



**Written submission from
Safety Probe International**

**Mémoire de
Safety Probe International**

In the Matter of

À l'égard de

**Application from SRB Technologies
(Canada) Inc. requesting acceptance of a
revised preliminary decommissioning plan
and a revised financial guarantee for the
SRBT tritium processing facility in
Pembroke, Ontario**

**Demande de SRB Technologies (Canada) Inc.
visant à obtenir l'approbation de la
Commission pour son plan préliminaire de
déclassement révisé et sa garantie financière
révisée visant son installation de traitement du
tritium à Pembroke (Ontario)**

Hearing in writing based on written
submissions

Audience par écrit fondée sur des
mémoires

October 2020

Octobre 2020



September 23, 2020

Comments on the Application of SRB Technologies

by
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Please find in the attachment the response of Safety Probe International, to your invitation for comments on SRBT's application requesting acceptance of a revised preliminary decommissioning plan and a revised financial guarantee for the SRBT tritium processing facility in Pembroke, Ontario.

Kind Regards,

Helmy Ragheb, PhD, P.Eng.



Attachment

Safety Probe International has reviewed the SRBT application requesting acceptance of a revised preliminary decommissioning plan and a revised financial guarantee for the SRBT tritium processing facility in Pembroke, Ontario. The review found no evidence that SRBT based its estimate for the cost of decommissioning on conservative information and predictions, and that the predicted financial guarantees may have been underestimated.

Description of the Circumstances

1. In preparing a Preliminary Decommissioning Plan (PDP), licensees should base their plans on conservative predictions of the facility state at the time the facility is shut down for decommissioning. Guide G-219, section 6.3.2 (Uncertainty) states: *“The preliminary plan should be based on the best available conservative information and predictions, and consider any special issues should an earlier unscheduled facility closure occur”.*
2. Funds for financial guarantees should also be estimated based on credible worst-case scenario. Guide G- 206, section 4.2 (Costing) states: *“If the impacts of proposed operations, or the effectiveness of specific decommissioning options, are difficult or impossible to estimate with precision, or to substantiate with confidence, it may be cost-effective or necessary to offset these deficiencies by estimating or funding credible worst-case scenarios.”*
3. SRBT, in its application, claimed (in page 14 items 2. and 3.) that it based its assessment on the principal radiological, chemical and physical conditions *“predicted to exist at the end of operations; and the general types of hazards, associated with the above conditions, that could be encountered during decommissioning”*
4. SRBT further claimed (in page 30) that the decommissioning cost estimate provided in its application was conservative, and was based upon a worst-case scenario, where the termination of activities is due to *“unexpected events”* . SRBT further claimed that *“The funds allocated in the FG are also based on this worst-case scenario”*
5. Our review of the application did not find evidence to substantiate claims in 3. and 4. above. SRB application did not appear have identified any *“unexpected events”* that could occur within the licensed facility prior or leading shutdown, nor did it explain how these unexpected events impacted the funding of the financial guarantees. Unexpected events or hazards such as flooding or fire should have been analysed and the results documented in the facility Safety Analysis Report (SAR).



6. Safety Probe International recommends that CNSC requests SRBT:
 - a. To review all credible scenarios documented in the SAR and identify the worst-case scenario that results in the maximum cost for funding the financial guarantees. This scenario should not be necessarily the one that causes maximum radioactivity release but rather the maximum cost for decommissioning.
 - b. To perform the cost estimate based on the selected worst-case scenario.
 - c. To report the updated analysis and assessment to the CNSC prior to issuing approval.