

1400 East Tremont St.

P.O. Box 130

Hillsboro, IL 62049
Telephone 217-532-3959
Facsimile 217-532-3212
E-Mail Hillsboro@hurst-rosche.com

Web Page www.hurst-rosche.com

December 21, 2012

SUBJECT:

U.S. NRC License Renewal Application License No. 12-18781-02

Materials Licensing Branch U.S. Nuclear Regulatory Commission, Region III 2443 Warrenville Road, Suite 210 Lisle, Illinois 60532-4351

Dear Sir:

Enclosed are two copies of a renewal application for our firm's U.S. Nuclear Regulatory Commission license (No.12-18781-02).

If you have any questions or require additional information, please contact our office.

Sincerely,

HURST-ROSCHE ENGINEERS, INC.

Michael E. Emken, P.E.

Michael To Ember

MEE:tmr

Enclosures

East St. Louis, Illinois Marion, Illinois Springfield, Illinois Barnhart, Missouri Neosho, Missouri

NRC FORM 313

(05-2012) 10 CFR 30, 32, 33, 34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120

EXPIRES: (05/31/2015)

Estimated burden per response to comply with this mandatory collection request 4.3 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Information Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

APPLICATION FOR MATERIALS LICENSE

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

OFFICE OF FEDERAL & STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA,

SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM DIVISION OF NUCLEAR MATERIALS SAFETY U.S. NUCLEAR REGULATORY COMMISSION, REGION I 2100 RENAISSANCE BOULEVARD, SUITE 100 KING OF PRUSSIA, PA 19406-2713

THIS IS AN APPLICATION FOR (Check appropriate item

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION III 2443 WARRENVILLE ROAD, SUITE 210 LISLE, IL 60532-4352

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING,

SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION IV 1600 E. LAMAR BOULEVARD ARLINGTON, TX 76011-4511

2. NAME AND MAILING ADDRESS OF APPLICANT (include ZIP code)

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S.NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

B. AMEN	LICENSE WAL OF LICENSE NO	JMBER 12-	18781-02		P.O. Box 1400 E. Hillsbor	osche Engineers, Inc x 130 Tremont Street o, Illinois 62049		n.
1100						Michael E. Emken		
Hillsboro, IL 62049 anywhere in the U.S.						BUSINESS TELEPHONE NUMBER BUSINESS CELLULAR TELEPHONE NUMBER		
	*		NRC maintai	ns		217-532-39		32-3959
No. 5 Bank Square jurisdiction.						EMAIL ADDRESS		
East St.	Louis, I	L 62203						
SUBMIT ITEMS 5 TH	IROUGH 11 ON 8-1/2	X 11" PAPER. THE	TYPE AND SCOPE OF IN	FORMA	TION TO BE P	PROVIDED IS DESCRIBED IN	THE LICENSE APPLICATIO	N GUIDE.
 RADIOACTIVE MATERIAL Element and mass number; b. chemical and/or physical form; and c. maiximum amount which will be possessed at any one time. 					6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.			
 INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE. 					8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.			
9. FACILITIES AND EQUIPMENT.					10. RADIATION SAFETY PROGRAM.			
11. WASTE MANAGEMENT.						E FEES (See 10 CFR 170 and	f Section 170.31) AMOUNT ENCLOSED	N/A
13. CERTIFICATION UPON THE APP		i by applicant) THE A	APPLICANT UNDERSTAN	DS THAT	ALL STATE	MENTS AND REPRESENTATI	ONS MADE IN THIS APPLIC	CATION ARE BINDING
CONFORMITY WITH THE BEST OF THEIR WARNING: 18 U.S.	I TITLE 10, CODE OF R KNOWLEDGE AND C. SECTION 1001 AC	FEDERAL REGULA BELIEF. TOF JUNE 25, 1948	TIONS, PARTS 30, 32, 33,	34, 35 , C RIMI	36, 39, AND 4	NAMED IN ITEM 2, CERTIFY 140, AND THAT ALL INFORMATION MAKE A WILLFULLY FAM.	FION CONTANED HEREIN IS	STRUE AND CORRECT TO
CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE					SIGNATURE			DATE
Michael E. Emken, RSO						hael Eo. Embu	<i>M</i>	12/26/12
			FC		C USE ON			
TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHEC	NUMBER	COMMENTS		
			\$					
APPROVED BY	*			DATE				
	1							

U.S. NRC Form 313 Item Nos. 5 - 11

Radionuclide	Manufacturer/Model No.	Quantity	Common Use					
Cesium-137	Sealed Source	Not to exceed 10 millicuries per source	Measure physical properties					
	(Troxler/Model No. 3400 series)	·	of materials					
Americium-241	Sealed Source	Not to exceed 50 millicuries per source	Measure physical properties					
	(Troxler/Model No. 3400 series)		of materials					
Item No. 7								
Radiation Safety Office	er (RSO) and Training							
Radiation Safety	The current RSO has successfully co	The current RSO has successfully completed one of the training courses described in Criteria in the section						
Officer:	entitled "Individual(s) Responsible for Radiation Safety Program and Their Training and Experience - Radiation							
Michael E. Emken	Safety Officer" in NUREG-1556, Vol. 1, Rev. 1 "Consolidated Guidance about Materials Licensees: Program-Specific							
	Guidance about Portable Gauge Licenses," dated Nov. 2001.							
	Before being named as the RSO, future RSOs will have successfully completed one of the training courses							
	described in Criteria in the section entitled 'Individual(s) Responsible for Radiation Safety Program and Their							
	Training and Experience - Radiation Safety Officer' in NUREG-1556, Vol. 1, Rev. 1, "Consolidated Guidance about							
	Materials Licenses: Program-Specific Guidance about Portable Gauge Licenses," dated Nov. 2001.							
ltem No. 8								
Training for Individuals	s Working in or Frequenting Restricted A	reas						
<u> </u>	Before using licensed materials, authorized users will have successfully completed one of the training courses							
	described in "Criteria" of the section entitled "Training for Individuals Working In or Frequenting Restricted Areas"							
	in NUREG-1556, Vol. 1, Rev. 2, "Con	in NUREG-1556, Vol. 1, Rev. 2, "Consolidated Guidance about Materials Licenses: Program-Specific Guidance about						
	Portable Gauge Licenses," dated Nov	Portable Gauge Licenses," dated Nov. 2001.						
Item No. 9								
Facilities and Equipme	ent							
	Important issues and topics are addressed in "Radiation Safety Program - Public Dose" and "Radiation Safety							
	Program - Operating, Emergency, an							

U.S. NRC Form 313 Item Nos. 5 - 11

10.1 Audit Program	An audit program is not required to be submitted for review during the licensing phase therefore an audit program				
	is not being submitted along with this renewal.				
10.2 Termination of	When the license expires or when the license ceases operation, NRC Form 314 will be submitted.				
Activities					
10.3 Survey Instruments	The licensee will either possess and use, or have access to and use, a radiation survey meter that meets the				
	Criteria in the section entitled "Radiation Safety Program - Instruments" in NUREG-1556, Vol. 1, Rev. 1, "Consolidated				
	Guidance about Materials Licenses: Program-Specific Guidance about Portable Gauge Licenses," dated Nov. 2001				
	in the event of an incident.				
10.4 Material Receipt and	Physical inventories will be conducted at intervals not to exceed 6 months to account for all sealed sources and				
Accountability	devices received and possessed under the license.				
10.5 Occupational	Provide dosimetry processed and evaluated by a National Voluntary Laboratory Accreditation Program (NVLAP)				
Dosimetry	approved processor that is exchanged at a frequency recommended by the processor.				
10.6 Public Dose	Gauges are stored and used in a manner to limit the public dose of radiation below the maximum allowable				
	amount. This matter will be examined during inspections.				
10.7 Operating, Emergency,	We will implement and maintain the operating and emergency procedures in Appendix H of NUREG-1556, Vol.1, Rev. 1				
and Security Procedures	"Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Portable Gauge Licenses,"				
	dated Nov. 2001.				
	Copies of these procedures will be provided to all gauge users and at each job site.				
10.8 Leak Test	Leak tests will be performed at intervals approved by the NRC or an Agreement State and specified in the Sealed				
Program	Source and Device Registration Sheet. Leak tests will be performed by an organization authorized by NRC or an				
	Agreement State to provide leak testing services to other licensees or using a leak test kit supplied by an				
	organization authorized by NRC or an Agreement State to provide leak test kits to other licensees and according to				
	the kit supplier's instructions.				
10.9 Maintenance	Routine Cleaning and Lubrication				
	We will implement and maintain procedures for routine maintenance of our gauges according to each				
	manufacturer's recommendations and instructions.				
	Non-Routine Maintenance				
	We will send the gauge to the manufacturer or other person authorized by NRC or an Agreement State to perform				
	non-routine maintenance or repair operations that require detaching the source rod from the gauge.				
10.10 Transportation	The applicant is not required to submit its response about transportation during the licensing period. This will be				
	addressed during site inspections.				
Item No. 11					





Materials Licensing Branch
U.W. Nuclear Regulatory Commission, Region III
2443 Warrenville Road, Suite 210
Lisle, Illinois 60532-4351