



1606 North Seventh Street
Terre Haute, IN 47804-2780
(812) 238-7000

May 8, 2008

Nuclear Materials Licensing Branch
Attn: Mr. William P. Reichhold
United States Nuclear Regulatory Commission
Region III
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

RE: NRC Material License
No. 13-16457-01

Dear Mr. Reichhold:

Union Hospital has undertaken a major renovation of part of the lower level of main hospital building to accommodate the installation of a new laundry facility. This will include the remodeling and reuse of our former Radioactive Waste Store Room located in the northwest corner of the lower level of the Union Hospital, West Building. All radioactive materials were transferred to our new Radioactive Waste Store Room which is located approximately 80 feet east of the old store room also located on the lower level of the Union Hospital, West Building. The transfer was completed on April 09, 2008.

We request amendment of our license to release the former Radioactive Waste Store Room for unrestricted use. In support of this request, please find enclosed, a copy of the decommissioning survey including wipe test results on the former store room.

If you have any questions regarding this request please contact our Radiation Safety Officer, Rasiklal Ganatra, MD at (812) 238-7581 or Dean Taylor, MS (our Radiation Safety Consultant) at (812) 894-2554.

Sincerely,

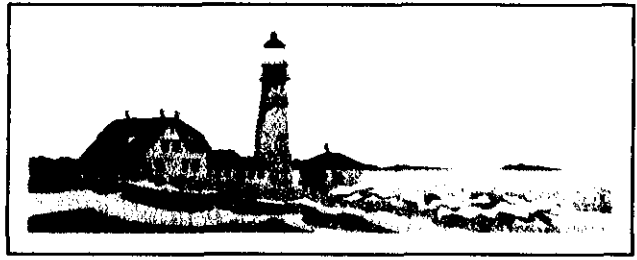
A handwritten signature in black ink, appearing to read "R. Ganatra", written over a horizontal line.

Rasiklal Ganatra, MD
Radiation Safety Officer

Enclosure

RECEIVED MAY 13 2008

Beacon X-Ray Testing, Inc.
Physics Consulting Services
5696 South Ernest Street
Terre Haute, Indiana 47802-9499
(812) 894-2554



May 8, 2008

Union Hospital Health Group
Attn: David R. Doerr, President, CEO
1606 North Seventh Street
Terre Haute, Indiana 47804-2780

RE: NRC Materials License
No. 13-16457-01

Dear Mr. Doerr:

The attached decommissioning survey is provided in support of your application to the NRC to remove the old Union Hospital, West Building Radioactive Waste Material Store Room from the Union Hospital Radioactive Materials License. A removable contamination survey was completed on May 24, 2004 and an area radiation survey was completed on May 26, 2004. Survey results indicate that no residual contamination remains from the storage of RAM waste and stored sealed sources which are no longer of use. All remaining waste and sources were moved to the new waste store room in the West Building on May 21, 2004.

It is my understanding that the East Building is scheduled for demolition this year. I would like to take this opportunity to reemphasize the need to have NRC approval in hand (to release the old store room for unrestricted use) *before* demolition can begin. This fact, notwithstanding, my survey results indicate that there should be no trouble receiving this release and I would anticipate a response from the NRC within 60 days of the date of this report.

I will be available to address any concerns or questions regarding the attached report from you or the NRC. Please contact me at the number listed above. I hope that UHHG will continue to call on me to assist with your radiation safety program.

Sincerely,




Dean A. Taylor, M.S.

Copy to:
Radiation Safety Committee

Enclosed

DECOMMISSIONING SURVEY FOR RADIOACTIVE CONTAMINATION

Surveyor:	Dean A. Taylor, M.S. ISDH Approved Physicist	Report Date:
Survey Location:	West Building Basement	May 07, 2008
	Union Hospital, Inc.	
	1606 North Seventh Street	
	Terre Haute, Indiana 47804-2780	
Survey Dates:	Removable Contamination Survey:	Apr 11, 2008
	Direct Reading Environmental Radiation Survey:	May 07, 2008
Instrument Used:	Wipe Sample Well Counter (NaI Well-Drilled Crystal Detector)	
Manufacturer:	Capintec, Inc.	Model: CAPRAC Serial #: 000139
Auto calibration conducted per manufacturer's recommendations: April 11, 2008		
Calibration rod reference source:	Cs-137	Serial Number: A0671
Nominal Activity:	123.8 nCi	Calibration Date: October 01, 1992
Instrument Used:	Area Survey Meter (NaI Crystal Detector)	
Manufacturer:	Ludlum Radiation Measurements	Model: 2221 Meter Serial #: 71251
		Model: 44-2-5 Probe Serial #: PRO-72100
Calibration conducted by manufacturer: April 24, 2008		
Unsealed isotopes stored in the facility:	Samarium-153, Gallium-67, Technetium-99m, Iodine-131, Xenon-133	
Sealed sources stored in the facility:	Cobalt-57, Cobalt-60, Iodine-125, Iodine-129, Barium-133, Cesium-137, Radium-226	
RAM Storage Dates:	May 21, 2004 to April 09, 2008	
The following documents are attached:		
1) Floor Plan Indicating Survey Points		
2) Removable Contamination Survey Results		
3) Direct Reading Environmental Radiation Survey Results		
Surveyor:		Date: May 07, 2008
ISDH Approved Physicist (#264)		

**DECOMMISSIONING SURVEY FOR RADIOACTIVE CONTAMINATION
RADIOACTIVE WASTE STORE ROOM - UNION HOSPITAL, INC.
REMOVABLE CONTAMINATION SURVEY RESULTS**

Date: Apr 11, 2008	Instrument: Well Counter (NaI well-drilled crystal detector)		
Background Readings	Initial: 201 dpm ± 18.7dpm	Final: 192 dpm ± 18.9dpm	
Cs-137 Source Test Measurement	94.6 nCi Calculated		95.0 nCi Measured
Deviation = -4.1%	Energy Deviation = 0.0%	Gain Reference = 047	
Response Ratio Ch1/(Ch4+Ch5) = 1.00	Measured as = 0.97	Deviation = -3.0%	
Wipe Sample ID	Test Analysis by Isotope in Net dpm (half-life in hours)		
	Tc-99m (6.01h)	Ga-67 (78.2h)	I-131 (193.2h)
A West Wall	7.71 dpm ± 8.60 dpm	28.75 dpm ± 25.77dpm	7.45 dpm ± 28.50 dpm
B North Wall	14.31 dpm ± 9.01 dpm	8.75 dpm ± 25.28 dpm	11.18 dpm ± 28.62 dpm
C East Wall	17.62 dpm ± 9.21 dpm	48.75 dpm ± 26.25dpm	57.75 dpm ± 30.09 dpm
D South Wall	9.91 dpm ± 8.74 dpm	17.5 dpm ± 25.50 dpm	54.02 dpm ± 29.98 dpm
E SW Quadrant Floor	6.61 dpm ± 8.53 dpm	33.75 dpm ± 25.89dpm	13.04 dpm ± 28.68 dpm
F NW Quadrant Floor	3.30 dpm ± 8.31 dpm	13.75 dpm ± 25.40dpm	18.63 dpm ± 28.86 dpm
G NE Quadrant Floor	5.51 dpm ± 8.46 dpm	31.25 dpm ± 25.83dpm	33.53 dpm ± 29.34 dpm
H SE Quadrant Floor	-1.10 dpm ± 8.02 dpm	-2.50 dpm ± 25.00dpm	18.63 dpm ± 28.86 dpm
I Room Center Floor	-3.30 dpm ± 7.86 dpm	37.50 dpm ± 25.98dpm	9.31 dpm ± 28.56 dpm
J Interior Door Surface	3.30 dpm ± 8.31 dpm	31.25 dpm ± 25.83dpm	39.12 dpm ± 29.51 dpm
K Vestibule Floor	2.20 dpm ± 8.84 dpm	22.50 dpm ± 25.62dpm	20.49 dpm ± 28.92 dpm

Comment: No removable contamination was expected. This assumption was supported by the wipe analysis produced no readings exceeded 50 pCi net activity. No remedial action is indicated.

**DECOMMISSIONING SURVEY FOR RADIOACTIVE CONTAMINATION
RADIOACTIVE WASTE STORE ROOM - UNION HOSPITAL, INC.
ENVIRONMENTAL RADIATION SURVEY RESULTS**

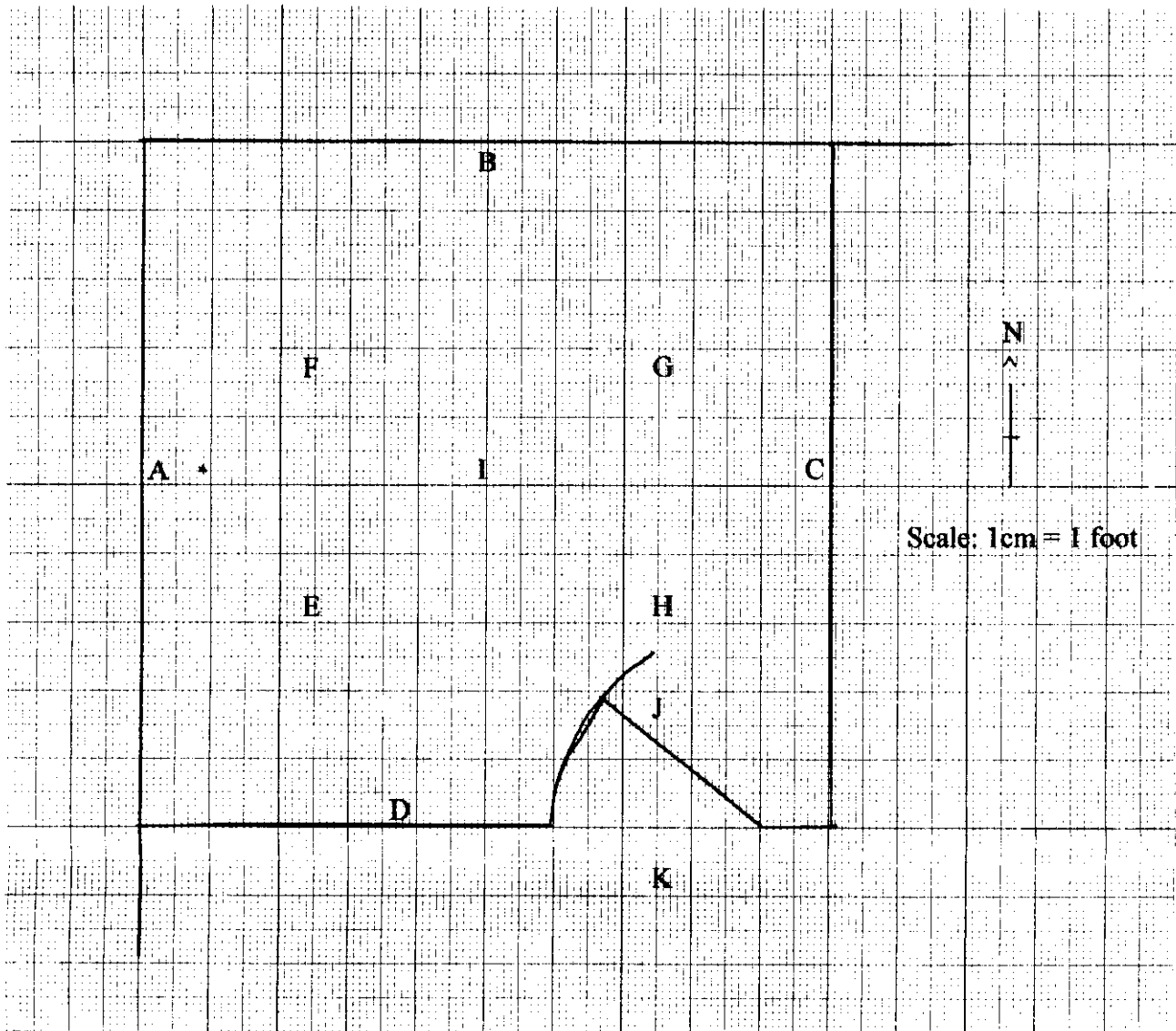
Date: May 07, 2008		Instrument: Area Survey Meter (1.5" NaI Crystal Detector)	
Background Readings		Initial: 1200 Counts/Minute	Final: 1300 Counts/Minute
Average Background Reading:		1250 Counts/Minute	
Survey Point ID	Counts/Minute (CPM)	Corrected CPM	Action Needed
A West Wall	1400	150	None
B North Wall	1500	250	None
C East Wall	1200	0	None
D South Wall	1200	0	None
E SW Quadrant Floor	1200	0	None
F NW Quadrant Floor	1300	50	None
G NE Quadrant Floor	1250	0	None
H SE Quadrant Floor	1200	0	None
I Room Center Floor	1250	0	None
J Interior Door Surface	1200	0	None
K Vestibule Floor	1200	0	None

Comment: The West and North walls are composed of a combination of poured concrete and cinder block construction. These materials must contain trace amounts of naturally occurring radioactive material as they demonstrate higher background readings even in areas of the building where RAM has never been used or stored. No remedial action is indicated.

DECOMMISSIONING SURVEY FOR RADIOACTIVE CONTAMINATION

Former Radioactive Waste Store Room (West Building - New Laundry)
Union Hospital, Inc., 1606 North 7th Street, Terre Haute, IN 47804-2780

Survey May for:
Removable Contamination Wipe Tests - Conducted April 11, 2008
Environmental Radiation Direct Monitoring - Conducted May 07, 2008



Survey and Wipe Test Points

A	west wall surface	E	SW quadrant of the floor	I	room center floor
B	north wall surface	F	NW quadrant of the floor	J	interior surface of door
C	east wall surface	G	NE quadrant of the floor	K	vestibule floor
D	south wall surface	H	SE quadrant of the floor	L	background wipe



6312 West Oakton Street
Morton Grove, IL 60053-2723
847-965-1999
Fax 847-965-1991

April 18, 2008

Dean A. Taylor, MS
Beacon X-Ray Testing, Inc.
5696 South Ernest Street
Terre Haute, IN 47802-9499

RE: Leak test results

Dear Dean Taylor:

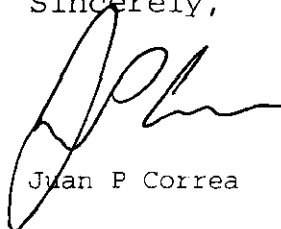
- MDA List

Ba-133	$< 2.3 \times 10^{-5}$	I-129	$< 8.9 \times 10^{-5}$
Co-57	$< 4.9 \times 10^{-4}$	I-131	$< 2.7 \times 10^{-6}$
Co-60	$< 3.7 \times 10^{-6}$	Ra-226	$< 2.0 \times 10^{-6}$
Cs-137	$< 2.6 \times 10^{-6}$		

- Three isotopes: Ga-67, Tc-99m, and Sm-153, are not on the list because their half-lives are shorter than 4 days. The samples were analyzed within 5 days of collection.
- All samples were less than MDA.
- Leak tests should be performed every six months.

Please call, 847-965-1999, if you have any questions

Sincerely,



Juan P Correa

SEALED SOURCE LEAK TEST ANALYSIS REPORT

Facility: Union Hospital, West Building (New Laundry)
Address: RAM Waste Storage Room
1606 North Seventh Street
Terre Haute, IN 47804-2780
Telephone: 812-238-7184
FAX:
License No.:

Decommissioning Survey
Person Submitting Samples: Dean A. Taylor, MS
Date Samples Collected: April 11, 2008
Send Results To: Beacon V-Ray Testing, Inc.
ATTN: Dean A. Taylor, MS
5696 South Ernest Street
Terre Haute, IN 47802-9499

RSSI SAMPLE NUMBER	CLIENT REFERENCE	RADIO-NUCLIDE	ACTIVITY (mCi)	SOURCE CALIBRATION DATE	DEVICE MANUFACTURER	SOURCE MODEL NUMBER	SOURCE SERIAL NUMBER	RESULTS* (μCi)
081060	A	Various	-	-	-	-	-	< MDA
081061	B	Various	-	-	-	-	-	< MDA
081062	C	Various	-	-	-	-	-	< MDA
081063	D	Various	-	-	-	-	-	< MDA
081064	E	Various	-	-	-	-	-	< MDA
081065	F	Various	-	-	-	-	-	< MDA

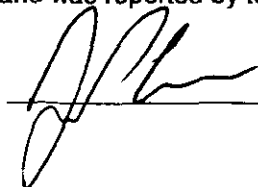
Analysis authorized by license No. IL-01429-01. Analysis approved by the Canadian Nuclear Safety Commission, meeting the criteria and requirements of R-116. Analysis instrument: Nuclear-Chicago Spectro Shield 1152 α/β counter. Serial number 28458. Calibrated February 5, 2008. Measuring time = 5 minutes. Alpha background = 0.58 cpm. Beta/Gamma background = 3.88 cpm.

Most regulatory agencies consider a source to be leaking if a leak test indicates the presence of more than 0.005 μCi (5 x 10⁻³ μCi) of removable contamination. Sources for which the results indicate the presence of 5 x 10⁻⁴ μCi or more of removable activity should be investigated.

* < followed by a number indicates the activity is below the limit of detection.

A highlighted result exceeds regulatory limits and was reported by telephone to the person submitting the sample and/or _____ on _____.

Analyzed by: Juan P Correa
081071.doc



Date: April 18, 2008

Page 1 of 2

SEALED SOURCE LEAK TEST ANALYSIS REPORT

Facility: Union Hospital, West Building (New Laundry)
Address: RAM Waste Storage Room
1606 North Seventh Street
Terre Haute, IN 47804-2780
Telephone: 812-238-7184
FAX:
License No.:

Decommissioning Survey
Person Submitting Samples: Dean A. Taylor, MS
Date Samples Collected: April 11, 2008
Send Results To: Beacon V-Ray Testing, Inc.
ATTN: Dean A. Taylor, MS
5696 South Ernest Street
Terre Haute, IN 47802-9499

RSSI SAMPLE NUMBER	CLIENT REFERENCE	RADIO-NUCLIDE	ACTIVITY (mCi)	SOURCE CALIBRATION DATE	DEVICE MANUFACTURER	SOURCE MODEL NUMBER	SOURCE SERIAL NUMBER	RESULTS* (μCi)
081066	G	Various	-	-	-	-	-	< MDA
081067	H	Various	-	-	-	-	-	< MDA
081068	I	Various	-	-	-	-	-	< MDA
081069	J	Various	-	-	-	-	-	< MDA
081070	K	Various	-	-	-	-	-	< MDA
081071	L	Various	-	-	-	-	-	< MDA

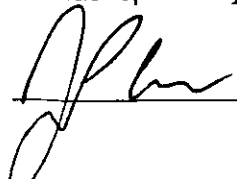
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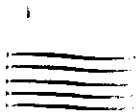
A highlighted result exceeds regulatory limits and was reported by telephone to the person submitting the sample and/or _____ on _____.

Analyzed by: Juan P Correa
081071.doc



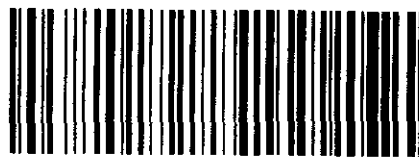
Date: April 18, 2008

Page 2 of 2

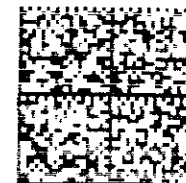


Union
HOSPITAL
 IMAGING SERVICES
 1606 North Seventh Street
 Terre Haute, IN 47804-2780

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

Attn: Mr. William P. Reichhold

60532+4352-60 C021

