

SEP 19 1980

MEMORANDUM FOR: A. Bert Davis, Chief, Fuel Facility and Materials Safety Branch, Region III

FROM: George H. Smith, Chief, Fuel Facility and Materials Safety Branch, Region I

SUBJECT: MALLINCKRODT, INC. SHIPMENT OF 151 MILLICURIES OF IODINE-131 ARRIVED WITHOUT DOT LABELS

A limited, special inspection was conducted by Region I at the Walter Reed Army Medical Center, License No. 08-01738-02, Forest Glen Annex, on August 26, 1980. The inspection was in response to a telephone notification by the licensee that a package containing 151 millicuries of iodine-131 shipped by Mallinckrodt, Inc., St. Louis, Missouri, and received at the Walter Reed Forest Glen Annex on July 28, 1980, arrived with no DOT labels.

The Region I inspection report and a copy of the Walter Reed Radiation Safety Memorandum for Record are forwarded for whatever action you deem appropriate.

George H. Smith, Chief  
Fuel Facility and Materials  
Safety Branch

Enclosures:  
As Stated

2/48

OFFICE ▶	FFMS	FFMS	FFMS		
SURNAME ▶	<i>Neill/sl</i>	<i>Kinneman</i>	<i>Smith</i>		
DATE ▶	9/15/80	9/19/80	9/19/80		

SEP 19 1980

Docket No. 30-1317

Department of the Army  
Walter Reed Army Medical Center  
ATTN: Major General George I. Baker  
Commanding Officer  
Washington, D. C. 20012

Gentlemen:

Subject: Inspection 30-1317/80-02

This refers to the special inspection conducted by Mr. B. O'Neill and Ms. J. Johansen of this office on August 26, 1980 at the Forest Glen Annex, Silver Springs, Maryland of activities authorized by NRC License No. 08-01738-02 and to the discussions of our findings held by Mr. B. O'Neill and Ms. J. Johansen with Captain Dennis Stevenson and Mr. James Stafford of your staff at the conclusion of the inspection.

Areas examined during this inspection are described in the Office of Inspection and Enforcement Inspection Report which is enclosed with this letter. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector.

Within the scope of this inspection, no items of noncompliance were observed.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you (or your contractor) believe to be proprietary, it is necessary that you make a written application within 20 days to this office to withhold such information from public disclosure. Any such application must be accompanied by an affidavit executed by the owner of the information, which identifies the document or part sought to be withheld, and which contains a statement of reasons which addresses with specificity the items which will be considered by the Commission as listed in subparagraph (b) (4) of Section 2.790. The information sought to be withheld shall be incorporated as far as possible into a separate part of the affidavit. If we do not hear from you in this regard within the specified period, the report will be placed in the Public Document Room.

No reply to this letter is required; however, should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

OFFICE ▶	FFMS	FFMS	FFMS	John D. Kinneman, Chief
SURNAME ▶	Johansen/skl	O'Neill	Kinneman	Materials Radiological Protection Section
DATE ▶	9/15/80	9/19/80	9/19/80	

Enclosure:  
Office of Inspection and Enforcement Inspection  
Report Number 30-1317/80-02

cc - *Officer In Charge* ✓

bcc w/encl:  
IE Mail & Files (For Appropriate Distribution) ✓  
Central Files  
Public Document Room (PDR)  
Nuclear Safety Information Center (NSIC)  
REG:I Reading Room  
District of Columbia  
*License Fee Mgt. Branch*

OFFICE ▶						
SURNAME ▶						
DATE ▶						

U.S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT

Region I

Report No. 30-1317/80-02

Docket No. 30-1317

License No. 08-01738-02 Priority III Category G1

Licensee: Department of the Army  
Walter Reed Army Medical Center  
Washington, D. C. 20012

Facility Name: Walter Reed Army Medical Center

Inspection at: Forest Glen Annex, Silver Springs, Maryland

Inspection conducted: August 26, 1980

Inspectors: B. D. O'Neil  
B. D. O'Neil, Radiation Specialist

8/19/80  
date signed

Jenny M. Johansen  
Jenny M. Johansen, Radiation Specialist

9/19/80  
date signed

Approved by: John D. Kinneman  
John D. Kinneman, Chief, Materials Radio-  
logical Protection Section, FF&MS Branch

date signed  
9/19/80  
date signed

Inspection Summary:

Inspection on August 26, 1980 (Report 30-1317/80-02)

Areas Inspected: Special, announced, inspection limited to review of events surrounding the receipt of a package containing 151 mCi (107 mCi as of August 1, 1980) of I-131 shipped from Mallinckrodt/Nuclear Inc., which arrived with no DOT labels. The inspection involved five inspector-hours onsite by two NRC inspectors.

Results: No items of noncompliance or deviations with respect to License Number 08-01738-02 were identified.

## DETAILS

### 1. Persons Contacted

- \*Captain Dennis Stevenson, RSO
- \*Mr. James Stafford, Health Physicist
- SP6 James Lewis, Jr. Health Physics Technician

### 2. Description of Circumstances and Licensee Actions

On July 28, 1980, Region I received a telephone call from the Radiation Safety Officer, Walter Reed Army Medical Center, regarding the receipt of a package of radioactive material containing 151 mCi of I-131 which was not labelled as required by DOT regulations. A special, limited inspection was conducted on August 26, 1980.

Licensee representatives stated that the package was received on Monday, July 28, 1980 at 0402 hours at the Field Guard Station, Walter Reed Army Medical Center (WRAMC) Forest Glen Annex. In accordance with WRAMC procedures the package was taken by the security guard to Building 149A and placed in the refrigerator.

During regular duty hours a health physics technician removed the package from the refrigerator and transported it to Building 188 to process the package before delivery to the Nuclear Medicine Service WRAMC. (see attached WRAMC memorandum, August 1, 1980, which is included with this report as Enclosure 1).

After measuring radiation levels and taking standard smears for contamination, the package was opened and the packing list indicated that the radioactive material was 107 mCi of I-131 precalibrated for August 1, 1980. The health physics technician noted that the package had no DOT Yellow III shipping labels on the outside of the package.

The health physics technician held the package at Building 188 and delivered other packages on hand to the Nuclear Medicine Service WRAMC. Upon his return he informed the Radiation Safety Officer (RSO) of the problem. The Radiation Safety Officer (RSO) notified Mallinckrodt and NRC Region I of the situation.

Licensee representatives stated that when the health physics technician informed the RSO of the receipt of the unlabelled package of I-131, the RSO instructed him to apply DOT Yellow III labels to the package, and have it delivered to the Nuclear Medicine Services WRAMC. This was done and the empty boxes were later returned to building 188.

The RSO called Mallinckrodt at 12:47 p.m. and informed the Assistant Plant Manager of the receipt of the unlabelled package. Later in the day, the health physics technician was called by Mr. Rich Kamler, Order Department Supervisor, Mallinckrodt, Inc. Mr. Kamler was given information regarding the receipt of the unlabelled package.

Licensee representatives stated that since these two telephone calls no further communications had been received from Mallinckrodt, Inc. regarding this package.

3. Review of Licensee Records of Radioactive Materials

Records maintained by the licensee and reviewed by inspectors indicated that 151 mCi I-131 was logged in as having been received on July 28, 1980. The records indicated that the licensee measured dose rates at the surface and 3 feet from the package were 40 mR/hr and 3 mR/hr, respectively. (see attached WRAMC memorandum August 1, 1980 items 2., 3.). A copy of the packing list from WRAMC records is attached as Enclosure 2.

4. Inspector Verification

The inspectors examined the package which licensee representatives stated was the one received on July 28, 1980. The package was a cardboard box 12" x 12" x 24" in which 2 smaller boxes with packing material were contained. The smaller boxes had no DOT labels affixed. The outside address label stated Customer No. C7310 and Customer P.O. #DADA 1580-M-9882, Order No. J725419, and Radioactive Material N.O.S. These numbers agreed with the original packing list seen by the inspectors. The Yellow III DOT labels that the licensee stated they had attached were in place.

Labels on the lead pigs which were shown to the inspectors and which licensee representatives stated were the ones received on August 26, 1980, indicated activities of 100 mCi and 7 mCi of I-131 calibrated for August 1, 1980, respectively.

5. Exit Interview

The inspectors met with the licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on August 26, 1980. The inspectors summarized the purpose and scope of the inspection and the findings. The inspectors stated that their review indicated that the licensee had followed proper procedures in receipt and transfer of the package within WRAMC.

No items of noncompliance were observed regarding NRC license number 08-01738-02.

HSWP-QHP

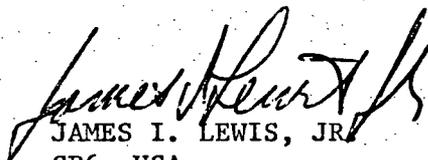
1 August 1980

## MEMORANDUM FOR RECORD

SUBJECT: Receipt of Unlabeled Mallinckrodt Package

1. On 28 Jul 80 I removed an unlabeled Mallinckrodt package from the refrigerator in Bldg 149-A. It was the only package in the refrigerator at the time because I had come in on 27 Jul in response to a phone call from the FGS MP's regarding the temperature in the refrigerator, and removed all of the packages from the refrigerator. I transported the package to Bldg 188, Rm 9, to process the package prior to delivery to the Nuclear Medicine Service, WRAMC.
2. The Bill of Lading (Incl 1) for the shipment indicated that the package contained 107 mCi of I-131. The shipment consisted of two small boxes packed within a larger box. One of the small boxes had a lead pig containing 7 mCi of I-131 and the other box had a lead pig containing 100 mCi of I-131. According to the labels on the pigs, the millicurie amounts were calibrated for 1 Aug 80. Neither the inner or outer package was labelled.
3. I measured the dose rate at the surface of the package and at three feet from the surface of the package using a Victoreen 440, SN 2263, with a calibration due date of 8 Aug 80. The highest dose rate at the surface of the package was 40 mr/hr and the highest dose rate at 3 feet from the surface of the package was 3 mr/hr. I left the package in Rm 9, Bldg 188, and delivered all of the other packages to Nuclear Medicine Service, WRAMC.
4. Upon my return to Bldg 188, I informed CPT Stevenson of the problem. Then, upon instructions from CPT Stevenson, I applied yellow-III labels to the package and had it delivered. The boxes were returned to Bldg 188.
5. CPT Stevenson informed me that he had contacted Mallinckrodt and the NRC to inform them of the situation. Later in the day I was called by Mr. Rich Kamler, Order Department Supervisor, Mallinckrodt, Inc. Mr. Kamler wanted the specifics concerning the shipment and was so informed. I also contacted the MP's and was informed that the package was received at 0402 hrs, 28 Jul 80, by Mr. Roberts.

1 Incl  
as

  
JAMES I. LEWIS, JR.  
SP6, USA  
RMC Branch, HPO, WRAMC

Cus. No. **C-7310** Order No. **72541** Date Taken **0404, 580-M-9802** Customer P.O. **0404, 580-M-9802** Date to Ship **7-2**  
 FRT TAX ST **W** or D/JSB **F** Zip Code **21154** Com. St. Int. **LK**  
**Walter Reed Army Med Ctr**  
 ATTN: **PATHOLOGY LAB** **NUCLEAR MEDICINE DEPT** *Reserch physics office*  
**Bldg 188 - Forest Glen Section**  
**Attn: H 274E**  
**Silver Spring Maryland**

**WAS**

SPECIAL INSTRUCTIONS  INV   
**Kenneth A. Ayars**  
**LOG TECH. 5XRD**  
**NUCLEAR MEDICINE SVC.**  
**WRAMC**  
**RECEIVED 28 JUL 1980**

CREDIT REFERRAL  
 DOLLAR AMT.  
 NAME  
 TIME

QTY.	ITEM	LOT	INDEX	STRENGTH	DESCRIPTION	CALIB.	PRICE	IVC
1	450	1X7-0085	A30	9.9	MLI 131 NAI Tos (7)	7-28		
	025		A00	200	TK Fission Generator (100 Caps Per Bottle)			
	090		B00					
	093		B00					
	094		B00					
	110				Technescan Pyp Kit			
	115				131 Rose Bengal			
	160				131 Hippuran			
	180				SE 75 Selenomethionine			
	300		P00	15	Ga67 Gallium Citrate			
	300		Z00	25	131 NAI Caps			
	300		050	50	131 NAI Caps			
	300		100	100	131 NAI Caps			
	350				125 IHSA			
	37		250	250	CR51 Sodium Chromate			
	381				Fe 59 Ferrous Citrate			
1	450	1X105-0087	MA0	140.1	131 NAI Tos (Labeled as (100))	7-28		Bl
	452				131 NAI Cap (Labeled as (100))			
	461		F00	5	P32 Sodium Phosphate			
	470				P32 Chromic Phosphate			
	260		3		Vials Fe 59 Res-O-Mat Kit (12 Test)			
	411		3		125 Res-O-Mat ETR Kit (50 Test)			
	502		4		125 Ria-Mat T3 (100 Test)			
	503		3		125 Ria-Mat T3 (250 Test)			
	516		3		125 Ria-Mat T4 (100 Test)			
	517		3		125 Ria-Mat T4 (250 Test)			
	525		A00		125 Spac Digoxin (50 Tests)			
	526		4		125 Spac Digoxin (100 Tests)			
	530		A00		125 Spac T4 RIA (50 Test)			
	531		3		125 Spac T4 RIA (100 Test)			
	535		A00		125 Spac T3 RIA (50 Test)			
	536		3		125 Spac T3 RIA (100 Test)			
	548		A00		125 Ria-Quant HCG Kit (100 Test)			
	551		AA0		125 Ria-Nate Kit (50 Test)			
	695		A00		125 Ria-Quant Pap Kit (100 Test)			

PACKING LIST FOR AEC RECORD