NRC FORM 374					PAGEOFPAGES				
U.S. NUCLEAR REGULATORY COMMISSION Amendment No. 20 MATERIAL SLICENSE									
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, 39, 40, and 70, 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						er dated			
 St. Louis County Department of Health Environmental Health Laboratories 				December 21, 2009, 3. License number 24-11263-01 is amended in its entirety to read as follows:					
2. 11	South Meramec			4. Expiration date August 31, 2013					
Cla	yton, MO 63105			5. Docket No. 030-05125 Reference No.					
6. Byproduct, source, and/or special 7. Chemical and/or physical form 8. Maximum amount that licensee may possess at any one time under this licensee may possess at any one time under this licensee may possess at any one time under this licensee may possess at any one time under this licensee may possess at any one time under this licensee may possess at any one time under this licensee may possess at any one time under this licensee may possess at any one time under this licensee may possess at any one time under this licensee may possess at any one time under this licensee may possess at any one time under this licensee may posses at any one time under this l						imum amount that licensee may ss at any one time under this license			
A.	Any byproduct material with Atomic Nos. 1 through 83, inclusive	A.	Any		Α.	5 millicuries total			
B.	Uranium (natural)	В.	Any		В.	0.1 microcurie			
C.	Americium-241	C.	Any		C.	15 microcuries			
D.	Radium-226	D.	Sealed source (Nucleus Inc. D. 5 Model Ra-226-SC; NMC e Gold Standard Series Ra- 226 disc)			5 sources, total not to exceed 0.1 microcuries			
F.	Radium-228	F.	Bound/non-volatile/liquid F. (0.01 microcuries			
G.	Radium-226	G.	Bound/non-	Bound/non-volatile/liquid		0.4 microcuries			
H.	Nickel-63	H,	Foil source cell Model 1 Model 1110	(Tracor Detector 114800-3201 or 119)	H.	3 cells not to exceed 15 millicuries each			
9. A	uthorized Use:								
A through G Preparation of and use as analytical samples or standards and for instrument calibration									
H. To be used in gas chromatograph for sample analysis.									
CONDITIONS									
 Licensed material shall be used only at the licensee's facilities located at 111 South Meramec, Clayton, Missouri. 									

NRC	C FOR	M 374/	A U.S. NUCLEAR REGULATORY COMMISSION	PAGE 2 of 3 PAGES				
-				License Number 24-11263-01				
			MATERIALS LICENSE SUPPLEMENTARY SHEET	Docket or Reference Number 030-05125				
				Amendment No. 20				
11.	11. Licensed material shall be used by, or under the supervision of, Robert A. Nicolotti, Ph.D. or Jennifer Western.							
12.	The	Rad	liation Safety Officer for this license is Robert A. N	icolotti, Ph.D.				
13.	A.	Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210.						
	В.	Notv be te	Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.					
	C.	In the absence of a certificate from a transferor indicating that a leak test has been made within 6 months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.						
	D.	Sealed sources need not be leak tested if:						
		(i) they contain only hydrogen-3; or						
		(ii)	(ii) they contain only a radioactive gas; or					
		(iii)	(iii) the half-life of the isotope is 30 days or less; or					
		 (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or 						
		(v)	they are not designed to emit alpha particles, are when they are removed from storage for use or t been tested within the required leak test interval, sealed source or detector cell shall be stored for tested for leakage and/or contamination.	e in storage, and are not being used. However, transferred to another person, and have not , they shall be tested before use or transfer. No a period of more than 10 years without being				
	E.	The leak test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie (185 becquerels) 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.	Test: spec	s for leakage and/or contamination shall be perfor cifically licensed by the Commission or an Agreem	rmed by the licensee or by other persons lent State to perform such services.				
	G.	Records of leak test results shall be kept in units of microcuries and shall be maintained for 3 years.						

14. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.

NRC	FORM 374A	U.S. NUCLEAR REGU	JLATORY COMMISSION		PAGE	3	of	3	PAGES
				License Number 24-11263-01					
		MATERIALS LICENS SUPPLEMENTARY SHEE	і Е ЕТ	Docket or Reference Numbe 030-05125	ir -				
				Amendment No. 20					
15.	Maintenance, performed on ⁱ an Agreemen	repair, cleaning, replace ly by the device manufac t State to perform such s	ement, and disposal of turer or other persor services.	of foils contained in de is specifically authoriz	etector 2ed by t	cells he C	shal comn	ll be nissi	ion or
16.	Except as othe contained in the	erwise specified in this li he manufacturer's instru	cense, the licensee s ction manual for the	shall have available ar chromatography devic	nd follo ce.	w the	e inst	truct	tions
17.	The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 5 years from the date of each inventory, and shall include the quantities and kinds of byproduct material, manufacturer's name and model numbers, location of the sources and/or devices, and the date of the inventory.								′ices 'om :turer's
18.	The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."							CFR	
19.	. 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 10 CFR 30.35(d) for establishing decommissioning financial assurance.								
20.	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. 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. Applicatic	ns dated May 28, 2003,	and October 15, 200)8.					
	FOR THE U.S. NUCLEAR REGULATORY COMMISSION								
Date	MAR 2 8	2010	By Latter	a g. led.	<u>M</u>				_

Patricia J. Pelke, Chief Materials Licensing Branch Region III