	APPROVED BY OMB: NO 3150-0028	EXPIRES: 06/30/2007
INRC FORM 314 U.S. NUCLEAR REGULATORY COMMISSION (6-2004)	Estimated burden per response to comply with	this mandatory collection request: 30 minutes.
70.38(j)(1); and 72.54(j)(1) T -3	This submittal is used by NRC as part of the released for unrestricted use. Send comments	basis for its determination that the facility is regarding burden estimate to the Records and
CERTIFICATE OF DISPOSITION OF MATERIALS	FOIA/Privacy Services Branch (T-5 F52), U.S. No 20555-0001, or by internet e-mail to infocollect	uclear Regulatory Commission, Washington, DC ts@nrc.gov, and to the Desk Officer, Office of
	Information and Regulatory Affairs, NEOB-102 Budget, Washington, DC 20503. If a means use	202, (3150-0028), Office of Management and ad to impose an information collection does not
	display a currently valid OMB control number, person is not required to respond to, the informat	the NRC may not conduct or sponsor, and a ion collection.
LICENSEE NAME AND ADDRESS	LICENSE NUMBER	DOCKET NUMBER
St. Luke's Hospital	47-23517-01	030-22300
P.O. Box 1190 Rivefield, West Virginia 24701	LICENSE EXPIRATION DATE	
	01/31/2011	
A. LICENSE STATUS (Check the second seco	e appropriate box) e terminate it.	
B. DISPOSAL OF RADIOACT		
(Check the appropriate boxes and complete as necessary. If additional space is n The licensee, or any individual executing this certificate on behalf of the license	eeded, provide attachments)	
1. No radioactive materials have ever been procured or possessed by	the licensee under this license.	
 All activities authorized by this license have ceased, and all radioac under this license number cited above have been disposed of in the 	tive materials procured and/or po	ossessed by the licensee
 ✓ a. Transfer of radioactive materials to the licensee listed below: Sealed sources (calibration & reference) were transferred to Princeton Community 	Hospital USNRC License #47-16307-01	Docket # 030-10772
 b. Disposal of radioactive materials: 		
1 Directly by the licensee:		
All residual patient associated waste and associated radioactive material	was decayed and disposed by St. Luke's	Hospital.
2. By licensed disposal site:		
3. By waste contractor:		
 ✓ c. All radioactive materials have been removed such that any rema Part 20, Subpart E, and is ALARA. 	ining residual radioactivity is with	in the limits of 10 CFR
C. SURVEYS PERFORMED A	ND REPORTED	
1. A radiation survey was conducted by the licensee. The survey confir	ms:	
\checkmark a. the absence of licensed radioactive materials		
b. that any remaining residual radioactivity is within the limits of 10	CFR 20, Subpart E, and is ALAF	ΧΑ .
2. A copy of the radiation survey results:		
✓ a is attached: or b, is not attached (Provide explanation); or	c. was forwarded to NRC on:	
3 A radiation survey is not required as only sealed sources were ever r	ossessed under this license, and	Date
a. The results of the latest look test are attached; and/or	h No leaking sources have or	ver been identified
	D. NO REAKING SOURCES HAVE EN	
The person to be contacted regarding the information provided on this form:		
Steve Curry Director of Radiology, Princton Community Hos	pital (304) 487-7735	scurry@pchonline.com
Mail all future correspondence regarding this license to: Steve Curry Princeton Community Hospital 12th Street Extention Princeton, West Virginia 24740		
C. CERTIFYING OFF	ICIAL FOREGOING IS TRUE AND CORF	RECT
PRINTED NAME AND TITLE SIGNATURE	L A-+-	DATE
Joetta Dotson, Chief Nursing Officer	N Naban	314101
WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPEC WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY	AND/OR CRIMINAL PENALTIES. N T. 18 U.S.C. SECTION 1001 MAKES IT OF THE UNITED STATES AS TO ANY N	C REGULATIONS REQUIRE THAT A CRIMINAL OFFENSE TO MAKE A MATTER WITHIN ITS JURISDICTION.
NRC FORM 314 (6-2004) MAY 1 A 2007	140	FRINTED ON RECYCLED PAPER
REC'D IN LAT	NMSS/	RGN1 MATERIALS-002

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1333 Southview Drive P.O. Box 1190 Bluefield, West Virginia 24701 Phone (304) 327-2900 / FAX (304) 327-2906

3 May 2007

Licensing Assistant Section Nuclear Materials Safety Branch U.S. Nuclear Regulatory Commission, Region I 475 Allendale Road King of Prussia, PA 19406-1415

030-22300 Re: Closeout Surveys for St. Luke's Hospital USNRC License # 47-23517-01

To Whom It May Concern:

This letter will constitute the final closeout of St. Luke's Hospital's Nuclear Medicine program. On this date Mr. James Nunn of Physics Associates (USNRC License 45-17344-01) conducted a thorough closeout of radioactive use and storage facilities. Please see the attached documentation for details of survey results.

Scan Room and Treadmill Exercise Area

The scan room and treadmill exercise areas were areas of use not storage of radioactive materials. Surveys of the rooms with the below mentioned GM survey meter vielded no radiation exposure greater than background levels (0.01 mR/hr). Also, there were no major spills this area during the tenure of this radioactive materials program.

Hot Lab Area

- a. **Disposition of Materials:** The hot lab area was the primary use area for all radioactive sources in the hospital. This room contained the receipt area, radioapharmaceutical preparation area, storage area, and waste decay boxes. On this day all waste was disposed as "cold" waste. The measurements from the waste bins were indistinguishable from background radiation levels, using the below mentioned GM survey meter. The sealed sources were transferred to Princeton Community Hospital (Legal Owner of St. Luke's Hospital) whose USNRC license number is 47-16307-01 Docket # 030-10772. Please see the attached USNRC form 314, Certificate of Disposition of Materials, for further details. These sources were packaged and transported in accordance with USNRC and DOT regulations.
- b. Method of Surveys: The surveys for fixed and removable contamination were performed in the following manner. The area surveys were conducted with a Bicron Surveyor 2000 GM survey meter with a "pancake" style GM probe with a thin window. The surfaces were scannerd in a slow deliberate manner with the "audio" on and the meter in the fast response mode. No

Page 1 of 2 St. Luke's Hospital USNRC License # 47-23517-01 **Closeout Survey Results**

exposures were noted above background. The wipe surveys for removable contamination were conducted with an absorbent pad soaked with isopropyl alcohol. The wipes were taken by making "S" shaped swipes across an area of 929 cm² (the floor tiles are 12" x 12") applying moderate pressure to the wipe. The wipes were then counted in a NaI(Tl) wipe counter whose calibration, Minimum Detectable Activity, and efficiency were performed on this date. Please see the attached calibration report for the counting instrument. No wipes were found to have removable contamination that was statistically significant.

Assuming these surveys meet the approval of the Commission, and there is agreement between St. Luke's Hospital and the USNRC regarding the proper disposition of the radioactive materials, we respectfully request that our materials license be terminated. With respect to the hot lab; we will maintain this room as a restricted area until such a time as the Commission terminates the license.

Documentation of the closeout surveys, disposition of material, and personnel radiation monitoring records will be maintained by our parent company, Princeton Community Hospital, until authorized for disposition.

If you have any further questions regarding this amendment request or would like to discuss it further do not hesitate to contact me. The main hospital telephone number is (304) 327-2900.

ames P. Nunn, MS

Senior Physicist Physics Associates

Sincerely,

Joetta Dotson Chief Nursing Officer St. Luke's Hospital

Attachment(s):1. Inventory and Leak test for sealed sources

- 2. Calibration of counting equipment
- 3. Closeout survey questionnaire
- 4. Survey results
- 5. Floor plan and survey grid of Hot Lab area
- 6. USNRC for 314 "Certificate of Disposition of Materials"

Page 2 of 2 St. Luke's Hospital USNRC License # 47-23517-01 Closeout Survey Results

MEDIC/ SHIELD Lee S. / Certified Certified	AL PHYSICS DING DESIGN Anthony, Ph. D. d Health Physicist d Medical Physicist d Radiologic Physicist	Physics Associates 5346 Peters Creek Road Roanoke, Virginia 24019 Tel: (540) 563-0165	RADIATION PHYSICS EMERGENCY CONSULTATION Robert C. Hudson, M. S. Kay A. Saul, B. S. Lee S. Anthony, Jr., B. S.; M. A. James P. Nunn, M.S.
		ST. LUKE'S HOSPITAL SEALED SOURCE INVENTORY AND LEAK TEST	
		3 May 2007 Date	Present Activity:
1	Co-57	Dose Calibrator Reference Source North American Scientific MED 3550 S/N 64058 5.456 mCi on 5/1/2005	842 uCi
2	Cs-137	Dose Calibrator Reference Source NEN, Cat. NES-356, Vial E Serial #3560681A-47 218 uCi on 6/10/81	122 uCi
3	Cs-137	Well Reference Source NEN # 139A-101089-0006 0.105 uCi on 10/10/89	70.0 nCi
4	Co-57	Flood Source North American Scientific Model MED 3709 S/N 64110 10 mCi on 4/20/2005	1.5 mCi
5	Cs-137	Disk Calibration Source Spectrum Techniques 10 uCi on March 2004	9.3 uCi
6	Co-57	Line Source Ruler; North American Scientific Model MED3502 S/N 99687 80 uCi on 11/1/2006	37 uCi

The above sources, located in the hot lab, were sighted and leak tested on this date. No observable removable contamination was noted. Removable contamination did not exceed 0.005 uCi. These wipe tests were measured on the Capintec CRC-15W Nal(TI) wipe Counter.

James P. Nunn, MS 6 Physicist

Nicholas L. Graham, MS Physicist Lee S. Anthony, Ph.D. C.H.P., C.R.P., C.M.P.

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St. Luke's Hospital Closout Documentation USNRC License # 47-23517-01 MEDICAL PHYSICS SHIELDING DESIGN

Lee S. Anthony, Ph. D. Certified Health Physicist Certified Medical Physicist Certified Radiologic Physicist

Physics Associates

5346 Peters Creek Road Roanoke, Virginia 24019 Tel: (540) 563-0165 RADIATION PHYSICS EMERGENCY CONSULTATION

Robert C. Hudson, M. S. Kay A. Saul, B. S. Lee S. Anthony, Jr., B. S..; M. A. James P. Nunn, M.S.

Present Activity:

ST. LUKE'S HOSPITAL SEALED SOURCE INVENTORY AND LEAK TEST

3 May 2007

Date

Retired Sources in Hot Lab

6	Ba-133	Dose Calibrator Reference Source ICN Model # MLD-01, SWO# 352849 233 uCi on 8/30/88	73.8 uCi
7	Co-60	Dose Calibrator Reference Source EGAG 30 CIS-U.S., Inc. 54.8 uCi on 7/8/94	9.4 uCi
8	Cs-137	Reference Source for Molybdenum DuPont Pharmaceuticals S/N S8023003-30 31 uCi on 11/3/2003	14.0 uCi

The above sources, located in the hot lab, were sighted and leak tested on this date. No observable removable contamination was noted. Removable contamination did not exceed 0.005 uCi. These wipe tests were measured on the Capintec CRC-15W Nal(TI) wipe Counter.

James P. Nunn, MS 1 Physicist

Nicholas L. Graham, MS Physicist Lee S. Anthony, Ph.D. C.H.P., C.R.P., C.M.P.

St. Luke's Hospital Closout Documentation USNRC License # 47-23517-01

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Facility: St. Luke's Hospital

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STANDARD INFORMATION

ID: Cs-137 T(1/2) Yrs: 30.200 Abundance(#/dis.): 0.9500 CAL. DATE - Year: 1989 Month: 10 Day: 10 * * Standard activity units: 1 = uCi, 2 = dpm, 3 = Bq * * Enter activity unit choice (1-3): 1 uCi on Calib. Date: 0.105

COUNTING DATA

Counting time in a Bkd: 1.00	minutes for: Standards:		1.00		
Date Counted- Year:	2007	Month:	5	Day:	3
Instrument Used:	Capintec CRC	15W S/N 1706	508		

Counted By: James P. Nunn,MS Physics Associates

ID	Counts
Background	165
Standard	45075

RESULTS

Ctg.	Efficiency	=	0.3035	or	308
------	------------	---	--------	----	-----

		LLD/MDA	
	Computed	Computed	Computed
Method	uCi	dpm	Bq
NCRP 58	9.27E-05	2.06E+02	3.43E+00
NRC	8.88E-05	1.97E+02	3.29E+00
$3 \times SD(bkd)$	5.72E-05	1.27E+02	2.12E+00

COMMENTS:

Well Counter

St. Luke's Hospital Closeout Survey Questionnaire

USNRC Materials License Number: 47-23517-01

Building/room location: Nuclear Medicine Hot Lab

1. List radionuclides used in the room; circle form used (*Sealed*, *U*nsealed, or *G*as):

Radionuclides Used	Form Used	First Use Date	Last Use Date
Tc-99m	SU G	1990	4/25/2007
Tl-201	SU G	1990	4/25/2007
I-123	s U G	1990	4/25/2007
Listing of Calibration Sources (sealed)	SUG		
Co-57	SUG	1990	4/25/2007
Cs-137	SUG	1990	4/25/2007
Ba-133	SU G	1990	4/25/2007
Co-60	SUG	1990	4/25/2007
ματοπολογιστικό το πολογιστικό το πολογιστικό του πολογιστικό το πολογιστικό το το αργολογιστικού το το το το - -	SUG		
	SUG	ча фонtности на столити на на челото чело П	

2. Did a major spill occur in the room which resulted in residual radioactivity?

[🖂]	No
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[] Yes (if yes, attach description)

3. Did any sealed sources stored or used in the room leak or fail a leak test?

[] Yes (if yes, attach description)

4. Were sealed sources which require a leak test transferred or relocated from the room?

[\square] No [\square] Yes (if yes, attach regulatory current test results)

5. Were all radioactive materials, sources, and equipment removed?

[] No	[🖂
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] Yes (if no, attach description)

6. Did the closeout survey methods follow best practices in NUREG 1556 Vol. 9?

[] No [] Yes (if no, attach alternate methods)

7. What survey instruments were used?

Exposure rate measurements

Survey meter/probe manufacturer/model: Bicron Surveyor 2000 S/N B424Z With PGM S/N A563V (thin window 1.35 mg/cm^2)

Calibration date: 4/4/2007

Background reading in mR per hour:0.02 mR/hr

Surface scans for fixed radioactivity

Survey meter/probe manufacturer/model: Bicron Surveyor 2000 S/N B424Z With PGM S/N A563V (thin window 1.35 mg/cm^2)

Calibration date: 4/4/2007

Background reading in CPM or DPM:50 cpm

Swipe surveys for removable radioactive contamination

Counting equipment manufacturer/model:Capintec CRC-15W S/N 170680 w/2" **Nal(TI) Detector**

Background counts:165 (auto background subtraction)

Calibration source counts:44910 cpm (0.105 uCi on 10/10/1989)

Calibration source efficiencies:30 %

Minimum detectable activities (uCi or DPM):206

8. Were any results for exposure rate measurements or surface scans for fixed radioactivity greater than background readings?

[🖂] No [🗌] Yes

(if yes, attach description)

9. Were any swipe survey results greater than applicable release criteria in NUREG 1556, Volume 11, Table S.5?

[[]]	No
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[] Yes (if yes, attach description)

10. Information attached (other than listed above).

[X] Room diagram

[X] Survey grid

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[X] Counting system calibration/quality assurance results

[] Other (specify)

Point of contact Name: James P. Nunn Physics Associates (45-17344-01) Roanoke Virginia

Telephone number/e-mail address:(540) 563-0165 Cell (540) 353-2597

St. Luke's Hospital Closeout Survey Results For Hot Lab

1. Numbers in the upper left corner of each box correspond to numbers on the room diagram.

2. Exposure rate measurements in mR per hour. Background reading: 0.01 mR per hour

3. Scanning survey results in counts per minute (CPM). Background reading: 50 CPM

4. DPM¹ and DPM², swipe survey results, in disintegrations per minute per 100 centimeters squared (DPM) for two energy levels, (upper=²⁰¹Tl, ⁵⁷Co, ¹³³Xe, ^{99m}Tc, ¹¹¹In, etc; and lower=¹²⁹I), where:

DPM¹: background counts 165 calibration source 44910 efficiency 30

energy range/radionuclides evaluated 50 keV ->1.5 MeV MDA 206

DPM²: background counts NA calibration source efficiency

energy range/radionuclides evaluated MDA

5 1 2 4 3 mR: 0.01 mR: 0.01 mR: 0.01 mR: 0.01 mR: 0.01 CPM: 50 **CPM: 50** CPM:50 **CPM:50** CPM: 50 DPM¹: 14 DPM1: 14 DPM¹: 14 **DPM¹: 34 DPM1: 34** DPM²: DPM²: DPM²: DPM²: DPM²; 6 7 8 9 10 mR: 0.01 mR:0.01 mR:0.01 mR: 0.01 mR: 0.01 CPM: 50 CPM: 50 CPM: 50 **CPM:50** CPM: 50 DPM1: 28 DPM¹: 16 **DPM1: 34** DPM1: 28 **DPM1: 28** DPM²: DPM²: DPM²: DPM²: DPM²: 11 13 14 15 12 mR:0.01 mR: 0.01 mR: 0.01 mR: 0.01 mR: 0.01 CPM: 50 CPM:50 CPM: 50 CPM:50 CPM: 50 DPM1: 16 DPM¹:16 **DPM¹: 22** DPM¹:22 DPM¹: 22 DPM²; DPM²: DPM²: DPM²: DPM²: 20 16 17 18 19

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St. Luke's Hospital Closout Documentation USNRC License # 47-23517-01

mR: 0.01	mR: 0.01	mR: 0.01	mR: 0.01	mR: 0.01
CPM: 50	CPM: 50	CPM: 50	CPM: 50	CPM: 50
DPM ¹ : 18	DPM ¹ : 18	DPM ¹ : 18	DPM ¹ : 1	DPM¹: 1
DPM ² :	DPM ² :	DPM ² :	DPM ² :	DPM ² :
21	22	23	24	25
mR: 0.01	mR: 0.01	m R: 0.01	mR: 0.01	mR: 0.01
CPM: 50	CPM: 50	CPM: 50	CPM: 50	CPM: 50
DPM ¹ : 18	DPM¹: 38	DPM ¹ : 38	DPM ¹ : 38	DPM ¹ : 8
DPM ² :	DPM ² :	DPM ² :	DPM ² :	DPM ² :
26	27	28	29	30
mR: 0.01	mR: 0.01	mR: 0.01	mR: 0.01	mR: 0.01
CPM: 50	CPM: 50	CPM: 50	CPM: 50	CPM: 50
DPM ¹ : 8	DPM ¹ : 8	DPM ¹ : 1	DPM ¹ : 1	DPM ¹ : 1
DPM ² :	DPM ² :	DPM ² :	DPM ² :	DPM ² :
31	32	33	34	35
mR: 0.01	mR: 0.01	mR: 0.01	mR: 0.01	mR: 0.01
CPM: 50	CPM: 50	CPM: 50	CPM: 50	CPM: 50
DPM ¹ : 1	DPM ¹ : 1	DPM ¹ : 1	DPM ¹ : 2	DPM1: 2
DPM ² :	DPM ² :	DPM ² :	DPM ² :	DPM ² :
36	37	38	39	40
mR: 0.01	mR: 0.01	mR: 0.01	mR: 0.01	m R : 0.01
CPM: 50	CPM: 50	CPM: 50	CPM: 50	СРМ: 50
DPM1: 2	DPM ¹ : 12	DPM ¹ : 12	DPM ¹ : 12	DPM ¹ : 1
DPM ² :	DPM ² :	DPM ² :	DPM ² :	DPM ² :
41	42	43	44	45
mR: 0.01	mR: 0.01	mR: 0.01	mR: 0.01	mR: 0.01

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CPM: 50	CPM: 50	CPM: 50	CPM: 50	CPM: 50
DPM ¹ : 1	DPM ¹ : 1	DPM ¹ : 18	DPM ¹ : 18	DPM ¹ : 18
DPM ² :	DPM ² :	DPM ² :	DPM ² :	DPM ² :
46	47	48	49	50
mR: 0.01	mR: 0.01	mR: 0.01	mR: 0.01	mR: 0.01
CPM: 50	CPM: 50	CPM: 50	CPM: 50	CPM: 50
DPM ¹ : 28	DPM ¹ : 28	DPM ¹ : 28	DPM ¹ : 1	DPM ¹ : 1
DPM ² :	DPM ² :	DPM ² :	DPM ² :	DPM ² :
51	52	53	54	55
mR: 0.01	mR: 0.01	mR: 0.01	mR: 0.01	mR: 0.01
CPM: 50	CPM: 50	CPM: 50	CPM: 50	CPM: 50
DPM ¹ : 1	DPM ¹ : 4	DPM ¹ : 4	DPM ¹ : 4	DPM ¹ : 4
DPM ² :	DPM ² :	DPM ² :	DPM ² :	DPM ² :
56	57			
mR: 0.01	mR: 0.01			
CPM: 50	CPM: 50			
DPM1: 18	DPM ¹ : 18	4.4 40177 -		
DPM ² :	DPM ² :	1 1		

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ft.	1 ft.	1 ft. 8.0 in.	3 ft. 4.0) in.	12'-6"								
	49	48 4'-	4 7	46	45	44 ©	43 Hot	42	41	40	39 _{'9} ~	38 1'-0"	
	Stora	ge cabinet top 4 fi	beneath co t. x 2ft.	unter			Lab				_	\ \	
	35	1	4	7	10	14	17	20	23	26	29	32	
	1'-1" 5 36 7	2	5	8	11	15	18	21	24	27	30	33	
	37	3	6	9	13	16	19	22	25	28	31	34	
		r.c											
	Wipes and surveys 50-57 were conducted in												
	the storage cabinet below counter in clockwise												
	fashion starting in the northeast corner of the												
	cabinet										\bigvee		
							0						
	No Radioactive				Scan			St. Luke's Hospital Closeout Survey Map and				N	
1.0	F	Material was sto	ored in				Ro	om	Grid.	USNRC License	#47-23517-01 Doc	:ket	
Scan Room					030-22300.]	\square	

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