U. S. Nuclear Regulatory Commission Materials Licensing Section 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352

Dear Sir or Madam:

Johnson County Memorial Hospital would like to amend its Materials License, Number 13-14817-01, to release its old Nuclear Medicine Department area of use from restricted control. All licensed activities have transferred to the new Nuclear Medicine Department, located at the same address of use and added to the license with amendment 31. Enclosed is a close-out survey of the old Nuclear Medicine Department.

In addition, we request the removal of the Franklin W. Sequeira, M.D. Dr. Sequeria has discontinued practice at our facility.

Finally, we request the addition of Tarun R. Jindal, M.D. as an Authorized User of materials licensed under 10 CFR 35.100, 35.200, 35.392, and 35.394. Dr. Jindal is currently listed as an Authorized User of materials licensed under 10 CFR 35.100, 35.200, and 35.300 (limited to the use of I-131) on Community Health Network, Inc. materials license 13-06009-01.

Should there be any questions concerning this license amendment request, please contact our nuclear medicine physicist, Mr. Patrick Byrne, DABR, CHP, DABSNM, at 1-877-317-5811.

Sincerely,

Doug Penley

Director of Imaging

Close-out survey of the old Nuclear Medicine area of use Johnson County Memorial Hospital 1125 Jefferson Street, Franklin, Indiana, 46131

Performed by: Patrick J. Byrne, DABR, CHP, DABSNM Radiation Safety Officer

Radioactive materials usage at this area of use was limited to materials licensed under 10 CFR 35.100, 35.200, and 35.300 as well as sealed sources for equipment quality control. All radioactive materials have been transferred to a new area of use at the same address of use.

Wipe tests for removable radioactive contamination were taken on 7/9/20 and analyzed in a Ludlum Model 243 (S/N: 145366) Shielded Well Scintillator coupled to a Ludlum Model 2200 (S/N: 138705) Scaler Ratemeter. A window of 50 to 400 keV was used to analyze the wipes. The efficiency of this system for cobalt-57 with a window of 50-400 keV is 1.12 dpm/cpm. The results of the wipe tests are enclosed.

The radiation levels survey was performed on 7/9/20 by Patrick Byrne, using a Ludlum 14C Geiger-Muller survey meter (S/N: 253954). The meter was calibrated on 1/13/20. The range used for the radiation level survey was 0.0 to 0.2 mR/hr.

Visual Inspection

The area was visually inspected to ensure that all radioactive waste had been removed. No radioactive material was located in the area.

Radiation Level Survey

No area demonstrated radiation levels in excess of the background reading of 0.01 mR/hr.

Sealed Sources

All sealed sources and radioactive materials have been transferred out of the area of use closed out to the new area of use. No sealed source had ever been found to be leaking. Enclosed is a copy of the results of the last leak tests performed on the sealed sources prior to transfer.

Removable Contamination Survey Results

Wipe samples were counted in a Ludlum Model 243 Shielded Well Scintillator (S/N: 145366) coupled to a Ludlum Model 2200 Scaler Ratemeter (S/N: 138705). The efficiency of this system for Cobalt-57 with a counting window of 50-400 keV

is 1.12 dpm/cpm. Background on this window was 343 counts per minute.

| Wipe | Gross counts per | Net counts per | |
|-------------|---------------------------------------|----------------|----------------------------|
| Number | minute | minute | Disintegrations per minute |
| 1 | 315 | 0 | 0 |
| 2 | 348 | 5 | 5.6 |
| 3 | 322 | 0 | 0 |
| 4 | 347 | 4 | 4.48 |
| 5 | 355 | 12 | |
| 6 | · · · · · · · · · · · · · · · · · · · | 0 | 13.44 |
| 7 | 313 | - | 0 |
| | 328 | 0 | 0 |
| 8 | 367 | 24 | 26.88 |
| 9 | 346 | 3 | 3.36 |
| 10 | 306 | 0 | 0 |
| 11 | 319 | 0 | 0 |
| 12 | 347 | 4 | 4.48 |
| 13 | 343 | 0 | 0 |
| 14 | 352 | 9 | 10.08 |
| 15 | 337 | 0 | 0 |
| 16 | 316 | 0 | 0 |
| 17 | 339 | 0 | 0 |
| 18 | 318 | 0 | 0 |
| 19 | 354 | 11 | 12.32 |
| 20 | 365 | 22 | 24.64 |
| 21 | 335 | 0 | 0 |
| 22 | 308 | 0 | 0 |
| 23 | 310 | 0 | 0 |
| 24 | 355 | 12 | 13.44 |
| 25 | 341 | 0 | 0 |
| | | | <u> </u> |

^{*}Please refer to the attached survey map for wipe locations.

Maximum removable contamination occurred in area 8. Gross count rate = $367 \text{ cpm}/100\text{cm}^2$. Net count rate (gross minus background) = $367 - 343 = 24 \text{ cpm}/100\text{cm}^2$. Net removable disintegrations per minute = $24 \text{ cpm}/100\text{cm}^2 \times 1.12 \text{ dpm/cpm} = <math>26.88 \text{ dpm}/100\text{cm}^2$.

Conclusion

As of 7/9/20, all radioactive materials have been removed from the area of use and no removable contamination is present.



Sealed Source Leak Test

Licensee: Johnson County Memorial Hospital

Date: <u>04/23/20</u>

Performed by: Patrick Byrne

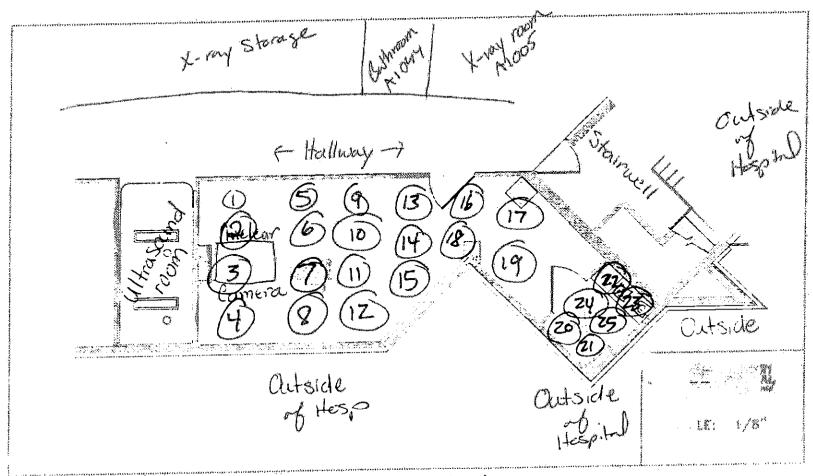
| Calibration Calibration | | | | | | |
|-------------------------|-------------|----------|----------|----------|-----------|------------|
| Nuclide | Type | Activity | Date | Location | M/N | S/N |
| Cs-137 | Vial | 224 uCi | 03/10/78 | Hot Lab | NES-356 | 319-188-11 |
| Current Ac | tivity: 84. | 603uCi | | | | |
| Co-57 | Flood | 20 mCi | 09/01/19 | Hot Lab | MED3709 | 2095-114 |
| Current Ac | tivity: 10. | 963mCi | | | | |
| Cs-137 | Vial | 204 uCi | 09/01/08 | Cardio | MED3550 | 132382 |
| Current Ac | tivity: 155 | 5.87uCi | | | | |
| Gd-153 | Rod | 10 mCi | 07/01/18 | Symbia | HEGL-0133 | Q6-166 |
| Current Ac | tivity: 1. | 502mCi | | | | |

Comment: The sources listed above were leak tested using a dry wipe technique and were found to have less than 0.005 uCi removable activity. The leak test wipes were analyzed using instrumentation capable of detecting 185 Bq (0.005 uCi) radioactivity on the wipe.

RADIATION SAFETY OFFICER:

Main Nuclear Medicine Dept. 1125 West Jefferson Street

A. Sink B. Dose Call, and waste 360rage C. Source Storage



Circled numbers refer to wipe sample locations

Song, Taehoon

From: Tomczak, Tammy

Sent: Thursday, July 23, 2020 7:01 AM **To:** Song, Taehoon; Pavon, Sandy

Subject: FW: materials license amendment 13-14817-01

Attachments: MX-B402SC_20200723_073343.pdf

Good morning, Tae and Sandy,

Can you please add the attached to ADAMS?

Thanks!!! Tammy

----Original Message----

From: Kristin Burress < KBurress@johnsonmemorial.org>

Sent: Thursday, July 23, 2020 6:30 AM

To: Tomczak, Tammy < Tammy. Tomczak@nrc.gov>

Subject: [External Sender] materials license amendment 13-14817-01

Dear Sir or Madam:

Attached is a request to amend Johnson Memorial Hospitals Materials License 13-14817-01.

Sincerely,

Kristin Burress CNMT, RT(N)

----Original Message----

From: scanner@johnsonmemorial.org [mailto:scanner@johnsonmemorial.org]

Sent: Thursday, July 23, 2020 7:34 AM

To: Kristin Burress < KBurress@johnsonmemorial.org>

Subject: Scanned image from MX-B402SC

Reply to: Karen Gregory <kgregory@johnsonmemorial.org> Device Name: Not Set Device Model: MX-

B402SC

Location: Not Set

File Format: PDF MMR(G4) Resolution: 200dpi x 200dpi

Attached file is scanned image in PDF format.

Use Acrobat(R)Reader(R) or Adobe(R)Reader(R) of Adobe Systems Incorporated to view the document.

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