****

 **SSRL Sample Holder Request for Approval**

**Proposal # Date Submitted: Beamline: Expected beam time:**

**Contact:**

**PI: Application Review On:**

\* **Allow at least 60 days for approval**

*Information on radioactive samples*

1. **Total sample matrix, weight, and dimensions**.

2. **The amount (weight) of each radioactive isotope in the sample.**

3. **A detailed description of the sample containment.**

4**. Provide engineer drawings of the holder**

5**. What is the periodicity that layers are replaced and the inner layer are checked?**

6. **Any data on integrity of the sample, the sample holder, and containment under the expected experiment conditions (e.g., heating, cooling, pressure, etc.)**

**7. Provide a QA form to indicate as the holder is built which parameters are verified by the institution. See example in attachment, each requestor can design their own QA form.**

7. **Special training requirements, in reference to handling, accountability, transport, etc. of the samples. (The SLAC-SSRL requires a minimum of Radioactive Worker 1 (ESH) training for all experiment participants that will handle the contained samples. Rad Worker 1 training from other DOE facilities is transferrable to SLAC. An SLAC- SSRL site-specific practical training will be required at the start of the experiment.)**

8. **Exposure readings from the sample at contact and at 30 cm, with a description of the instruments used to perform the measurements, if data is available**.

9. **Approximate beam size and flux on sample**.

10. **Beam type (Mono/Pink/White).**

11. **Beam energies if Mono or ID gap if pink/white**.

12. **Energy cutoff if pink beam.**

**Attachment QA Verification**

**This form is required for all radionuclides that require 3 layers of containment**

**CHECKLIST for SAMPLE LOADING and CONTAINMENT ASSEMBLY of Holder 1xx**

**Laboratory of Origin: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Identification Label: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**1.** **Sample Description, Radionuclide(s), Location in Holder, and Radionuclide Quantity**:

Holder ID:1xx

Slot 1:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Preliminary Inspection Initials**

 Back windows are a 0.002”(2mil) or thicker Kapton \_\_\_\_\_\_\_\_\_

 Front window is 0.002” or thicker polypropylene \_\_\_\_\_\_\_\_\_

 Visual inspection of window seal integrity ---------------

 Indium wire thickness -------------

 Epoxy expiration date \_\_\_\_\_\_\_\_\_

**Primary Containment Vessel Assembly:**

 Samples fixed in place \_\_\_\_\_\_\_\_\_

 Smooth seal surface \_\_\_\_\_\_\_\_\_

 < MDA dpm removable alpha & beta contamination. \_\_\_\_\_\_\_\_\_

 < MDA fixed alpha and beta contamination. \_\_\_\_\_\_\_\_\_

**Secondary Containment Vessel Assembly:**

 Samples fixed in place \_\_\_\_\_\_\_\_\_

 Smooth seal surface \_\_\_\_\_\_\_\_\_

 < MDA dpm removable alpha & beta contamination. \_\_\_\_\_\_\_\_\_

 < MDA fixed alpha and beta contamination. \_\_\_\_\_\_\_\_\_

**Tertiary Containment Vessel Assembly:**

 Samples fixed in place \_\_\_\_\_\_\_\_\_

 Smooth seal surface \_\_\_\_\_\_\_\_\_

 < MDA dpm removable alpha & beta contamination. \_\_\_\_\_\_\_\_\_

 < MDA fixed alpha and beta contamination. \_\_\_\_\_\_\_\_\_

 Assembly configuration conforms to container specifications \_\_\_\_\_\_\_\_\_

**Loader**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_

Print Name and Signature

**Checker:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date: \_\_\_\_\_\_\_\_\_\_\_

Print Name and Signature

**Surveyor:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_

Print Name and Signature