada) Incorporated, NSPFOL-13.00/2022, June 29, 2015 (e-Doc 4624670).

[2] Licence Conditions Handbook, SRB Technologies (Canada) Inc., Nuclear Substance Processing Facility Operating Licence (NSPFOL), NSPFOL-13/2022, Revision 2, January 6, 2017 (e-Doc 5040052).

[3] SRBT-2018-02, Compliance Matrix, Type II Packaging and Transport Inspection (e-Doc 5455542).

[4] SRBT-2018-02, Preliminary Inspection Facts and Findings Report, March 13, 2018 (e-Doc 5482394).

APPENDIX A: DEFINITIONS

Compliance Action Categories:

Directive

A written request that the licensee or a person subject to enforcement action take action to correct:

- a non-compliance with the NSCA, the applicable regulations, licence conditions, codes, standards, or
- a general or sustained failure to adhere to approved documents, policies, procedures, instructions, programs, or processes that the licensee has established to meet licensing requirements.

Action Notice

A written request that the licensee or a person subject to enforcement action take action to correct a non-compliance that is not a direct contravention of the NSCA, the applicable regulations, licence conditions, codes or standards, but that can compromise safety, security, or the environment and that may lead to a direct non-compliance if not corrected.

Such non-compliances include:

- a failure to satisfy one of the compliance criteria if the criteria are not directly referenced in the applicable regulations or licence conditions.
- a significant but non-systemic failure to comply with the licensee's own policies, procedures, or instructions that have been established to meet licensing requirements (including programs and internal processes submitted in support of a licence application)

Recommendations:

Recommendation

A written suggestion to effect an improvement based on good industry practice.

A recommendation is not:

- an indication of non-compliance with regulatory requirements,
- subject to enforcement action,
- to be issued as a means of suggesting improvements to the licensee's programs outside the mandate of the CNSC.

Recommendations are not required to be implemented.

APPENDIX B: ACRONYMS AND ABBREVIATIONS

CNSC	Canadian Nuclear Safety Commission
LCH	Licence Conditions Handbook
SCA	Safety and Control Area
SRBT	SRB Technologies (Canada) Inc.
NSCA	*Nuclear Safety and Control Act*
NPFD	Nuclear Processing Facilities Division
MEL	Master Equipment List
NSPFOL	Nuclear Substance Processing Facility Operating Licence
PPE	Personal Protective Equipment
PTNSR	*Packaging and Transport of Nuclear Substances Regulations*
TDG	Transportation of Dangerous Goods
WPHSC	Work Place Health and Safety Committee

APPENDIX C: Attendance Records

Canadian Nuclear Safety Commission / Commission canadienne de sûreté nucléaire

Inspection Opening Meeting Attendance Record

Division	NPFD
Title of Inspection	Type II Packaging and Transport Inspection
Inspection Identification Number	SRBT-2018-02

Name of Licensee	SRB Technologies (Canada) Inc.
Location/Site	SRB Tritium Processing Facility (Pembroke, ON)
Licence Number	NSPFOL-13.00/2022

Lead Inspector	Robert Buhr
Date of Inspection	March 13, 2018 to March 13, 2018
Date of Opening Meeting	March 13, 2018

Instructions: Complete the top section of this form prior to the formal Opening Meeting. Have all attendees at the formal Inspection Opening Meeting sign this form, indicating their presence. Use multiple sheets if needed.

Name	Organization / Role	Signature
Rinat Rashigov	CNSC / Project Officer	
Shane Rean	Import & Export Manager	
JAMIE MACDONALD	MANAGER - HP + RA	
Tanya Sennett	Compliance Mgr.	
Paul Lavigne	Manager - Safety + Security	
FRANÇOIS DAGENAIS	CNSC	
STEPHANE CONESCHUT	SRBT	
Rob Buhr	CNSC	
Courtney Sinclair	SRBT	

Canadian Nuclear Safety Commission / Commission canadienne de sûreté nucléaire

Inspection Closing Meeting Attendance Record

Division	NPFD
Title of Inspection	Type II Packaging and Transport Inspection
Inspection Identification Number	SRBT-2018-02

Name of Licensee	SRB Technologies (Canada) Inc.
Location/Site	SRB Tritium Processing Facility (Pembroke, ON)
Licence Number	NSPFOL-13.00/2022

Lead Inspector	Robert Buhr
Date of Inspection	March 13, 2018 to March 13, 2018
Date of Opening Meeting	March 13, 2018

Instructions: Complete the top section of this form prior to the formal Opening Meeting. Have all attendees at the formal Inspection Opening Meeting sign this form, indicating their presence. Use multiple sheets if needed.

Name	Organization / Role	Signature
Rinat Bachynov	CNSC / Project Officer	
François Dagenais	CNSC /	
JAMIE MACDONALD	SRBT MGR HP+RA	
Tanya Sennett	Compliance Mgr.	
Dave Rea	Import and Export Manager	
Paul Lavigne	Manager - Safety + Security	
Courtney Sinclair	SRB - Project Engineer (Maintenance)	
STEPHANE LOVESQUE	SRBT PRESIDENT	
Rob Buhr	CNSC Project Officer	

APPENDIX D: Compliance Matrix

e-Doc Number & Security Classification:	**5455542 |** Not Protected | Non-Classifié
Licensee:	SRB Technologies (Canada) Inc.
Licence Number:	NSPFOL-13.00/2022
Facility / Program / Site:	SRB Technologies Tritium Processing Facility
Inspection Number:	SRBT-2018-02
Title of Inspection:	Type II Packaging and Transport Inspection
Inspection Team:	Robert Buhr, NPFD (Lead Inspector) Rinat Rashapov, NPFD (Participant) François Dagenais, TLSSD (Participant)

Inspection Safety and Control Area(s) and/or Other Matters of Regulatory Interest

☐ Management System	☐ Environmental Protection	☐ Waste Management
☒ Fitness for Service	☐ Radiation Protection	☐ Security
☐ Operating Performance	☒ Conventional Health and Safety	☐ Safeguards and Non-Proliferation
☐ Safety Analysis	☐ Human Performance Management	☒ Packaging and Transport
☐ Physical Design	☐ Emergency Management & Fire Protection	☐ Other, specify below

Criteria	Compliance Expectation / Inspection Methods	Analysis	Met / Not Met
Safety and Control Area: Packaging & Transport			
PTNSR	**Excepted Packages** Compliance expectations: - Dangerous goods are transported in the appropriate type of package - Damages or modifications do not compromise the design integrity of the package - Shipping records are appropriately completed - Non-fixed contamination tests are conducted - Packages are appropriately marked with signage - Packages are accompanied by a complete transport document	SRBT handles and transports radioactive materials in the following types of packages: • Excepted package: Cardboard boxes (UN2910 and UN2911 for quantities lower than 21.60 Ci) • Type A package: Cardboard boxes (UN2915 for tritium quantities exceeding 21.6 Ci) • Type A package: 200L drums (UN2915) • Type B package: Amersham container (UN2916) CNSC staff reviewed a sample of SRBT's excepted packages (cardboard boxes) at the shipping & receiving area in Zone 1. The packages were in good condition and no damages, modifications or degradations were observed. The packages were appropriately labelled and marked in accordance with the *Packaging and Transport of Nuclear Substances Regulations, 2015* (PTNSR). Excepted Packages were appropriately marked with the appropriate UN numbers on the outside and included the address label of both the consignor and consignee. CNSC staff verified that records of past shipments of excepted package were complete and logged in SRBT's Shipping Log document. Transport document that accompanies packages were appropriately completed.	Met

Criteria	Compliance Expectation / Inspection Methods	Analysis	Met / Not Met
PTNSR TDG	**Type A Packages** Compliance expectations: - Dangerous goods are transported in the appropriate type of package - Activity limits are respected - Packages are appropriately labelled and marked - Shipping records are appropriately completed - Non-fixed contamination tests are conducted - Packages are accompanied by a complete transport document	SRBT stated that it makes use of two different Type A packages: Cardboard boxes for shipping of Gaseous Tritium Light Sources product to customers around the world and 200L drums for low-level waste transfers. CNSC staff reviewed a sample of SRBT's cardboard boxes ready for shipment in the shipping & receiving area in Zone 1. The packages were in good condition and no damages, modifications or degradations were observed. The packages were appropriately labelled and marked in accordance with the PTNSR. The cardboard boxes are checked for contaminations by wipe testing and the total activity of the package content is specified on the shipping documents. Records of the contamination checks are maintained by SRBT Type A packages were appropriately marked with the proper UN numbers, name and address of both the consignor and consignee and the words "TYPE A". The packages were appropriately labelled with the I_WHITE label. CNSC staff verified that records of past Type A shipments were complete and logged in SRBT's Shipping Log document. Transport document have been appropriately completed and SRBT retains the transport documents for at least two years, as required by the Regulations. Records that demonstrate that packages (cardboard boxes and drum) meet the Type A standard are maintained by SRBT and were available for review.	Met

Criteria	Compliance Expectation / Inspection Methods	Analysis	Met / Not Met
PTNSR TDG	**Type B Packages** Compliance expectations: - Dangerous goods are transported in the appropriate type of package - Activity limits are respected - Packages are appropriately labelled and marked - Shipping records are appropriately completed - Non-fixed contamination tests are conducted - Packages are accompanied by a complete transport document	CNSC staff verified that SRBT only transports radioactive nuclear substances as either Excepted Packages or Type A packages. SRBT previously received bulk tritium shipments in Type B packages "GE Healthcare Ltd. 3605D". SRBT staff stated that the Type B package "GE Healthcare Ltd. 3605D" (CDN/E204/-96 (Rev. 5) is currently not in use as this package model's Canadian Revalidation of Package Design Certificate expired on March 31, 2017. SRBT stated that it receives bulk tritium from CNL in the Amersham Type B package (CDN/2060/B(U)-85 (Rev. 6)). CNSC staff reviewed the package and verified that it was in good condition, undamaged, appropriately labelled and marked. General practice at SRBT was that once the bulk tritium container was emptied, the package was returned to CNL as a Type A shipment (UN2915). Due to a misclassification event of a package that exceeded the Type A tritium amount, these shipments will, from March 13, 2018 on, be shipped as a Type B shipment (UN2916).	Met
PTNSR TDG	**Training** Compliance expectation: - Verify that SRBT provided training to all workers who handle or transport dangerous goods and hold a Transportation of Dangerous Goods (TDG) certificate or are directly supervised by someone who is qualified	All five employees who handle or transport dangerous goods working in the shipping and receiving area received training on TDG Regulations. CNSC staff reviewed the certificates issued for the respective employees and confirmed that they were valid and current. The training is renewed every two years.	Met
PTNSR	**Transport Licences** Compliance expectation: - Verify that valid transport licences are issued, when required	SRBT stated that they have not needed to apply for any transport licences from the CNSC.	N/A

Criteria	Compliance Expectation / Inspection Methods	Analysis	Met / Not Met
SHP-001 6. Types of Shipments	Compliance expectation: - Radioactive packages are shipped as either excepted packages (UN2910, 2911) or Type A packages (UN2915)	CNSC staff confirmed through discussions with SRBT staff and records reviewed that only excepted packages (UN2910, UN2911) or Type A packages (UN2915) have been transported from the facility. Type B packages (UN 2916) will be transported from the facility in the future.	Met
SHP-001 7. Training	Compliance expectations: - Review training records to demonstrate that shippers have a Certificate of Training with the relevant classes or work under direct supervision who possess the certificate - Review TDG training records to demonstrate that training is completed minimum every three years for road shipments and every two years for air shipments - Training records are kept for a minimum of five years	All five employees who handle or transport dangerous goods working in the shipping and receiving area received training on TDG Regulations. CNSC staff reviewed the certificates issued for the respective employees and confirmed that they were valid and current. The training is renewed every two years and training records were retained for a minimum of five years.	Met
SHP-001 8. Record Keeping	Compliance expectations: - Review shipping log to ensure that all shipments are recorded as per procedure, including name and address of recipient, copy of recipient's licence (if applicable), quantity of radioactive substance and date of shipment - International shipments containing tritium are logged on Export Licence Log database to demonstrate that activity limits of export licence are not exceeded	CNSC staff reviewed SRBT's Shipping Log document and verified that shipments were completed as per procedure. The log included the relevant information such as order number, consignor, consignee, quantities of nuclear substance, destination and date of shipment for Excepted Packages (UN2911) and Type A package (UN2915). CNSC staff verified that SRBT tracks international shipments using the Export Licence log which included the country-specific total activity limits and total activity shipped within a given time period.	Met

Criteria	Compliance Expectation / Inspection Methods	Analysis	Met / Not Met
SHP-001 9. Registration of Use of Packages	Compliance expectation: - Review confirmation letter that SRBT is a registered user of Type B package "GE Healthcare Ltd. 3605D"	SRBT staff stated that the Type B package "GE Healthcare Ltd. 3605D" (CDN/E204/-96 (Rev. 5) is currently not in use as this package model's Canadian Revalidation of Package Design Certificate expired on March 31, 2017. SRBT provided the filed Confirmation Letter by the CNSC that SRBT was a registered user prior to decertification of the package. Note that SRBT is a registered user of CNL's tritide package (CDN/2060/B(U)-96).	Met
SHP-001 10. Contamination Control for Class 7 Shipments	Compliance expectations: - Verify that all shipments containing tritium are considered Class 7 shipments and are swipe tested for non-fixed contamination - Review contamination records demonstrating that contamination does not exceed 4 Bq/cm^2 averaged over 300 cm^2	CNSC staff verified that shipments containing tritium were considered as Class 7 shipments and were wiped for non-fixed contamination by the SRBT Health Physics team. SRBT staff stated that all Type A or Type B packages are tested for non-fixed contamination and only released for transport once the wipe result passes the criteria.	Met
SHP-005 Document – Dangerous Goods Document	Compliance expectations: - Review Dangerous Goods Documents are completed for all Type A packages as per procedure	CNSC staff reviewed the shipping documentation accompanying a Type A package and confirmed that the required documents (Dangerous Goods Shipper's Declaration, required original and signed copies) were prepared as stipulated by the procedure. The document contained all required information and met all regulatory requirements.	Met
MSP-012 Corrective Action	Follow up on Lost Package of Aircraft Tritium Safety Signs (November 21, 2017) From SRBT's report: "SRBT is in contact with both ConneXion and Purolator to determine what caused the damage, and what can be improved to ensure such events are prevented in the future."	SRBT was in contact with ConneXion and Purolator regarding the damaged package event. The carriers were not able to determine the final cause of the damage. No further information was required of SRBT to be provided to the CNSC. CNSC staff has accepted the submitted report and corrective actions.	Met

Criteria	Compliance Expectation / Inspection Methods	Analysis	Met / Not Met
MSP-012 Corrective Action	Follow up to Notification of Error in Shipping Classification of Package (March 1, 2018) From SRBT's notification: "We have been in close contact with CNL on this matter, and we are currently investigating corrective actions to prevent this from happening in the future. As per our internal process, a non-conformance report is in the process of being raised in order to document the corrective measures implemented. Based upon our initial discussions, a likely solution may be to cease shipping this as a Type 'A' quantity in a Type 'B' package, and simply ship it labelled and documented as a Type 'B' shipment (UN2916), in order to ensure a conservative level of compliance and safety."	CNSC staff concluded that by classifying the shipment as a Type A instead of a Type B shipment, SRBT failed to comply with the PTNSR. Therefore, SRBT is required to submit a full report to the CNSC outlining the event, cause and corrective actions identified. SRBT raised a non-conformance report to track corrective actions which include classifying future respective shipments as Type B shipments, updating relevant procedures and conducting a final heating cycle of the container to ensure maximal removal of tritium before the container is shipped back to CNL. CNSC and SRBT staff discussed the proposed corrective actions during the inspection and were satisfied that the corrective actions would – when implemented – adequately address the recurrence of similar events.	Met

Criteria	Compliance Expectation / Inspection Methods	Analysis	Met / Not Met
Safety and Control Area: Conventional Health & Safety			
SRBT Health & Safety Policy	Compliance expectation: - Review past six months of Workplace Health and Safety Committee (WPHSC) minutes to ensure that they are being conducted as per *Canada Labour Code* Part II requirements, and that any actions being raised are being followed up and addressed appropriately	CNSC staff reviewed the WPHSC meeting minutes for the last six months and determined that they include adequate details for tracking raised actions. WPHSC's were held monthly and the past meeting minutes are posted on a board accessible for SRBT workers. Health and safety concerns including identified hazards and near misses were brought up by SRBT employees to the Committee and were discussed and actioned upon. See photo in appendix E figure 1	Met
SRBT Health & Safety Policy	Compliance expectation: - Review previous records of workplace inspections to ensure that they are being conducted monthly as per policy	Workplace inspections of all areas at SRBT were performed monthly as per procedure FPP-003 Workplace Inspection and any identified hazards were corrected. Reviewed workplace inspection records and forms (Work Place Health & Safety Fire Inspection Recording Form, First Aid Inventory Checklist) were complete and signed off.	Met
SRBT Hazard Prevention Program	Compliance expectation: - Verify that workers are wearing the appropriate personal protective equipment (PPE) and are working safely	During the inspection, CNSC staff observed that SRBT staff were wearing the appropriate PPE and were working safely. PPE worn included booties, safety glasses, disposable lab coats and gloves (when required). Other PPE such as face mask, rubber gloves and gowns were available for use.	Met
SRBT Hazard Prevention Program	Compliance expectation: - Review sample of Hazard Prevention Program Training Records verify that training is completed	CNSC staff reviewed samples of Hazard Prevention Program Training Records for fiv SRBT employees and verified that training was completed as required by SRBT's Hazard Prevention Program. CNSC staff note that all new SRBT employees are trained on potential hazards for each of the 13 areas at the facility.	Met

Criteria	Compliance Expectation / Inspection Methods	Analysis	Met / Not Met
Safety and Control Area: Fitness For Service			
NSPFOL-13.00/2022 LC 7.1: *"The licensee shall implement and maintain a fitness for service program."* SRBT Maintenance Program (Rev. 6) 2.0 Scope	Compliance expectation: - Review that SRBT has a system in place to track maintenance of equipment - Review MTC-001 Master Equipment List and MTC-002 Critical Spare Parts and demonstrate it is maintained	CNSC staff reviewed SRBT's preventive maintenance activities as part of SRBT's Maintenance Program (Rev. 6). CNSC staff noted that the Master Equipment List (MEL) was still in development and was not maintained as required by SRBT's Maintenance Program and MTC-001 Master Equipment List. The reviewed draft at the time of the inspection listed some equipment but was incomplete and not yet approved for use. According to the MTC-001, equipment shall be recorded onto a MEL, sorted first by classification, and then by system and shall include a description of the components, manufacturer, reference to operating and maintenance manuals, SRBT staff member responsible for maintaining the equipment and a link to the critical spare parts (when applicable).	Partially Not Met
SRBT Maintenance Program (Rev. 6) 4.3 Maintenance Activities	Compliance expectations: - Review preventative maintenance records encompassing periodic, predictive, or planned activities to demonstrate they are completed - Review corrective maintenance records to demonstrate they are completed	Reviewed records of preventative maintenance activities conducted in 2017 and 2018 were completed according to the maintenance schedule. SRBT prepared the maintenance schedule at the beginning of each year and tracked preventative maintenance work for safety-related structures, systems and components. Examples of maintenance records reviewed include RTS Monitoring, Compressor, Filling and Bulk Rig and Overhoff Tritium in Air Sample Collector bubbler systems. SRBT maintains a log sheet to track corrective maintenance activities which SRBT workers may bring forward to the project engineer. CNSC staff reviewed a sample of corrective maintenance records and verified that the activities were completed. The reviewed records were complete and where required, independent post-verifications and testing were performed.	Met

Criteria	Compliance Expectation / Inspection Methods	Analysis	Met / Not Met
SRBT Maintenance Program (Rev. 6) 4.5 Maintenance Work	Compliance expectations: - Review log/records to demonstrate that key structures, systems and components (SSCs) maintenance has been performed as per annual schedule - Review sample of maintenance procedures from MTC-000 to ensure procedures contain adequate information to conduct the maintenance task - Review SRBT's post-maintenance verification and testing activities where verification details are outlined in maintenance procedure	CNSC staff reviewed the annual maintenance schedule for 2017 and 2018 and verified that preventive maintenance activities were conducted as planned. Due dates for maintenance activities were planned for a given month. CNSC staff determined that maintenance work activities were adequately planned at SRBT. CNSC staff reviewed procedure MTC-008 Bubbler Maintenance and determined that the procedure contained adequate information to perform the task. Post-verifications and testing were performed on the MTC bubbler system as scheduled.	Met

APPENDIX E: PHOTOGRAPHS

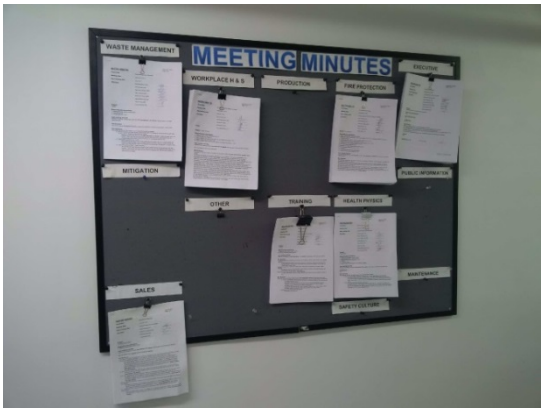

Figure 1: Meeting minutes of various Committees including from the Health and Safety Committee and Maintenance Committee