

#### **DEFENSE LOGISTICS AGENCY**

# DISTRIBUTION 2001 MISSION DRIVE NEW CUMBERLAND, PENNSYLVANIA 17070-5000

RECRG 1 OCT 12 12 AM 10:27

October 4, 2012

Commercial and R&D Branch Division of Nuclear Materials Safety Nuclear Regulatory Commission, Region I 2100 Renaissance Blvd, Suite 100 King of Prussia, PA 19406-2173 Dicket No. 030-33261 License No. 37-30062-01

> G7 03033261

Dear Ms. Masnyk Bailey:

This letter is to confirm that DLA Distribution conducted its annual physical inventory in response to your recent inspection, with a reported 100% accuracy. As discussed with you, the parameters of our inventory were modified from previous inventories to validate the quantities of materials contained in those manufacturer's cartons that contained multiple packages. The instructions to the field for the performance of this inventory included the requirement to open all cartons containing NRC Licensed commodities and verify the count down to the unit of issue pack. Once the count was verified and the items returned to the carton, if the individual Distribution Site deemed necessary, the cartons were to be sealed with packing tape and a certification label was to be placed across the tape indicating the verified count, date verified and individual performing verification. From this point forward, as long as the certification label is present and provides evidence that the carton has not been opened, subsequent inventories may use the carton count without reopening the carton. Any carton not bearing a certification label, as described above, must be opened and the count verified to the unit of issue pack for all subsequent inventories.

The attached Radiological Health Implementation Procedure describes the new process that will initiate the verification process at the time of receipt.

Please address any further questions or comments to myself or Mr. David Collins. We can be reached at (717) 770-4762/5623 or dave.mack@dla.mil and david.m.collins@dla.mil.

Sincerely,

Chairperson, Radiation Safety Committee

Enclosure:

DLA Distribution Radiological Health Implementation Procedure #7

NMSS/RGNI MATERIALS-004
ML/2298A353

ISO ELEMENT NO.	TITLE: Radiological Health Implementation Procedure Receipt of Radioactive Material	DOCUMENT NO. Dist-RHIP-7 ORIGINAL DATE 10/01/2006
OHSAS ELEMENT NO.	LOCATION: DLA Distribution New Cumberland, PA	REVISION NUMBER V2.0
VPP REFERENCE INTERGRATION PENDING	OWNER: DS-FDE	REVISION DATE 8/24/12

#### PURPOSE

This procedure provides policy and establishes uniform guidance and procedures for the receipt of radioactive materials (RAM) in accordance with the DLA Distribution Manual 6055.20, Radiological Health Program Manual (RHPM) and applies to any item containing licensed or unlicensed radioactive material as part of the item or as a component within the item.

#### II. <u>DISCUSSION</u>

This RHIP is an extension of the RHPM and compliance with this procedure is essential to maintaining compliance with the Program and associated Nuclear Regulatory Commission (NRC) License.

#### III. POLICY

All operations involving the receipt of radioactive material (RAM) shall be planned and conducted using procedures and engineering controls based upon sound radiation protection principles. This approach is designed to maintain doses to workers and the general public that are As Low As Reasonably Achievable (ALARA). This RHIP will be adhered to at all times while performing any task covered by this procedure. If during the performance of this affected task, it is discovered that this RHIP is in error or cannot be completed as written, work shall not continue until the discrepancy has been resolved through the DLA Distribution Radiation Safety Office. The RSO can be contacted at either DSN 771-5623 or 4762. Telephonic approval of an alteration of this procedure is authorized but must be followed up by a written procedure modification.

RAM is normally received at the DLA Distribution Depots and can be from many sources (i.e., vendor delivery for new procurement, return from the field, return from maintenance activity, etc.,). Receiving areas will be designated in writing and posted with all current posting. If all stock items are initially receipted through a "central receiving" point, procedures must be in place to ensure that RAM is identified as soon as possible and transferred to the appropriate receiving area.

Radioactive items in condition codes H, P, or R are considered unserviceable are not authorized for receipt by the DLA Distribution's NRC License. For the purpose of the NRC License, serviceable conditions codes include A through G only.

#### IV. PROCEDURES

#### A. Receipt of Radioactive Material

1. Upon receipt of Radioactive Material (as identified by hazardous labels, by receipt documentation, the Distribution Standard System (DSS), FEDLOG or HMIRS), receiving personnel shall verify quantity and NSN. Ensure material being received is serviceable.

- 2. Verify by visible inspection that the package is not damaged. If the package exhibits obvious damage, or there is reason to suspect contamination, isolate the package, contact the local Radiation Protection Officer (RPO) immediately and, if possible, detain the transport vehicle for evaluation.
- 3. Radiation receipt surveys of packages known to contain a DOT Labeled Quantity (DOT While I, Yellow II, or Yellow III) of RAM will be performed within 3 hours after the package is received (i.e. from the time it is initially identified as radioactive during off loading or induction). Surveys shall be performed no later than 3 hours from the beginning of the next working day if it is received after working hours.
- 4. Radiation receipt surveys of packages known to contain a RAM in quantities less than that which would require a DOT Label shall be surveyed no later than the end of the next working day.
- 5. The RSO will be notified of all packages received that are labeled with DOT Specification White I, Yellow II or Yellow III. Notification shall be made electronically and at a minimum will include the NSN and quantity of material being received. **Note: notification of RSO is required so that DLA Distribution Inventory records can be reviewed to ensure that allowable quantities of certain radionuclides are not exceeded.**

#### B. Receipt Surveys

- 1. Initial Radiation Surveys shall be performed on the outside of the package to ensure compliance with the appropriate transportation requirements. Radiation dose level/removable contamination measurements exceeding established guidelines will be immediately reported to the RPO. Other transportation requirements not satisfied (marking, labeling, etc.,) will also be noted at this time.
- 2. Surveys may be performed by either the RPO or individuals who have successfully completed the requirements of Radiological Health Monitor (RHM) training.
- 3. The radiation dose rate survey shall be performed on all sides of the package using the appropriate dose rate instrument, (Ludlum Models 12 or 19, Fluke 451P, etc.). Record on the Radioactive Material Movement Form (RMMF) (Appendix A):
  - a. the highest dose rate on contact with the package, and
  - b. the highest dose rate at 1 meter (3 feet) from the package (to validate Transportation Index if DOT labeled package)

**NOTICE:** If the dose rate exceeds 2000 micro-Rem per hour ( $\mu$ R/hr), 12 inches from the external surface of the package additional exposure controls will be necessary. Isolate the package and notify the RPO.

4. A swipe of the external surface of the package will be performed to determine the presence and level of removable contamination. Swipe samples will be analyzed using the appropriate radiation scaler, capable of obtaining the required Minimum Detectable Activity (MDA) for each type of radiation analyzed.

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- a. Swipe surveys shall be taken of each separate container, except where the containers have been palletized or otherwise bound together into a single package. Such shipments will be treated as a single container unless there is obvious damage, in which case each damaged container shall be wipe tested separately.
- b. Swipe surveys shall be taken by wiping the material over approximately 100 cm<sup>2</sup> of the surface being surveyed (4 inches by 4 inches). Use moderate pressure; being careful not to tear the swipe. If the surface is less than 100 cm<sup>2</sup> record the approximate size of the object.
- 5. Wipe sample results will be recorded and any result greater than the DLA Distribution Radioactive Contamination limit will be cause to suspend the receipt.
  - a. Contamination above the established limits will be re-analyzed to verify the results and if still questionable after second reading, the package will be re-swiped.
  - b. If contamination is verified, the item will be segregated and access will be controlled to limit potential spread of contamination.
  - c.The local Radiation Protection Officer will be immediately notified and a Radiological Occurrence Report (ROR) will be initiated (refer to Dist RHIP 05). A Supply Discrepancy Report (SDR) will also be initiated and final disposition instruction requested from the Item Manager.
  - d. The item will be double bagged in plastic bags, sealed with tape and labeled as "Leaking Radioactive Item, Do Not Open".
  - e. If excess radioactive material consolidation is performed by the host Radiation Safety Office, coordination should be made for timely transfer. A copy of the survey results should be maintained with the item.
- 6. Record the results on the RMMF in Blocks 20-21 for dry wipes and Block 24 for wet wipes.

#### Identification of Radioactive Material

- 1. Receiving personnel shall complete the RMMF. All radioactive items and devices received by depot must be properly identified. Initial identification should be completed by DSS through the receipt process. Identification is required regardless of whether the items are assembled as a component of a stock numbered item or as a separate component, spare parts, or other item.
- 2. Receiving personnel shall perform the kind-count-condition inspections on RAM in accordance with the standard DLA Distribution receipt process (i.e., bare metal part inspection and verification of at least one unit of issue per shipment). Verify, to the extent practical, that the radioactive source is intact in its holder, module, or component and is not contaminated. Verify the condition code classification is accurate for all repairables, field unit returns, unserviceable, or suspended stock.
  - a. For new procurement, not identified as NRC Licensed (HCC A2 or A3) at least one item must be inspected to the bare item for verification of KCC. Any discrepancy will require 100% inspection to the bare item of all items received.

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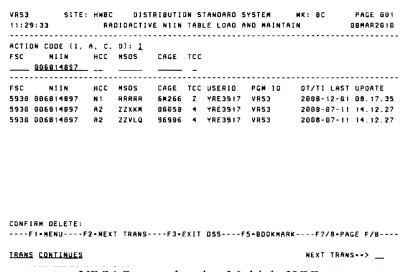
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- b. For new procurement identified as NRC Licensed (HCC A1) all shipping container must be opened to validate quantity. Once the quantity is verified, the shipping container is to be sealed with packing tape and receiving personnel shall sign across the tape with the date and quantity verified. This process will allow for all container quantities to be used for all subsequent inventories until the container is opened for issue.
- c. All field and/or maintenance returns, containing a radioactive component, must be inspected at 100% regardless of HCC, unless returned in the original manufacture's sealed packing with no evidence of tampering. NRC Licensed items (HCC A1) that are returned in the original manufacture's multipack will be opened to verify count and sealed as in step b. to allow for future inventory actions to use container count.

Container Quantity Verified
Date
Qty of Unit Issue Packs
Printed Name
Signature

Minimum Information Required on Certification

3. Receiving personnel shall check the information on each item suspected of containing RAM not listed in the DSS VRS4 screen. This screen should contain the appropriate HCC, Type Cargo Code (TCC), CAGE Code, and MSDS Serial Number for all items previously identified as containing a radioactive component. Note: Items that have variations of the same NIIN where one might contain a radioactive component and one might not, would both be listed. Those items verified as not containing a radioactive component will be receipted and stowed as general cargo.



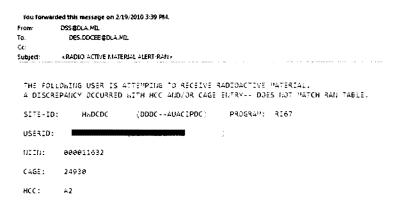
VRS4 Screen showing Multiple HCCs

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4. Items of supply that have been verified as containing a radioactive component, but which are not listed in the VRS4 table should be processed as hazardous with as much information available so that DSS will sent a receipt alert to the RSO.



#### DSS Alert for Unknown NIIN

- a. Once the above Alert is received by the RSO, the NIIN will be researched and when radioactivity is verified it will be added to the VRS4 Table.
- b. If the NIIN is not identified with a valid record in HMIRS, a HMIS Inquiry Form (Appendix B) will be completed by the depot and forwarded to the RSO for submission to HMIRS.
- 5. The RHM shall record the appropriate identifying information on the Radioactive Material Movement Form. Failure to provide all the information listed is not a basis for rejection of the item or shipment. If the HMIS listing is incorrect, record the discrepancy for evaluation by the RPO.
- 6. When none of the required information is provided at receipt, or is otherwise unavailable, then a Supply Discrepancy Report (SDR) will be completed and forwarded to generator. A copy of the ROD shall be provided to the RPO.
- B. Custody Transfer of Radioactive Material
  - The completed RMMF shall accompany the package until it has been transferred to a Radioactive Material Storage Area approved by the RPO. Custody and control of the radioactive material must be maintained until properly stowed in the designated RAM area.
  - 2. Packages that cannot be immediately transferred (within 1 hour) to the RAM storage area, or have been received after normal working hours, shall be stored in a RAM holding area approved by the RPO. Packages should not remain in the holding area for more than 3 hours after the beginning of the next shift. RAM must be kept secured or under

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- constant observation at all times to minimize the potential for exposure to personnel that are unfamiliar with the principles of radiation protection.
- 3. Packages of Radioactive Material that must be transported from the Receiving Area to the designated Storage Area must be labeled with the DLA Form 230 or equivalent, if the route to the storage area exits a DLA Controlled warehouse at any time (i.e., must traverse across open parking lots or roads from one warehouse to another). If the receipt process is completed in the designated storage area, the labeling will be accomplished based on the depot's designated procedure (i.e., labeling of each container or labeling of location placards).

### APPENDIX A DLA Distribution Radioactive Material Movement Form

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Radioactive Material Movement Form							
I. Type: Shipment: Recen	pt: [	2. TCN:					
3. TO:	· · · · · · · · · · · · · · · · · · ·	4. FROM:					
l		<u>'</u>					
		l					
Commodity Description							
5. NSN:		6. NAME:					
7 Quantity: 8. Condition	Code:	11. Physical Form: Solid T Laguid T Gas T					
9. Radionuclide(s):		12. Transportation	a Ferm: Special   Normal				
10. Activity: Per Item	SI Unit	Tetal	13. Transport Index				
Package Radiation Rate	Dry W	ipe	LSC Wipe				
14. Survey Meter Type/Serial No.	18. Lab Motor Type/Ser	rial Number	22. LSC Meter Type/Serial Number:				
15. Date Calibration Due:	19. Date Calibration De	te: 23. Date Calibration Due:					
16. milliRem/hr: 17. micruSv/hr: 29. Alpha dpm/100 cm1		21. Bon dpm/100 cm2	21. Ben dpm/100 cm2 24. LSC dpm/100 cm2				
25	Shipment Info	rmation					
Radioactive Material, Excepted Package,	Articles Manufactured from	natural transium, depleted t	uranisum or natural thorium, UN2909				
Radioactive Material, Excepted Package, I Radioactive Material, Excepted Package, I							
Radioactive Material, Excepted Peckage, 1 Radioactive Material, Type A Package, U		·11					
Radioactive Material, Type A Package, Special Form, UN3332							
26. Label Required: Excepted   White I   Yellow II   Yellow III							
Remarks and Special Precautions							
29. Fer additional information on this item(s) contact the Radintion Protection Officer at:							
30. Certified By: Date							
31. Surveyed By: (When certified and surveyed	by the same person, sign he	re only)	Date				

DDC Form 4155.04

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## APPENDIX B HMIS Technical Support Inquiry Form

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### **Technical Support Inquiry Form**

EXPEDITE	4HR	8HR	24HR	ROUTINE	
MANDATORY DATA		Control No. (HIMS USE ONL Y)			
Date		OPTIONAL DATA			
Requestor		Specification	n		
Phone		Lot No.			
Fax		Co. Name/0	Contractor.		
Activity		Co. Addres	5.		
MSN		Co. Phone	No		
Contrat No.		***************************************			
*Cage	_	Comments			
Part No./Trade Name					
Question	······································				
L HCC L Weds					
Transportation					
		***************************************			
Response					
Date Completed			Action Office	er's Initials	

\*W Cage not available, provide Company Name & Address HMIS Tech Support Helpline: DSN 695-4371; Comm. (804) 279-4371 Fax: DSN 695-4149; Comm. Fax: (804) 279-4149

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### APPENDIX C Illustrated RAM Receiving Process

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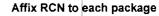
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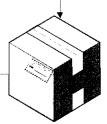


Off Load and Tally
(Check piece count from manifest,
note obvious damage)
Identify discrepancies on DD361 and manifest



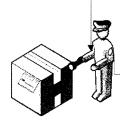


RAM Package isolated to RAM Receiving Area



Package identified as containing radioactive material

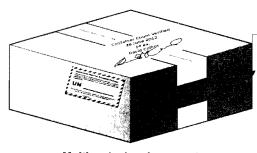
(If package shows obvious damage with a potential for internal component damage, immediately contact RPO)



Radiation Survey Completed (Radiation Dose Level and Wipe Test) NLT 3 hrs for DOT Labeled or COB Next Business Day for Excepted Pkg



Perform Count, Kind and Condition
Inspection. NRC Licensed Items (HCC A1)
must be 100% inventoried at receipt to the
unit of issue pack. All discrepancies must
be noted with a Supply Discrepancy
Report. Multipacks may be resealed and
certified after inspection for subsequent
inventory counting.



Multipack showing count verification seal over tape. Seal must be in place prior to stow.



Survey Documented on Radioactive Material Movement Form and Maintained for 3 years

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