



**SRB TECHNOLOGIES (CANADA) INC.**

320-140 Boundary Road  
Pembroke, Ontario, Canada, K8A 6W5  
Tel.: (613) 732-0055  
Fax: (613) 732-0056  
E-Mail: sales@betalight.com  
Web: www.betalight.com

Mr. R. Buhr  
Project Officer, Nuclear Processing Facilities Division  
Canadian Nuclear Safety Commission  
P.O. Box 1046, Station B  
Ottawa, Ontario  
Canada  
K1P 5S9

**Subject: Full Report – Activation of Contingency Plan (June 1, 2016)**

Dear Mr. Buhr,

As required by Section 29 (2) of the *General Nuclear Safety and Control Regulations*, please accept our full report of the event that occurred at SRBT on June 1, 2016, where a facility smoke detector was triggered, resulting in the dispatch of the Pembroke Fire Department to the facility. We confirm there were no safety consequences associated with this event.

A preliminary report was made by telephone to the CNSC Duty Officer, as well as to your attention [1] on the day of the event. Details of the event were posted to the SRBT website on June 1, 2016, and the full report will also be posted to our website.

Should you have any questions or concerns on this report, please do not hesitate to contact me at any time.

Sincerely,

A handwritten signature in blue ink, appearing to read 'SL' followed by a long, sweeping horizontal line.

Stephane Levesque  
President  
SRB Technologies (Canada) Inc.

cc: K. Murthy, CNSC  
R. Fitzpatrick, SRBT  
E. Gaudette, SRBT  
K. Levesque, SRBT  
J. MacDonald, SRBT

**Reference**

- [1] Email from J. MacDonald (SRBT) to R. Buhr (CNSC), *Preliminary Report: Activation of Smoke Alarm at SRBT, Implementation of Contingency Plan*, dated June 1, 2016.



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**FULL REPORT**

**Activation of Contingency Plan – June 1, 2016**

Author:

A handwritten signature in black ink, appearing to read 'J MacDonald', written over a horizontal line.

Jamie MacDonald  
Manager of Health Physics & Regulatory Affairs

Accepted:

A handwritten signature in blue ink, appearing to read 'S Levesque', written over a horizontal line.

Stephane Levesque, President

Accepted:

A handwritten signature in black ink, appearing to read 'Ross Fitzpatrick', written over a horizontal line.

Ross Fitzpatrick, Vice-President

Date Submitted: June 8, 2016

Submitted To: R. Buhr, Project Officer - CNSC

# SRBT Full Report

## Activation of Contingency Plan – June 1, 2016

NOTE: This report is intended to fulfill the requirements associated with Clause 29 (2) of the General Nuclear Safety and Control Regulations (GNSCR), in relation to the event of the activation of the fire response contingency plan at SRBT on June 1, 2016.

(a) The date, time and location of becoming aware of the situation.

SRBT became aware of the situation at 1150h on June 1, 2016 at the facility premises.

(b) A description of the situation and the circumstances.

The facility fire alarm was activated, resulting in the evacuation of all personnel from the facility to the muster point. An assessment of the location of the alarm noted that the smoke alarm for the compressor room had been triggered.

The Pembroke Fire Department responded to the alarm within minutes. Upon arrival, an assessment of the compressor room determined that one of two twinned drive belts on the compressor had failed, with pieces of the failed belt becoming entangled in the belt which was still intact.

The friction caused by the entanglement of the failed belt resulted in the generation of sufficient smoke as to activate the sensor on the fire detection system. The compressor was shut down immediately upon determining that the unit had malfunctioned.

With the assistance of the fire fighters and a licensed electrician, it was confirmed that there was no hazard of any kind to workers, the facility, the public nor the environment. SRBT's commercial neighbours were debriefed about the situation shortly after the situation was resolved.

The vendor of the compressor replaced both belts later the same day and performed an inspection of the unit. The compressor was tested, where it was determined that the compressor was fully operable with the new belt. The unit was returned to service the same day.

The fire department deployment to the facility was deemed to be an event that constituted the implementation of a contingency plan in accordance with the licence, as described in GNSCR (29) (1) (d).

(c) The probable cause of the situation.

The contingency plan implementation was caused by the failure of a component on the facility air compressor, resulting in the generation of smoke in the room to a degree that triggered the smoke detector.

(d) The effects on the environment, the health and safety of persons and the maintenance of security that resulted from the situation.

There were no effects on the environment, the health and safety of persons and the maintenance of security as a result of this event.

(e) The effective dose and equivalent dose of radiation received by any person as a result of the situation.

No effective or equivalent dose of radiation was received by any person as a result of this event.

(f) The actions that the licensee has taken or proposes to take with respect to the situation.

A non-conformance report (NCR-529) was initiated in line with our internal management system processes. The root cause of the event has been determined to be the failure of a wearable component on the equipment.

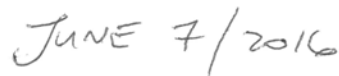
Compressor belts are replaced as part of the facility Maintenance Program on an annual basis. The belt that failed was scheduled to be replaced in July 2016.

As a result of the earlier than anticipated failure of the belt, the annual maintenance activity on the compressor has been changed to semi-annual, with the intention to ensure that belts are replaced long before failure is likely to occur.



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Jamie MacDonald  
Manager of Health Physics and Regulatory Affairs



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Date