NRC FORM 374

U.S. NUCLEAR REGULATORY COMMISSION

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MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 70 and 71, 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 byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	In accordance with letter dated	4. Expiration Date: July 31, 2027
 Guardian Pharmacy of Indianapolis Nuclear, LLC d/b/a Radiopharmacy of Indianapolis, LLC 	February 26, 2021,	
2. 6538 Corporate Dr. Indianapolis, IN 46278	3. License No.: 13-32637-01MD is amended in its entirety to read as follows:	5. Docket No.: 030-37428 Reference No.:
 Byproduct, source, 7. Chemical and/or physical and/or special nuclear material 	ical form 8. Maximum amount that licens may possess at any one tim under this license	see 9. Authorized use
A. Any byproduct material A. Any between Atomic Numbers 3 and 83 with Exceptions	A. No single radionuclide to exceed 800 millicuries; 800 millicuries total	A. For preparation and distribution of radioactive drugs, including compounding of lodine-131 and redistribution of unused molybdenum-99/technetium-99m generators to authorized recipients, in accordance with 10 CFR 32.72.
B. Molybdenum-99 B. Any	B. 250 curies total	B. Same as Subitem No. 9.A.
C. Technetium-99m C. Any	C. 250 curies total	C. Same as Subitem No. 9.A.
D. Xenon-133 D. Any	D. 1.1 curies total	D. Same as Subitem No. 9.A.
E. lodine-131 E. Any	E. 2.7 curies total	E. Same as Subitem No. 9.A.

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	MATERIALS LICE SUPPLEMENTARY	ense She	ET	License No.: 13-32637-01MD Amendment No. 14			Docket or Re 030-37428	eference I	No.:
6.	Byproduct, source, and/or special nuclear material	7. (Chemical and/	/or physical form	8. R R	Maximum amo may possess a under this lice	ount that licens at any one time nse	see 9. e	Authorized use
F.	Any byproduct material permitted by 10 CFR 35.65	F. S	Sealed Sourc	ces which have a set of the set o	F.	75 millicuries	total	F.	For use in calibration and checking of the licensee's instruments. For redistribution of sealed sources initially distributed by a manufacturer licensed in accordance with 10 CFR 32.74 to authorized recipients for medical use and for non-medical use to authorized recipients.
G.	Uranium- depleted in Uranium-235	G. N	Vetal		G.	600 kilogram	s total	G.	For shielding for molybdenum-99/technetium-99m generators.
H.	Any byproduct material permitted in 10 CFR 35.400	н. s	Sealed Source		н.	1 curie total	NOIS	H.	For redistribution of sealed sources initially distributed by a manufacturer licensed in accordance with 10 CFR 32.74 that have been registered either with NRC under 10 CFR 32.210 or with an Agreement State and have been distributed in accordance with an NRC or Agreement State specific license authorizing distribution to persons specifically authorized by an NRC or Agreement State license to receive, possess, and use the authorized device.
I.	Any byproduct material permitted by 10 CFR 31.11	I. F	Prepackaged	Kits	Ι.	20 millicuries	total	Ι.	For redistribution to specific licensees or to general licensees in accordance with 10 CFR 31.11, provided the packaging and labeling remain unchanged.

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6.	Byproduct, source, and/or special nuclear material	7.	Chemical and	l/or physical form	8. D	Maximum amo may possess a under this licer	ount that licensee at any one time nse	9.	Authorized use
J.	Germanium-68	J.	Any	SAUCLEAR	J.	100 millicurie	s total	J.	For use of the Eckert and Ziegler GalliaPharm generator for preparation and distribution of radioactive drugs and radiochemicals for medical use in accordance with 10 CFR 32.72 and for non-medical use to authorized recipients.
K.	Gallium-68	K.	Any		K .	100 millicurie	s total	K.	Same as Subitem No. 9.J.
L.	Molybdenum-99	L.	Liquid North to be used in System	Star Mo-99/Tc-99m the RadioGenix®	6-L	19 curies per vessel, not to curies total	source exceed 80	L.	For use of the NorthStar RadioGenix® System for preparation and distribution of radioactive drugs and radiochemicals for medical use in accordance with 10 CFR 32.72 and for non-medical use to authorized recipients.
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	CONDITI		
10. Licensed material may be used or sto	red at the licensee's facilities loca	ed at 6538 Corporate Dr., Indian	apolis, Indiana, 46278
	CLL		
11. The Radiation Safety Officer (RSO) for	or this license is Brian K. Hardesty	R.Ph.	
	2	P	
12. Licensed material shall only be used	by, or under the supervision of:	"L	
	<u>u</u>		
A. A pharmacist working or designate	ed as an authorized nuclear pharm	acist in accordance with 10 CFR	32.72(b)(2)(i) or (4).
	ST	NN	
		S S S	
	2	h.	

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B.	Authorized Nuclear Pharmacists for a	Il licensed material except Subitem No.	6.L.:			
	Kevin R. Boyd, R.Ph.	Matthew O. Broshears, R.Ph.	Chad A. Fowler,	, Pharm.D.		
	Brian K. Hardesty, R.Ph.	Shelby R. Koonce, Pharm.D.	Yogesh P. Patel	I, Pharm.D.		
	Stephen L. Piepenbrink, R.Ph.	Joseph M. Stamm, R.Ph.	Jason J. Wilson	, R.Ph.		
	John A. Zehner, R.Ph.	~	10			
		5	2 1			
C.	Authorized Nuclear Pharmacist for Su	bitem No. 6.L. including elution of techr	etium-99m from the NorthStar F	RadioGenix® System:		
	Brian K. Hardesty, R.Ph.		Ö			
13. A.	13. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State. In the absence of registration certificate, sealed sources shall be tested for leakage and/or contamination at intervals not to exceed 6 months, or at su other intervals as specified.					
В.	B. In the absence of a certificate from a transferor indicating that a leak test has been made within the intervals specified in the certificate registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State, prior to the transfer, sealed source received from another person shall not be put into use until tested and the test results received.					
C.	C. Sealed sources need not be tested if they contain only hydrogen-3; or they contain only a radioactive gas; or the half-life of the isotope is 30 days or less; or they contain not more than 100 microcuries of beta- and/or gamma-emitting material or not more than 10 microcuries of alpha-emitting material.					
D.	D. Sealed sources need not be tested if they are in storage and are not being used. However, when they are removed from storage for us or transferred to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.					

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- E. The leak test shall be capable of detecting the presence of 185 becquerels (0.005 microcuries) of radioactive material on the test sample. If the test reveals the presence of 185 becquerels (0.005 microcuries) or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(c)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations.
- F. Tests for leakage and/or contamination shall be performed by the licensee or other persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services. In addition, the licensee is authorized to collect leak test samples for analysis by persons specifically licensed by the Commission or an Agreement State to perform such services.
- G. Records of leak test results shall be kept in units of becquerels (microcuries) and shall be maintained for 3 years.
- 14. Sealed sources containing licensed material shall not be opened or sources removed from source holders by the licensee, except as specifically authorized.
- 15. The licensee shall conduct a physical inventory every 6 months, or at other intervals approved by the U.S. Nuclear Regulatory Commission, to account for all sealed sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 3 years from the date of each inventory, and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.
- 16. Except for maintaining labeling as required by 10 CFR Part 20, or Part 71, the licensee shall obtain authorization from the U.S. Nuclear Regulatory Commission before making any changes in the sealed source, device, or source-device combination that would alter the description or specifications as indicated in the respective certificate of registration issued either by the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or by an Agreement State.

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17. The licensee is authorized to hold radioactive material with a physical half-life of less than or equal to 120 days for decay-in-storage before disposal in ordinary trash provided:

- A. Before disposal as ordinary trash, the waste shall be surveyed at the container surface with the appropriate survey instrument set on its most sensitive scale and with no interposed shielding to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated, except for radiation labels on materials that are within containers and that will be managed as biomedical waste after they have been released from the licensee.
- B. A record of each such disposal permitted under this license condition shall be retained for 3 years. The record must include the date of disposal, the date on which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.
- 18. The licensee is authorized to retrieve, receive and dispose of radioactive waste from its customers, limited to radiopharmacy-supplied syringes and vials and their contents.
- 19. This license does not authorize distribution to persons exempt from licensing.
- 20. Notwithstanding the requirements of 10 CFR 30.35(a)(1), the licensee is exempt from the requirement to have a decommissioning funding plan needed for the possession and use of germanium-68/gallium-68 medical use generators (Eckert and Ziegler GalliaPharm generators), based on the commitments between the licensee and the manufacturer (Eckert and Ziegler), described in the letter dated June 29, 2017 (ML17191A516).
- 21. In accordance with letter dated September 27, 2017 (ML17271A040), the licensee may make changes to its radiation safety program, as it relates to the use of germanium-68/gallium-68 generators.
- 22. The licensee shall not modify the RadioGenix® System from the manufacturer's design and shall only use manufacturer approved consumable replacement parts.

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 23. The licensee applied for and is author A. Permit revisions to existing Radioo additional safety recommendation B. Permit individuals who have receive RadioGenix® System after these of 24. The licensee applied for and is author A. Notify the NPC within 20 days who 	ized to revise its radiation safety Genix® System radiation safety p s from the manufacturer. ved training resulting from safety changes are made by the manufa rized to:	program to: rograms to conform to future changes and operational changes to the Radio acturer.	in licensing guidance and Genix® System to use the	
working at the facility.	en experienced RadioGenix® Sys	stem Authorized Osers and Authorized	Nuclear Pharmacists begin	
B. Notify the NRC within 30 days who before each individual's first use o	en a new model of the RadioGen f the new model.	ix® System is installed at the facility ar	nd ensure training is completed	
 When a new model RadioGenix® Sys RadioGenix® System: 	tem is installed, the licensee sha	Il ensure the following before first use	of the new model	

- A. Additional training is provided for all authorized individuals, the Radiation Safety Officer, RadioGenix® System Administrator and RadioGenix® System Administrator designee and supervised individuals.
- B. Individuals must successfully complete the training on the new model prior to their first operation of the system.
- C. The training is provided by NorthStar or an individual certified by NorthStar to provide the training on the new model of the RadioGenix® System.

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- D. Records of the successful completion of this training are maintained by the licensee for the life of the license for the authorized users, the authorized nuclear pharmacists, and the Radiation Safety Officer, and for 3 years for all others.
- E. At a minimum, the record includes the model number of the RadioGenix® System, a list of the topics covered, the date of the instruction, the names of the attendees, and the names of the individuals who provided the instruction. For the authorized users, authorized nuclear pharmacists, and Radiation Safety Officer,

the record must also include a written attestation that the individual satisfactorily completed previous training and experience as described in letter dated March 13, 2020 (ML20073J702), Item No. 6, and is able to independently perform the radiation safety related duties of an Authorized User, Authorized Nuclear Pharmacist, or Radiation Safety Officer for the specific model of RadioGenix® System. The written attestation is dated and signed by NorthStar or an individual certified by NorthStar to provide the training and proctor the procedures.

- 26. 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. This license condition applies only to those procedures that are required to be submitted in accordance with the regulations. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
 - A. Application dated December 29, 2016 (ML17004A159)
 - B. Letter dated June 26, 2017 (ML17177A205)
 - C. Letter dated June 29, 2017 (ML17191A516)
 - D. Letter dated September 27, 2017 (ML17271A040)
 - E. Application dated March 18, 2018 (ML18081A845)
 - F. Letter dated June 15, 2018 (ML18169A195)
 - G. Letter dated June 19, 2018 (ML18171A056)
 - H. Letter dated November 6, 2018 (ML18310A301)

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L Letter dated March 11, 2020 (MI 2007	73 1702)	·	
L otter dated lung 8, 2020 (MI 20160/	(131) (131)		
J. Letter dated June 8, 2020 (ML201604		PLO RCOMMSS	
	FOR	THE U.S. NUCLEAR REGULATO	RY COMMISSION

Date: May 19, 2021

By:

Cassandra F. Frazier Region 3