

5 September 2013

05-SEP-2013 07:47 From:

U. S. Nuclear Regulatory Commission Region III Materials Licensing Section 2443 Warrensville Road, Suite 210 Lisle, Illinois 60532-4352

Re: Docket number 030-13959

License number 24-18625-01 Control number 581119

Authorized users for Y-90 as TheraSpheres.

As a result of the telephone conversation with Colleen Carol Casey pointing out that Jay Robinow, M. D., and John Sheldon, M. D. were already approved for TheraSpheres, we wish to withdraw Item 2 of our letter dated 17 June 2013, asking that the above doctors and David Shaeffer, M. D. be licensed for Y-90 TheraSpheres at this time.

We reserve the right to request the licensing of Dr. Shaeffer at some future time.

Should you need any further information, please feel free to contact us at (816) 276-4449.

Sincerely,

Stephen T. Slack, Ph. D. Radiation Safety Officer

To:81630515107831283

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5 September 2013

U. S. Nuclear Regulatory Commission Region III Materials Licensing Section 2443 Warrensville Road, Suite 210 Lisle, Illinois 60532-4352

Re:

Docket number 030-13959 License number 24-18625-01 Control number 581119

Additional information concerning decommissioning of the area that has been used for storage of brachytherapy sources by Radiation Oncology.

In response to the request for additional information by Colleen Carol Casey, we have performed a survey to assess possible beta contamination in the area. It is attached.

The Capintec Captus 3000 well counter was calibrated 11 February 2013.

The Ludlum Model 3 GM counter with Model CE probe was calibrated 17 January 2013.

Should you need any further information, please feel free to contact us at (816) 276-4449.

Sincerely,

Stephen T. Slack, Ph. D.

ephen T. Slack

Radiation Safety Officer

attachments

Radiation Therapy Storage Area

This is a continuation of the decommissioning survey for the former Radiation Oncology hot lab adjacent to the Nuclear Medicine waste storage area on Level B of Research Medical Center. The area was used between July 2006 and August 2012 for the storage and preparation of:

Cs-137 sealed sources, stored until disposal 12/28/11

Sr-90 eye applicator stored in its carrying case until disposal 11/27/07

(not included in this survey)

I-125 and Pd-103 sealed sources, prepared for implants, stored and prepared

for return of unused sources to the vendor.

The room was marked with a grid of approximately two foot by two foot squares for the floor, tabletop and two shelves. On 5 September 2013 a survey with a GM survey meter with pancake probe and wipe tests were taken of the areas where the Sr-90 eye applicator was most likely to have been stored. The same grid as the previous survey was used.

Equipment

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A thin window Geiger tube and Scaler Timer (The Nucleus Model 550, serial number 9109-1101) was used to count the wipes. It was calibrated and the efficiency for high energy betas determined 17 August 2013.

The GM counter was a Ludium Model 3, (serial number 180461) with a Model CE probe (serial number PR 186114). It was calibrated 17 January 2013 and is due for calibration 17 January 2014.

Statistical Considerations

Minimum Detectable Activity for each window is less than 220 dpm/100 cm².

MDA = [2.71 + 4.65 * SQRT(B t)] / (t * E)

Where B is the measured background for the window t is the counting time (here 1 minute for all samples), and E is the counting efficiency

The decision limit for counts, as defined in NCRP Report No. 58, of

L = BKG + 2.32 * SQRT(BKG)

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applied to the gross counts per minute, was use to determine any difference from background. In the results section, LDL indicates that the count was less than or equal to the decision limit.

Summary of results

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No detectable activity was found with the survey meter. All wipe test samples were below the decision limit for counts.

Stephen T. Slack, Ph. D., Radiation Safety Officer

5 September 2013

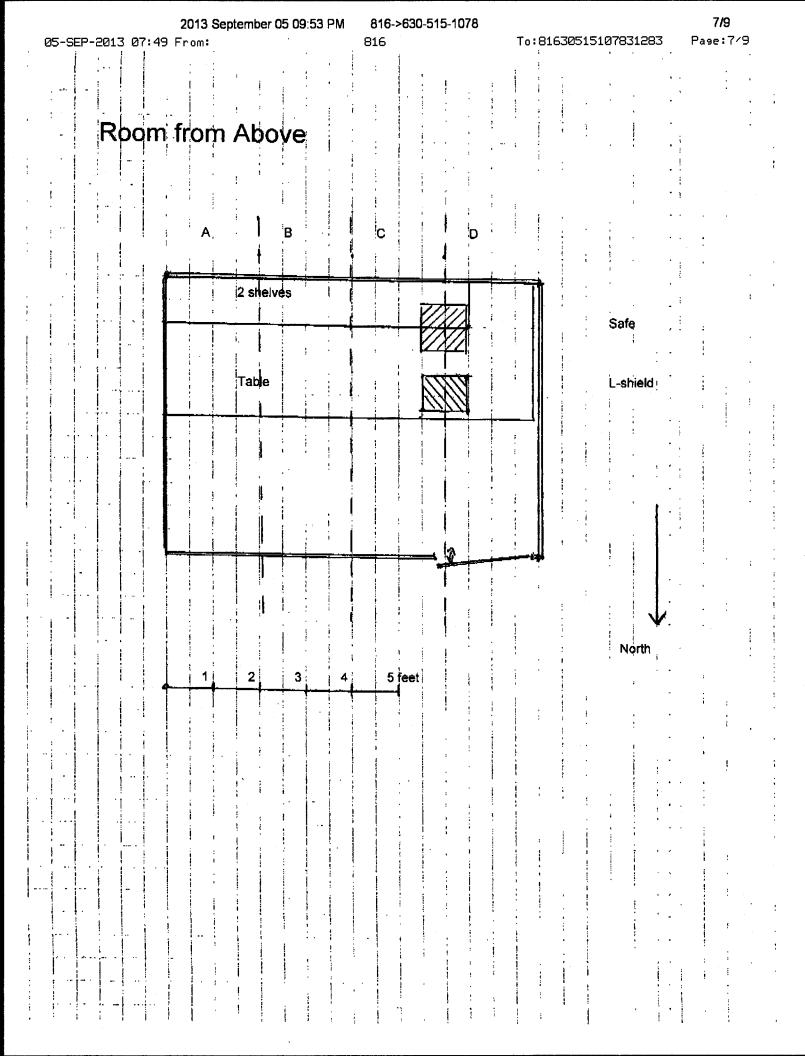
Counting Results

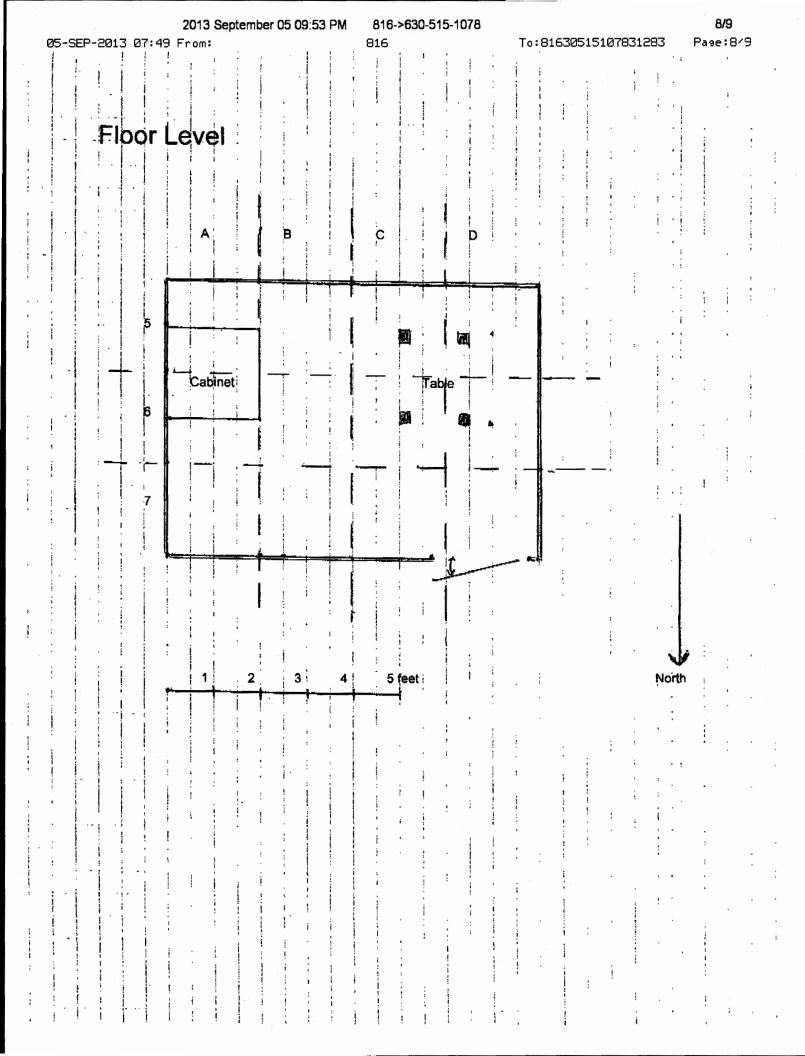
Survey of 9/5/13

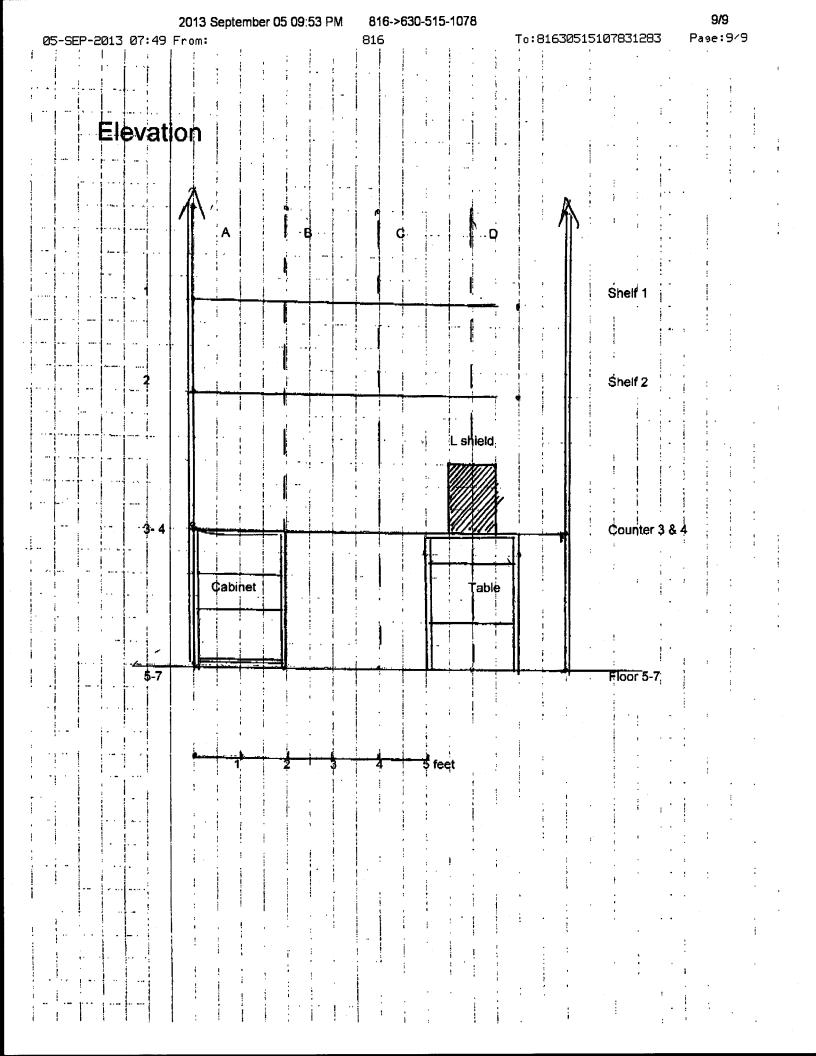
Sample	G M Survey		Wipe Test	
				net dpm per 100 cm²
Efficiency	0.4		0.2	•
MDA			186 dpm	
Decision Limit			72 cpm	
	gross	net		
	cpm	dpm	cpm	dpm
Background	300		55	ref
A 2	200	nda	55	LDL
A 3	300	nda	55	LDL
A 4	300	nda	61	LDL
B 2	300	nda	52	LDL
B 3	200	nda	47	LDL
B 4	200	nda	56	LDL
C 2	300	nda	62	LDL
C 3	300	nda	39	LDL
C 4	200	nda	41	LDL
D.0				
D 2	300	nda	43	LDL
D 3	300	nda	52	LDL,
D 4	300	nda	56	LDL

nda = no detectable activity

LDL = Less than decision limit







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Research Medical Center

2316 East Meyer Boulevard Kansas City, MO 64132 Telephone # 816-276-4449 Fax # 816-276-3478

To Colleen Carol Casey	From Stephen T. Slack, Ph. D., RSO
Company USNRC	Date
Fax Number (630) 515-1078	Total number of pages including cover sheet 9
Phone Number (630) 829-9841	
RE	

Notes/Comments

Answers / replies / additional data Docket # 030-13959 LICONSC # 24 48625-01 Control # 581119