

## WIPE INSTRUCTIONS

If wipe test procedures are available from the device manufacturer follow them carefully, otherwise the general test procedures below can be used as a guide.

Wipe sample(s) should be placed in clean, sealable polyethylene (plastic) sample bag(s)/envelopes with only 1 sample per bag/envelope and returned **immediately** via prepaid **courier** to BTI for analysis.

**Note: It is prohibited to send these wipe samples via the mail (Canada Post).**

Should there be any contamination of the wipes above the prescribed level, you will be contacted by phone, email or fax, otherwise a Leak Test Measuring Certificate will be sent via mail.

## GENERAL WIPE TEST PROCEDURES

1. The wipe test should only be performed by a person who knows the sealed source, the sealed source containment, and the requirements of the appropriate CNSC expectations (Canadian Nuclear Safety Commission (CNSC) Licence Application Guide: Nuclear Substances and Radiation Devices (REGDOC-1.6.1) Appendix AA: Regulatory Expectations for Leak Testing of Sealed Sources, October 2015) and can recognize and minimize the potential contamination and radiation hazards associated with the source, source containment, sampling method and wipe sample.
2. The sampler should be wearing a personal dosimeter; either film, TLD or PAD type during wipe procedures.
3. Wipes should not be handled with bare hands. Gloves and tongs should be worn / used during the wipe procedure and only removed after sealed source sampling is complete.
4. Either commercially available filter papers (with a maximum diameter of 5 cm) or one-ended Q-tips must be used for sealed source leak testing purposes. (BTI can also supply kits if required). The wipe (filter paper or Q-tip) should be dampened with alcohol before sampling to ensure that contamination will adhere to the swipe media.
5. Generally, for any one source or device, wipe samples should be taken at the exit port, transport system or any other accessory that may come in contact with the source.
6. Once the entire swipe is in contact with the surface to be swiped, sample the area using a back and forth movement while applying a constant, light but firm hand pressure. Try to pass over the sampling area only once. While the source containment can generally be vigorously "wiped", care should be exercised in areas around fragile windows and protective covers.

7. The wipes should be placed in individual envelopes / plastic bags (1 sample per bag) and the envelope / sample bag sealed. The number of the wipe should be indicated on the envelope / bag and the Leak Test Sampling Certificate along with the wipe location.
8. Please ensure that the Leak Test Sampling Certificate is complete and attached to the sample bag before sending the sample to BTI for analysis. DO NOT place the certificate in the bag with the sample.
9. Package and send samples immediately to BTI for analysis by **courier**.

All sealed source leak testing is analyzed under an ISO 9001:2008 registered quality management system and Canadian Nuclear Safety Commission (CNSC) Licence Application Guide: Nuclear Substances and Radiation Devices (REGDOC-1.6.1) Appendix AA: Regulatory Expectations for Leak Testing of Sealed Sources, October 2015. The time between sampling and measuring should be as short as practical and shall not exceed ten (10) working days.

Samples that do not meet or follow Canadian Nuclear Safety Commission (CNSC) Licence Application Guide: Nuclear Substances and Radiation Devices (REGDOC-1.6.1) Appendix AA: Regulatory Expectations for Leak Testing of Sealed Sources, October 2015 or BTI's Quality Management Procedures will be dealt with as follows:

1. Samples that are received at BTI with both the paperwork and sample in the same sample bag will be returned 'as is' (without analysis) at the customer's expense;
2. Leak test samples not based on commercially available filter papers (with a maximum diameter of 5 cm) or one-ended Q-tips will be returned 'as is' (without analysis) at the customer's expense;
3. Samples not received at BTI in a prompt fashion (no greater than seven (7) working days after the sampling date) will be returned 'as is' (without analysis) at the customer's expense; and
4. Multiple samples packaged in the same sampling bag will be processed; however a certificate will be issued stating the possibility of cross contamination between samples.