

**From:** "Jamie MacDonald" <jamie@betalight.com>  
**Subject:** Preliminary Report - Section 35 (c) of PTNSR - Lost Package of Aircraft Tritium Safety Signs  
**Date:** November 21, 2017 at 3:07:55 PM EST  
**To:** "Rashapov, Rinat \((CNSC/CCSN)\)" <rinat.rashapov@canada.ca>  
**Cc:** "Stephane Levesque" <stephane@betalight.com>, "Ross Fitzpatrick" <ross@betalight.com>  
**Reply-To:** <jamie@betalight.com>

Good day Mr. Rashapov,

The purpose of this email is to provide CNSC staff with a preliminary report of a lost shipment of aircraft tritium safety signs.

**Note: as 'lost or damaged nuclear substances' meets the definition of an emergency in draft REGDOC 3.1.2, SRBT has also proactively made a report to the CNSC Duty Officer.**

As the consignor of the missing shipment (an event that falls within the definition of 'dangerous occurrence' in Section 35 (c) of the *Packaging and Transport of Nuclear Substances Regulations (PTNSR)*), SRBT provides this preliminary report of the situation to the Commission, as per Section 37 (1) of the PTNSR.

The information presented here is our current understanding of the situation, and we are hopeful that the package will be found in due course.

#### **Location of the dangerous occurrence**

The package was last scanned by UPS Supply Chain Solutions (UPS SCS) in Montreal, QC at Dorval International Airport on November 14, 2017.

#### **Description of shipment**

The package (dimensions 18"x10"x9", weight 8lbs) contains 26 aircraft safety signs, totalling approximately 5.3 TBq of tritium within the devices. The shipment is classed as UN2911, Radioactive Material, Excepted Package, Articles.

The aircraft signs were in the process of being exported under licence EL-A1-25313.0/2018 to RUAG Aerospace Services GmbH in Germany. The shipment Incoterm was EXW; the consignee arranged for the handling of this shipment via UPS SCS.

#### **Circumstances of dangerous occurrence**

- The shipment was picked up at our facility on November 6, 2017 by UPS SCS without issue.
- On Monday, November 20, UPS SCS noted that they were unable to locate the package, and that the airline had alerted them that the package had been damaged. UPS SCS requested further details and pictures of the package.
- On Tuesday, November 21, UPS SCS notified us that the package was lost, and that they were unable to locate the goods.

#### **Expert Assessment (Section 36 (2) of the PTNSR)**

Much like smoke detectors which can contain small quantities of radioactive material, tritium safety signs are consumer products that are sold by SRBT throughout the world. They are designed to stringent standards and present no significant risk to persons during normal use. The signs that are missing are of a certified design.

The signs were contained in a package which meets the requirements of an 'Excepted Package' as defined in the IAEA Safety Standard No. SSR-6, *Regulations for the Safe Transport of Radioactive Material*, and were labelled as such for transit from Pembroke. Excepted packages do not require conveyances to be placarded as carrying Class 7 Dangerous Goods, nor do they require additional paperwork to accompany the shipment above and beyond the Commercial Invoice/Packing Lists.

During normal conditions of transport and use, there is no anticipated risk to members of the public or the environment due to the transport of these consumer goods. Should the signs be damaged, the risk is expected to be very small, and well within effective dose limits described in the *Radiation Protection Regulations*.

#### **Actions taken or proposed to be taken**

SRBT will continue to work closely with UPS SCS to determine the location and status of this package, and to verify if there has been any damage to the goods.

Should the signs be found and are determined to be damaged, SRBT will assist UPS SCS in ensuring the safety of persons during recovery efforts.

SRBT will provide a full report as required within 21 days of the occurrence, in compliance with Section 38 of the PTNSR.

Should you have any questions on this matter, please don't hesitate to contact Stephane Levesque, Ross Fitzpatrick or myself at any time.

Best regards,

#### **Jamie MacDonald**

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