

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

MATERIALS LICENSE

Pursuant to the Oklahoma Radiation Management Act (27A O.S. '2-9-101, *et seq.*) and the Oklahoma Radiation Management Rules (Rules) at Oklahoma Administrative Code (OAC) 252:410, including rules incorporated by reference from Title 10 of the Code of Federal Regulations, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer the source(s) of radiation (byproduct, source and special nuclear material, accelerator produced material, radium sealed sources and/or radiation machines) designated below; to use such source(s) for the purpose(s) and at the place(s) designated below; and to deliver or transfer such material to persons authorized to receive it in accordance with applicable rules. This license is subject to all applicable rules and orders of the Oklahoma Department of Environmental Quality (DEQ) now or hereafter in effect and to any conditions specified below.

<p style="text-align: center;">Licensee</p> <p>1. Muskogee Regional Medical Center, LLC</p> <p style="padding-left: 40px;">dba Eastar Health System</p> <p>2. 300 Rockefeller Drive</p> <p style="padding-left: 40px;">Muskogee, Oklahoma 74401</p>	<p>In accordance with applications dated</p> <p style="text-align: center;">December 3, 2012, January 6, 2014 and April 4, 2014</p> <p>3. License number OK-13157-01 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date: May 31, 2024</p> <hr/> <p>5. DEQ Login Nos.</p> <p style="text-align: center;">211498 and 216589</p>
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6. Byproduct material as defined in OAC 252:410-10-2(b)(1), source or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Any byproduct material identified in OAC 252:410-10-35(a)(4)(A) {10 CFR 35.100}	A. Any radiopharmaceutical identified in OAC 252:410-10-35(a)(4)(A) {10 CFR 35.100}	A. As needed
B. Any byproduct material identified in OAC 252:410-10-35(a)(4)(C) {10 CFR 35.200}	B. Any radiopharmaceutical identified in OAC 252:410-10-35(a)(4)(C) {10 CFR 35.200}	B. As needed
C. Any byproduct material identified in OAC 252:410-10-35(a)(5)(A) {10 CFR 35.300}	C. Any radiopharmaceutical identified in OAC 252:410-10-35(a)(5)(A) {10 CFR 35.300}	C. 500 millicuries
D. Cesium-137	D. Sealed Sources (3M Health Physics Series 6500 and 6520)	D. No single source to exceed 15 millicuries, and 250 millicuries total
E. Strontium-90 Yttrium-90	E. Sealed Sources (Atomchem Corporation Model BI)	E. 100 millicuries
F. Iridium-192	F. Sealed Sources (Nucletron Model 105.002)	F. No single source to exceed 12 curies, 21.5 curies total

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number
OK-13157-01

DEQ Login Nos.
211498 and 216589

Amendment No.
64

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| G. Fluorine-18 | G. Any | G. 600 millicuries |
| H. Any byproduct material identified in OAC 252:410-10-31(2)(H) {10 CFR 31.11} | H. Prepackaged Kits | H. As needed |

9. Authorized Use:

- A. Medical use described in OAC 252:410-10-35(a)(4)(A) {10 CFR 35.100}.
- B. and G. Medical use described in OAC 252:410-10-35(a)(4)(C) {10 CFR 35.200}.
- C. Medical use described in OAC 252:410-10-35(a)(5)(A) {10 CFR 35.300}.
- D. Medical use described in OAC 252:410-10-35(a)(6)(A) {10 CFR 35.400} and, for Cesium-137, calibration of licensee's survey meters and personnel dosimeters.
- E. For storage only.
- F. One source for medical use described in 10 CFR 35.600, in a Nucletron microSelectron remote afterloader unit. One source in its shipping container as necessary for replacement of the source in the remote afterloader unit.
- H. *In vitro* studies.

CONDITIONS

- 10. Location of use: 300 Rockefeller Drive, Muskogee, Oklahoma.
- 11. Radiation Safety Officer (RSO): Shawn Heldebrandt, M.S.
- 12. Authorized Users:
 - A. Mazen Al-Hamwy, M.D., for material identified in 10 CFR 35.200 as adopted by reference in OAC 252:410-10-35 limited to nuclear cardiology.
 - B. Gina M. Caravaglia, D.O., for material identified in 10 CFR 35.200 as adopted by reference in OAC 252:410-10-35 limited to nuclear cardiology.
 - C. Steven Ciglar, M.D., for material identified in 10 CFR 35.100, 35.200, 35.300, and 31.11 as adopted by reference in OAC 252:410-10-31 and 35.
 - D. Carl Critchfield, M.D., for material identified in 10 CFR 35.100, 35.200, and 31.11 as adopted by reference in OAC 252:410-10-31 and 35.
 - E. Diego Sebastian Humphrey, M.D., for material identified in 10 CFR 35.200 as adopted by reference in OAC 252:410-10-35 limited to nuclear cardiology.
 - F. Satish Kohli, M.D., for material identified in 10 CFR 35.200 as adopted by reference in OAC 252:410-10-35 limited to nuclear cardiology.

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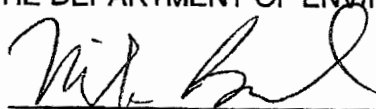
- G. Mohamad Amer Mahayni, M.D., for material identified in 10 CFR 35.200 as adopted by reference in OAC 252:410-10-35 limited to nuclear cardiology.
- H. Daniel P. Murphy, M.D., for material identified in 10 CFR 35.300 and 35.400 as adopted by reference in OAC 252:410-10-35.
- I. Selamawit Negusse, M.D., for material identified in 10 CFR 35.600 only Iridium-192 for use in a High Dose-Rate Remote Afterloader Unit.
- J. John Anthony Yeabower, Jr., M.D., for material identified in 10 CFR 35.100, 35.200, and 31.11 as adopted by reference in OAC 252:410-10-31 and 35.
13. Authorized Medical Physicists:
- A. Mathew West, Ph.D., for Iridium-192 for use in a High Dose-Rate Remote Afterloader Unit
- B. Shawn Heldebrandt, M.S., for Iridium-192 for use in a High Dose-Rate Remote Afterloader Unit
- C. Harith Saif, PhD., for Iridium-192 for use in a High Dose-Rate Remote Afterloader Unit.
14. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in OAC 252:410-10-30(3)(E){10 CFR 30.35(d)} for establishing decommissioning financial assurance.
15. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below, except for minor changes in the medical use radiation safety procedures as provided in OAC 252:410-10-35(a)(3)(B) {10 CFR 35.26}. The Radiation Management Rules shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the Rules.
- A. Application dated December 3, 2012
- B. Email dated April 4, 2014

FOR THE DEPARTMENT OF ENVIRONMENTAL QUALITY

Date

7 May 2014

By



Mike Broderick
Environmental Programs Manager
Radiation Management Section
Land Protection Division