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: August 31, 2022	
1. Jefferson Asphalt Com	pany	AR REGU		
2. P.O Box 104868 Jefferson City, MO 651	104868	3. License number: 24-32390-01 is amended in its entirety to read as follows:	5. Docket No.: 030-35988 Reference No.:	
<ol> <li>Byproduct, source, and/or special nuclear material</li> </ol>	7. Chemical and/or physical for	m 8. Maximum amount that license may possess at any one time under this license	9. Authorized use	
A. Radium-226	A. Sealed Sources (AEA Technology, Model RAD Radium Chemical Co., 21.94)	A 4.5 millicuries per source A 4.5 millicuries total A 4.5 millicuries total	<ul> <li>A. For use in Seaman Nuclear</li> <li>Corporation Models C-200 and C-300 portable gauging devices for measuring physical properties of materials.</li> </ul>	
B. Americium-241	B. Sealed Sources (APA Technology/QSA, Inc., X.2105)	B. 25 millicuries per source and 100 millicuries total	<ul> <li>B. For use in Troxler Electronic Laboratories Model 3241 portable gauging devices for measuring physical properties of materials.</li> </ul>	
C. Americium-241	C. Sealed Sources (AEA Technology/QSA, Inc., I AMN.V997; Isotope Pro Laboratories, Model Am	C. 44 millicuries per source and 264 millicuries total duct 1.NO2)	<ul> <li>C. For use in Humboldt Scientific, Inc. Model 5001 portable gauging devices for measuring physical properties of materials.</li> </ul>	

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<ol> <li>Byproduct, source,</li> <li>and/or special nuclear material</li> </ol>	al and/or physical form	8. Maximum amou may possess a mgenthis licen	unt that licensee t any one time se	9. Authorized use
D. Cesium-137 D. Sealed Techno CDC.8 Labora	Sources (AEA blogy/QSA, Inc., Model 05; Isotope Product tories, Model HEG-137)	D. 11 millieures and 66 millic	per source tries total	D. For use in Humboldt Scientific, Inc. Model 5001 portable gauging devices for measuring physical properties of materials.
E. Californium-252 E. Sealed Produc HEG-2 Model	Sources (Isotope t Laboratories, Model 52; OSA Global, Inc., CVN.CY2)	E. 0.11 millicuri source and millicuries to	es per 2 32 tal	E. For use in Troxler Electronic Laboratories Model 3242 portable gauging devices for measuring physical properties of materials.
F. Cesium-137 F. Sealed Techno CDCW Labora	Sources (AEA blogy/QSA, Inc., Model 556, Isotope Products tories, Model HEG-137)	AF 9 millicuries	per source	<ul> <li>F. For use in Troxler Electronic Laboratories Model 3400 portable gauging devices for measuring physical properties of materials.</li> </ul>
G. Americium-241 G. Sealed Techno AMNV Labora 3027; I Labora	Sources (AEA ology/QSA, Inc., Model 997; Isotope Product tories, Model 3021; sotope Products tories, Model AM1.NO2)	G 44 millicuries	s per source uries total	G. For use in Troxler Electronic Laboratories Model 3400 portable gauging devices for measuring physical properties of materials.
· · · · · · · · · · · · · · · · · · ·		CONDITIONS		
<ol> <li>Licensed material may be used or s</li> <li>1. 2606 West Edgewood, Jefferson</li> <li>2. 2229 Christy Drive, Jefferson Cit</li> </ol>	stored at the licensee's faci City, Missouri, 65109 y, Missouri, 65101	lities located at:	•	
Licensed material may be used at t maintains jurisdiction for regulating	emporary job sites anywhe the use of licensed materia	re in the United Sta al, including areas o	ates where the of exclusive Fe	U.S. Nuclear Regulatory Commission deral jurisdiction within Agreement States.

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If the jurisdiction status of a Federal faci	lity within an Agreement State is unkno	wn the licensee should contact the l	Federal agency
controlling the job site in question to det use of radioactive materials at job sites state regulatory agency.	ermine whether the proposed job site i in Agreement States not under exclusi	an area of exclusive Federal jurisdic Federal jurisdiction shall be obtain	ction. Authorization for ed from the appropriate
11. Licensed material shall only be used by training described in the facsimile applic users for 3 years following the last use	or under the supervision and in the ph ation received February 27, 2012. The relicensed material by the individual.	ysical presence of, individuals who h licensee shall maintain records of ind	ave received the dividuals designated as
12. The Radiation Safety Officer (RSO) for	his license is Stephen Myers	Ă	
<ol> <li>A. Sealed sources and detector cells since of registration issued to absence of a registration certificate, months, or at such other intervals as</li> </ol>	hall be tested for leakage and/or contain by the U.S. Nuclear Regulatory Commi sealed sources shall be tested for leak specified.	nination at intervals not to exceed the ssion under 10 CFR 32.210 or by an age and/or contamination at intervals	e intervals specified in Agreement State. In the not to exceed 6
B. In the absence of a certificate from a registration issued by the U.S. Nucle sealed source received from another	transferer indicating that a leak test has ar Regulatory Commission under 10 C r person shall not be put into use until t	as been made within the intervals spe FR 32.210 or by an Agreement State ested and the test results received.	ecified in the certificate of e, prior to the transfer, a
C. Sealed sources need not be tested i or transferred to another person, and transfer. No sealed source shall be s	f they are in storage and are not being I have not been tested within the requi stored for a period of more than 10 yea	used. However, when they are removed leak test interval, they shall be test is without being tested for leakage ar	ved from storage for use sted before use or nd/or contamination.

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D. The leak test shall be capable of dete sample. If the test reveals the preser filed with the U.S. Nuclear Regulator immediately from service and decont	ecting the presence of 185 becquerels (0 ace of 185 becquerels (0.005 microcuries y Commission in accordance with 10 CF aminated, repaired, or disposed of in acc	.005 microcuries) of radioactive ) or more of removable contami R 30.50(c)(2), and the source sh cordance with Commission regul	material on the test nation, a report shall be all be removed ations.
<ul> <li>E. Analysis of leak test samples and/or Commission or an Agreement State to the analysis.</li> <li>F. Records of leak test results shall be</li> </ul>	contamination shall be performed by per to perform such services. The licensee is wept in units of becquerels (microcuries).	sons specifically licensed by the authorized to collect leak test s and shall be maintained for 3 yea	U.S. Nuclear Regulatory amples but not perform ars.
14. Sealed sources or source rods containing gauges by the licensee, except as specified and the second statement of the second	g licensed material shall not be opened o fically authorized.	or sources removed or detached	from source rods or
15. The licensee shall conduct a physical inv Commission, to account for all sealed so maintained for 3 years from the date of e numbers, and the date of the inventory.	ventory every 6 months, or at other interv ources and/or devices received and poss each inventory, and shall include the radi	als approved by the U.S. Nuclea essed under the license. Record onuclities, quantities, manufactu	ir Regulatory s of inventories shall be rer's name and model
16. Except for maintaining labeling as requir Regulatory Commission before making a description or specifications as indicated Commission pursuant to 10 CFR 32.210	ed by 10 CFR Part 20, or Part 71, the lice any changes in the sealed source, device in the respective certificate of registration or by an Agreement State.	ensee shall obtain authorization e, or source-device combination t n issued either by the U.S. Nucl	from the U.S. Nuclear hat would alter the ear Regulatory
17. Each portable nuclear gauge shall have sealed source from its shielded position. direct surveillance of an authorized user	a lock or outer locked container designed The gauge or its container must be lock	d to prevent unauthorized or acc ed when in transport or storage,	idental removal of the or when not under the

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18.	<ul> <li>Any cleaning, maintenance, or repair of the only by the manufacturer or by other persperform such services.</li> <li>A. If the licensee uses unshielded sealed extends from the lowest depth to 12 is or probe becoming lodged below the implement procedures to ensure that is a sealed source or a probe contains recover the sealed source or probe submit the report required by 10 CFF the Commission's prior written consection.</li> </ul>	he gauge(s) that requires detaching the sons specifically licensed by the U.S. Nu <b>EAREG</b> d sources extended more than 3 feet beinches above the surface and other approximate. If it is not feasible to extend the the cased hole is free of obstruction before and the successful, the licensee shall 30.50(b)(2) and (c). The licensee shall the the cased hole is free of the surface shall the successful is the licensee shall the successful is the successful is the licensee shall the successful is the successful is the successful in the licensee shall the successful is the successful is the licensee shall the successful is the successful is the licensee shall the successful is the license shall the successful is the successful is the licensee shall the successful is the successful i	source or source rod from the gauge shall be performed iclear Regulatory Commission or an Agreement State to how the surface, licensee shall use surface casing that opriate procedures to reduce the probability of the source casing 12 inches above the surface, the licensee shall are making measurements. We the surface and it becomes apparant that efforts to notify the D.S. Nuclear Regulatory Commission and not abandon the sealed source or probe without obtaining

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<ul> <li>20. Except as specifically provided otherwise representations, and procedures contain to those procedures that are required to regulations shall govern unless the state more restrictive than the regulations.</li> <li>A. Application dated January 26, 2012 (</li> <li>B. Facsimile application received February C. Letter dated July 7, 2016 (ML16193A)</li> </ul>	e in this license, the licensee shall condu- ed in the documents, including and enclo- be submitted in accordance with the regu- ments, representations, and procedures ML120400667) ary 27, 2012 (ML12230A173) 678) 678 678 678 678 678 678 678	ct its program in accordance with osures, listed below. This license ulations. The U.S. Nuclear Regul in the licensee's application and o	the statements, condition applies only atory Commission's correspondence are
	FOR	THE U.S. NUCLEAR REGULATO	DRY COMMISSION
Date: August 2, 2016	By: 反 R	Fands fran rank P. D. Tran	