NUCLEAR MATERIAL EVENTS DATABASE/NMED/CC01/INEEL/US
Sent by: Dante C Huntsman/DHUN/CC01/INEEL/US

07/13/2010 07:53 AM

To Dante C Huntsman/DHUN/CC01/INEEL/US@INEL
cc
bcc
Subject Fw: NMED Event No. 100009 (Indianapolis)

----- Forwarded by Dante C Huntsman/DHUN/CC01/INEEL/US on 07/13/2010 07:53 AM -----

"Wiedeman, Darrel" <Darrel.Wiedeman@nrc.gov>
07/13/2010 06:09 AM

To "NMED@inel.gov" <NMED@inel.gov>
cc "Huston, Thomas E." <Thomas.Huston2@va.gov>
Subject FW: NMED Event No. 100009 (Indianapolis)

Dante, attached is the reactive inspection report from VA's National Health Physics Program regarding NMED No. 100009 (VA Indianapolis). The report contains the description of the event, dosage prescribed and administered and the permittee's corrective action. We do not plan to take any further action regarding this event. Please close out NMED No. 100009.

Darrel Wiedeman

From: Huston, Thomas E. [mailto:Thomas.Huston2@va.gov]
Sent: Monday, July 12, 2010 4:56 PM
To: Wiedeman, Darrel
Cc: Frazier, Cassandra; Williams, Gary E
Subject: NMED Event No. 10009 (Indianapolis)

Darrel,

In response to your telephone inquiry today for information to close out NMED Item No. 10009, for Richard L. Roudebush VA Medical Center, Indianapolis, Indiana, I am attaching a copy of the NHPP reactive inspection report associated with this medical event report. No inspection record was prepared in this case since there was a detailed inspection narrative. No regulatory violations were identified by the inspection for the medical event.

In response to this event, the vendor came onsite and reviewed the event circumstances with the permittee. Based on a recommendation from that review, as a corrective action the permittee revised its standard operating procedures on March 23, 2010, to include a step to flush the catheter with plain saline solution to remove any residual contrast media before the microspheres are infused.

Please let me know if additional information is needed to close-out this NMED item.

Regards,
Tom

Thomas E. Huston, PhD, CHP
VHA National Health Physics Program
Phone: 501-257-1578

NMED Item Number: 100009

Narrative: **Last Updated:** 04/13/2010

The Department of Veterans Affairs (VA) reported that a patient only received 74.4% of the prescribed 2.34 GBq (63.2 mCi) of Y-90 during a Nordion Theraspher treatment on 12/30/2009. The incident was discovered on the same day as the treatment when the waste container from the procedure was assayed. The waste material indicated a higher than expected residual activity equal to about 25% of the activity that was in the source vial prior to treatment. Examination of the waste material revealed that nearly all of the residual activity was distributed somewhat uniformly along the length of the 100 cm microcatheter tubing. Therefore, the patient received approximately 1.74 GBq (47.03 mCi) and 0.58 GBq (15.67 mCi) was identified in the waste. VA estimated that the absorbed dose to the target organ was approximately 10,900 cGy (rad) and was within the therapeutic target range of 10,000 to 15,000 cGy (rad). Initial visual examination showed no apparent kinks or obstructions in the catheter or tubing that would have cause a blockage of infused microspheres. After the Y-90 activity decayed in the source vial and delivery tubing, a more accurate assessment was made of where in the apparatus the held-up microspheres remained. An investigation was conducted in collaboration with the material's vendor. Although the location of the residual microspheres was determined, the reason that they were held-up in this location could not be determined. Corrective actions included additional careful monitoring of the flow of microspheres from the source vial through the delivery tubing. If a higher than expected exposure rate is detected at the exit point of the vial, the vial will be removed from the shield, shaken vigorously, and flushed one or two additional times into the patient's liver.

Event Date:	Discovery Date:	Report Date:
12/30/2009	12/30/2009	12/31/2009

Licensee/Reporting Party Information:

Regulated By:	NRC	Reciprocity:	NONE
License Number:	03-23853-01VA	Name:	DEPARTMENT OF VETERANS AFFAIRS
Docket Number:	03034325	City:	NORTH LITTLE ROCK
Program Code:	03613	State:	AR
Responsible NRC Region:	3		

Site of Event:

Site Name: INDIANAPOLIS State: IN

Excerpt from NMED: 2010 04 23 Indianapolis Insp Rpt.pdf