

# Nuclear Material Control Plan

## Nuclear Material Control Plan

Passport Systems, Inc. (PSI) is responsible for the Special Nuclear Material (SNM) under its control. This stewardship encompasses the security and use of the SNM. Procedures for documenting the location and the condition of the SNM are described in this plan.

### 1. Control of SNM

#### 1.1 Receipt of SNM

Within 3 hours after receipt the Radiation Safety Officer (RSO) or an Authorized User (AU) shall follow these procedures when receiving packages containing SNM. If received after working hours then within 18 hours of receipt:

1. Put on gloves to prevent hand contamination.
2. Verify with the appropriate survey equipment, the package labeling information.
3. Verify that the shipment does not exceed possession limits. If possession limits are exceeded contact sender and return package.
4. Visually inspect package for any sign of damage. If damage is noted, stop procedure and document the condition.
5. Open the package with the following precautionary steps:
  - a. Open the outer package (following manufacturer's directions, if supplied) and remove packing slip.
  - b. Open inner packager and verify that contents agree with those on the packing slip. Compare requisition, packing slip, and label(s) on item(s).
  - c. Check integrity of final source object (i.e. inspect for breakage of seals or welds, loss of cladding, or any other evidence of tampering).
6. Secure the SNM in the radioactive materials storage area.
7. Monitor the packing material and packages for contamination before discarding.
8. If contaminated, treat as radioactive waste.
9. If not contaminated, obliterate radiation labels before discarding in regular trash.
10. Complete SNM Shipment Receipt Report and submit to RSO.

#### 1.2 Use of SNM

All uses of SNM shall be under the control of an AU. To use SNM:

1. The AU shall request item(s) from the RSO who will review their intended use and security.
2. A record shall be kept of the state of the SNM prior to and after use using the SNM Use Form.
3. If any loss of mass is found with the returned SNM an investigation shall be conducted to resolve the anomaly.

#### 1.3 Operating Procedures

The AU shall follow the following procedures when using SNM:

1. Remove the SNM from the secure radioactive material storage area.
2. Complete the SNM Check-in and Check-out Report.
3. Manage the use of the SNM.
  - a. If this is a test, oversee the placement of the SNM in the test area.
  - b. The AU shall know the location of the SNM at all times.
4. Return the SNM to the secure radioactive material storage area.
5. Complete the SNM Check-in and Check-out Report.

#### **1.4 Shipping of SNM**

All shipping of SNM shall be under the control of the RSO or Assistant RSO.

1. Contact the receiver and ask for written verification of request for the SNM.
  - a. Use the Request for Shipment of SNM form.
  - b. If a copy of the requesters SNM license is not on file, obtain a copy for the record.
2. Document the state of the SNM prior to packaging for shipment.
3. Follow PSI procedures for shipping radioactive materials.
4. Include these documents with shipment:
  - a. Packing list with SNM description and SNM mass
  - b. Request of acknowledgement of shipment receipt
5. If SNM has been loaned to PSI and is being returned to loaner then the following shall occur:
  - a. Follow previous guidelines for shipping SNM
  - b. Document removal of SNM for PSI's inventory.

#### **SNM SHIPMENT RECEIPT REPORT**

This completed shall be submitted to, approved and retained by the RSO.

A. Date & Time:	B. Location:
C. Material Type: ___ LEU      ___ HEU      ___ Plutonium      ___ Uranium Oxide	
D. Mass (grams)	E. Activity (mR/hr)  @Surface  @1 meter
F. Do Packing Slip and Contents Agree?  SNM      ___yes ___no      Difference_____	
Amount      ___yes ___no      Difference_____	
Form      ___yes ___no      Difference_____	
G. Received and checked by ( <i>Printed name and signature</i> ):	
Notes & Comments:	

**SNM CHECK-IN & CHECK-OUT REPORT**

This completed form shall be submitted to, approved and retained by the RSO.

**OUT**

A. Date & Time:	B. Use Location:
C. Material Type: ____ LEU      ____ HEU      ____ Plutonium      ____ Uranium Oxide	
D. Mass ( <i>grams</i> ):	E. Condition:
F. Authorized User ( <i>Printed name &amp; Signature</i> ):	

**IN**

G. Date & Time:	H. Mass ( <i>grams</i> ):	I. Condition:
J. Authorized User ( <i>Printed name &amp; Signature</i> ):		
K. Notes & Comments:		

**REQUEST FOR SHIPMENT OF SNM**

This form shall be submitted to, approved and retained by the RSO.

A. Requester:	
B. Phone:	C. E-mail:
D. Ship To:	
The recipient of the SNM possesses a valid SNM License issued by the NRC or other appropriate governing body and will acknowledge receipt of material via FAX or e-mail with 24 hours of receipt.	
E. SNM License # <i>(If current SNM License is not on file with PSI then please provide):</i>	
F. Acknowledge by <i>(Printed name &amp; Signature):</i>	
G. SNM Requested: ____ LEU      ____ HEU      ____ Plutonium      ____ Uranium Oxide	
H. Requested Delivery Date:	
I. Additional Information:	
J. Requester's Signature:	