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From: jamie@betalight.com
Sent: March 23, 2026 3:31 PM
To: Alison O'Connor; CNSC Staff (cnsc.licensee-titulaires.ccsn@canada.ca)
Cc: 'Stephane Levesque'; Ross Fitzpatrick; Joshua Bull; 'Katie Levesque (katie@betalight.com)'; Chris Hoffman
Subject: SRBT Notification of Action Level Exceedance - Bioassay Sample

ADDRESSEE: Alison O'Connor, Project Officer, NPFD (alison.oconnor@cnsc-ccsn.gc.ca).

DATE OF SUBMISSION: March 23, 2026.

Good morning Alison,

The purpose of this message is to provide the initial notification to the Canadian Nuclear Safety Commission of the exceedance of a radiation protection-related action level at SRBT.

The report is required under the *Radiation Protection Regulations*, paragraph 6 (2) (c).

The action level in question is described in SRBT's management system document *Licence Limits, Action Levels and Administrative Limits,* as follows:

- Action level for bioassay result of SRBT NEW:

PARAMETER	ACTION LEVEL
Bioassay result – any sample	400 Bq/ml

Details:

- An SRBT nuclear energy worker submitted a routine bioassay sample for analysis on March 20, 2026, as per the SRBT Radiation Safety Program.
- This sample was analyzed over the weekend of March 21-22, in accordance with SRBT's Dosimetry Service Program.
- The analyzed concentration of tritium-in-urine in the sample was measured as exceeding the action level (~1,435 Bq/ml).
- This was discovered on March 23, 2026, and was confirmed by repeat measurement of the sample.
- The committed effective dose that will result from this intake will depend on subsequent samples, as per SRBT dosimetry procedures:
    - The effective dose for the in-house dosimetry period of March 16-20 assigned to this worker is calculated as 0.30 mSv.
    - As a projection, based on the concentration of the March 20 sample alone, a committed effective dose of 1.20 mSv would be estimated, absent any other previous or subsequent data on tritium concentration in urine for this individual.
    - The final committed effective dose due to this event will be established in the coming weeks as follow-up samples are obtained and analyzed.
    - This intake will also very likely result in the worker exceeding the action level for the first quarter of the 2026 calendar year (i.e. final quarterly dose will exceed 0.50 mSv).

    - The dose is not likely to approach the prescribed regulatory limits for nuclear energy workers.
    - The radiological risks associated with this exposure are very low.
    - As a conservative precaution, the worker will be restricted from radiological work until their bioassay samples fall below 400 Bq/ml.
- The cause of this action level exceedance is being investigated as required by the Radiation Protection Regulations, paragraph 6 (2) (a).
    - Initial findings suggest that the excess internal contamination exposure likely occurred when the worker changed tip seals on a contaminated scroll pump on March 18, 2026.
- SRBT will identify and take actions to ensure the effectiveness of the SRBT Radiation Safety Program and to prevent recurrence of a similar event.

A full report on this event will be submitted to your attention within 21 days of having become aware of the event – before end of day Monday, April 13, 2026.

(NOTE: this event was not reported to the CNSC Duty Officer as it does not fall within the defined requirements to do so as described in CNSC REGDOC-3.1.2, Section 2, Clause 8.)

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