

## SOP-5 PROCEDURES FOR RECEIVING AND OPENING INCOMING PACKAGES

- All packages containing radioactive material received at the University of Mississippi Main Campus must be inspected and surveyed for contamination within 3 hours of receipt.
- Records for incoming package surveys are maintained in Laboratory Services (LS).
- *\*In the event that an incoming package is improperly delivered to another University location, please contact Laboratory Services immediately at 5433. Do not open the package.*

### Procedures for Package Surveys by the Radiation Protection Specialist (RPS)

1. Confirm that the arrival of the shipment was expected, and determine if the package was properly labelled, marked and packaged.
2. Verify that the package is not open, wet, leaking or displays any degradation of its integrity.
3. Obtain a calibrated beta-gamma portable survey instrument that has a beta-gamma probe.
4. Measure the radiation level, in mR/hr on contact with the outside accessible surfaces of the shipping container. The surface contact radiation level should not exceed 200 mR/hr. Record readings.
5. Measure radiation levels at a distance of three feet (1 meter) from the surfaces of the shipping container. Radiation level should not exceed 10 mR/hr at three feet from any surface of the package. Record readings.

### Procedures for Wipe Test

1. Obtain wipes or swabs and scintillation vials, deionized water, and protective gloves.
2. With protective gloves, dampen a smear or swab with two to four drops of deionized water, and wipe the innermost container of the package over its entire surface or 100 cm<sup>2</sup> whichever is less. Return the innermost container to the interior of the package.
3. Place the wipe or swab into the labeled scintillation vial.
4. Refer to the Procedures for Wipe Testing section of SOP-3, for the appropriate counting protocol. Record results.
5. If the results indicate the presence of removable activity in excess of the limits given in the table below, the RPS must immediately notify the carrier and the Mississippi Division of Radiological Health.

**Table 3 Wipe Test Limits for Removable External Radioactive Contamination**

Radioactive Contamination	Bq/cm <sup>2</sup>	μCi/cm <sup>2</sup>	dpm/cm <sup>2</sup>
Beta and gamma emitters and low toxicity alpha emitters	0.4	10 <sup>-5</sup>	22
All other alpha emitting radionuclides	0.04	10 <sup>-6</sup>	2.2