

# Memorial

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## Hospital of South Bend

March 27, 2002

Gary Shear  
United States Nuclear Regulatory Commission  
Region III, Medical Licensing Section  
801 Warrenville Road  
Lisle, IL 60532

RE: Self Identified Violation - NRC Event #38797

Dear Mr. Shear:

The enclosed report is for your perusal. If you have any questions, please contact me at 574-284-3112 or our RSO, Nina Johnson at 574-284-7461.

Thank you for your cooperation in this matter.

Sincerely,



Richard Selle, CNMT  
Coordinator  
Nuclear Medicine Department

RS:bjs

615 North Michigan Street  
South Bend, Indiana 46601-9986  
219/234-9041

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APR 2 2002

NRC Event #38797  
March 25, 2002

On the morning of March 25, 2002 at approximately 10:45am Scott Van Heesbeke, RSO for Spectrum Pharmacy informed me that an ammunition can #A-24 received from Memorial Hospital Nuclear Medicine Department was contaminated with  $Tc^{99m}$ . Nina Johnson, MD, Memorial Hospital's RSO was contacted.

I immediately summoned all Nuclear Medicine personnel. All personnel involved (Farah Ranah, Tim Huyser, Carol Forbes, Lori Mott, Barbara Ioinello and Dick Selle) were evaluated for contamination. No personnel contamination was found. The hot lab was surveyed for a radioactive spill. No contamination or radioactive spill was identified. I reviewed the return survey report. Surveys and wipe test were within limits to return to Spectrum Pharmacy.

Carol Forbes, the technologist, who performed the survey on Box #A-24 was interviewed. She demonstrated how she wipe tested and surveyed the box and where she placed the box for the return to Spectrum Pharmacy. The procedure she demonstrated met with lab standards. However, Carol explained the box in question A-24 was not immediately placed on the return cabinet shelf because she was called to care for a patient. Carol stated the box was placed on the return cabinet shelf about 10 minutes later. This is not lab policy and would explain how the droplet of  $Tc^{99m}$  could have contaminated the box after our survey was completed.

#### CONCLUSION

Ammunition Box A-24 was contaminated with a calculated amount of .10uCi of  $Tc^{99m}$ . This contamination appears to have been an isolated droplet of  $Tc^{99m}$  from either a needle cap or a spent syringe which contaminated the ammunition box A-24 after Memorial's return survey was completed. This self identified violation was communicated to Darrel Wiedeman, USNRC, Region III on March 26, 2002 at approximately 10:15am.



Richard Selle, CNMT  
Coordinator  
Nuclear Medicine Department

CORRECTIVE ACTION:

NRC Event #38797

Date: March 27, 2002

A department meeting was held March 27, 2002 to discuss the contamination incident and to review the policy for returning boxes.

1. Boxes that have been surveyed, wipe tested and cleared to return to the manufacturer will be immediately put on the lower cabinet shelf for returned boxes.
2. Boxes on the lower cabinet shelf will be pushed back so front end of box is not hanging over the edge of the shelf.
3. Handling of radioactive syringes: Changing needles, making point sources or braking down syringes will take place behind the lead shield and in the fume hood. Always wear gloves and practice good radiation safety precautions when performing these functions.

**Return to Manufacturer Report :**  
**Date: 03-25-2002 11:03**

**NRC # 03-0173**  
**Report ID: A**

**Ship To: SPECTRUM PHARMACY**

**Ship From: MEMORIAL HOSPITAL**  
**NUCLEAR MEDICINE DEPARTMENT**  
**SOUTH BEND, INDIANA**

Case ID: A 24

Lot No	Radionuclide	Chemical Form	Physical Form	Cal Time	Vol./Qty	Returned Activity
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**Total Returned Activity:**

**Total Vol./Qty:**

**Total Doses: 0**

Case ID	Date/Time	Survey Bkg.	Reading	Instr. #	Wipe Bkg.	Reading	Ins
A 24	03-25-2002 09:33	0.03 mR/hr	0.03 mR/hr 0.30 uSv/hr	3	300 CPM	20 CPM 24 DPM 0.39 Bq	

**Instruments**

1 -- Model: GM COUNT	Mfg: VICTOR	Serial No: 1083	Next Cal.: 03-07-2001	Trigger: 0.50 mR/hr	Eff: n/a	
2 -- Model: MODEL 2200	Mfg: LUDLUM	Serial No: 76167	Next Cal.: 05-22-2001	Trigger: 2000.00 DPM	Eff: 93.33%	Area: 100.00sq/
3 -- Model: GM COUNT	Mfg: VICTOR	Serial No: 1083	Next Cal.: 03-28-2002	Trigger: 0.50 mR/hr	Eff: n/a	
4 -- Model: MODEL 2200	Mfg: LUDLUM	Serial No: 76167	Next Cal.: 05-10-2002	Trigger: 2000.00 DPM	Eff: 85.00%	Area: 100.00sq/

Comments:

Tech. Signature: C. W. F.

**Pharmacy Use Only**

Received By \_\_\_\_\_  
Survey Instrument \_\_\_\_\_  
Survey Background \_\_\_\_\_  
Survey Package \_\_\_\_\_

Transfer record No. \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Wipe Instrument \_\_\_\_\_  
Wipe Background \_\_\_\_\_  
Wipe Reading \_\_\_\_\_

**Footnotes:**

This package conforms to the conditions and limitations specified in 49CFR 173.421 for radioactive material excepted package-limited quantity of material, UN2910.