



LETTER OF TRANSMITTAL

DATE: 3/12/19

HAI Job No.: 1000

SUBJECT: US NRC Radioactive Material

License Renewal Application

4 Hemisphere Way • Bedford, Ohio 44146 • (440) 232-9945

TO: Materials Licensing Branch

U.S. Nuclear Regulatory Commission, Region III

2443 Warrenville Road, Suite 210

Lisle, IL 60532-4352

We are sending you☐ Reports☐ Work Order☐ Specifications☐ Invoice☐ Prints☐ Change Order☐ Copy of letter☐ Plans

Item	Date	Copies	Description
1	3/12/19	2	Application for Renewal of Material License (NRC Form 313)
2	3/5/19	1	Application Renewal Fee \$1,300 (Check #108496)
3	NA	1	NRC Form 531 - Request For Taxpayer Identification Number

These are transmitted as checked below:☐ For signature☐ For review and comment☒ For approval☐ As requested☐ For your use

REMARKS: Please find enclosed two copies of our NRC license renewal application and fee. Please let me know if you require any additional information.

You can reach me at: 440-232-9945 or email: mzakrzewski@hullinc.com

COPY TO:

W/ENCLOSURE

SIGNED: **Mark Zakrzewski, CSP, RSO**

If enclosures are not as noted, kindly notify Hull & Associates, Inc. at once.

RECEIVED MAR 19 2019

NRC FORM 313

(10-2017)
10 CFR 30, 32,
33, 34, 35, 36,
37, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR
MATERIALS LICENSE

APPROVED BY OMB: NO. 3150-0120

EXPIRES: 06/30/2019

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-2 F43), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by 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.

INSTRUCTIONS: SEE THE CURRENT VOLUMES OF THE NUREG-1556 TECHNICAL REPORT SERIES ("CONSOLIDATED GUIDANCE ABOUT MATERIALS LICENSES") FOR DETAILED INSTRUCTIONS FOR COMPLETING THIS FORM: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/>. SEND TWO COPIES OF THE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

MATERIALS SAFETY LICENSING BRANCH
DIVISION OF MATERIAL SAFETY, STATE, TRIBAL AND RULEMAKING PROGRAMS
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
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

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

IF YOU ARE LOCATED IN:

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

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.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- ☐ A. NEW LICENSE
☐ B. AMENDMENT TO LICENSE NUMBER
☒ C. RENEWAL OF LICENSE NUMBER

34-24957-02

2. NAME AND MAILING ADDRESS OF APPLICANT (Include zip code)

Mark Zakrzewski
Hull & Associates, Inc.
4 Hemisphere Way
Bedford, OH 44146

3. ADDRESS WHERE LICENSED MATERIALS WILL BE USED OR POSSESSED

temporary jobsites anywhere in the U.S. where the NRC
maintains jurisdiction.

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Mark Zakrzewski

BUSINESS TELEPHONE NUMBER
440-232-9945

BUSINESS CELLULAR TELEPHONE NUMBER
216-505-7746

BUSINESS E-MAIL ADDRESS
mzakrzewski@hullinc.com

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

- a. Element and mass number; b. chemical and/or physical form; and c. maximum amount
which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.

10. RADIATION SAFETY PROGRAM.

9. FACILITIES AND EQUIPMENT.

11. WASTE MANAGEMENT.

12. LICENSE FEES (Fees required only for new applications, with few exceptions*)
(See 10 CFR 170 and Section 170.31)

*Amendments/Renewals that increase the scope of the existing license to a new or higher fee category will require a fee.

FEE
CATEGORY

1C

AMOUNT
ENCLOSED \$

1,300.00

PER THE DEBT COLLECTION IMPROVEMENT ACT OF 1996 (PUBLIC LAW 104-134), YOU ARE REQUIRED TO PROVIDE YOUR TAXPAYER IDENTIFICATION NUMBER. PROVIDE THIS INFORMATION BY COMPLETING NRC FORM 531: <https://www.nrc.gov/reading-rm/doc-collections/forms/nrc531info.html>.

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 37, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

Mark F. Zakrzewski, Health & Safety Officer

SIGNATURE

DATE

3/12/19

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	

**Suggested Format for Providing Information Requested in
Items 5 through 11 of
U.S. Nuclear Regulatory Commission Form 313**

Items 5 and 6: Materials To Be Possessed and Proposed Uses

Yes	No	Radionuclide	Manufacturer or Distributor Model No.	Quantity	Use as Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
X		Cesium-137	Gauge manufacturer (or distributor) and model number: Campbell Pacific Nuclear Model MC Series	Specify activity per source and number of gauges requested. No single source to exceed 10 mCi 20 gauges	Yes <input checked="" type="checkbox"/> Specific description of the gauge use: To measure physical properties of materials	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: (Submit safety analysis supporting safe use.)
X		Americium-241	Gauge manufacturer (or distributor) and model number: Campbell Pacific Nuclear Model MC Series	Specify activity per source and number of gauges requested. No single source to exceed 50 mCi 20 gauges	Yes <input checked="" type="checkbox"/> Specific description of the gauge use: To measure physical properties of materials	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: (Submit safety analysis supporting safe use.)

Yes	No	Radionuclide	Manufacturer or Distributor Model No.	Quantity	Use as Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
	X	Californium-252	Gauge manufacturer (or distributor) and model number:	Specify activity per source and number of gauges requested.	Yes <input type="checkbox"/> Specific description of the gauge use:	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: (Submit safety analysis supporting safe use.)
	X	Radium-226	Gauge manufacturer (or distributor) and model number:	Specify activity per source and number of gauges requested.	Yes <input type="checkbox"/> Specific description of the gauge use:	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: (Submit safety analysis supporting safe use.)
	X	Other Isotope (Specify):	Gauge manufacturer (or distributor) and model number:	Specify activity per source and number of gauges requested.	Yes <input type="checkbox"/> Specific description of the gauge use:	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: (Submit safety analysis supporting safe use.)
	X	Is financial assurance required? If yes, submit evidence of financial assurance.				

**Items 7 through 11: Training and Experience,
Facilities and Equipment, Radiation Safety Program,
and Waste Disposal**

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE—RADIATION SAFETY OFFICER Name: <u>Mark Zakrzewski</u>	Documentation demonstrating the proposed radiation safety officer's training and experience (e.g., certificate of completion of the RSO's course and/or the authorized user's course).	Submit applicable documentation. not applicable - previously submitted	
8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS	Before using licensed materials, authorized users will have successfully completed one of the training courses described in the "Criteria" part of the section titled, "Training for Individuals Working in or Frequenting Restricted Areas" in NUREG-1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses."	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. FACILITIES AND EQUIPMENT	Provide a facility diagram for each permanent portable gauge storage location. Include on the diagram the use of adjacent areas (including above and below), and information relevant to public dose and security as discussed in Sections 8.10.5, "Public Dose," and 8.10.6, "Operating, Emergency, and Security Procedures," respectively, in NUREG-1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses"	Submit applicable documentation. Not applicable. Hull has no permanent storage locations outside Ohio	

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10.1 RADIATION SAFETY PROGRAM—AUDIT PROGRAM	The applicant should not submit its audit program to the NRC for review during the licensing phase. The audit program will be reviewed during NRC inspections.	Need Not Be Submitted with Application	
10.2 RADIATION SAFETY PROGRAM—RADIATION MONITORING INSTRUMENTS	We will either possess and use, or have access to and use, a radiation survey meter that meets the criteria in the section titled, "Radiation Safety Program—Radiation Monitoring Instruments" in NUREG-1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses," in the event of an incident.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10.3 RADIATION SAFETY PROGRAM—MATERIAL RECEIPT AND ACCOUNTABILITY	Physical inventories will be conducted every 6 months or at other intervals approved by the NRC to account for all sealed sources and devices received and possessed under the license. AND We will develop, implement, and maintain procedures for ensuring accountability of licensed materials at all times.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10.4 RADIATION SAFETY PROGRAM—OCCUPATIONAL DOSE	We will maintain, for inspection by the NRC, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of the limits in 10 CFR 20.1502(a). OR We will provide and require the use of individual monitoring devices (dosimetry). All personnel dosimeters that require processing to determine the radiation dose will be processed and evaluated by a NVLAP-approved processor.	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/>

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10.5 RADIATION SAFETY PROGRAM—PUBLIC DOSE	The applicant is <i>not</i> required to submit a response to the public dose section in a license application. This matter will be examined during NRC inspections.	Need Not Be Submitted with Application	
10.6 RADIATION SAFETY PROGRAM—OPERATING, EMERGENCY, AND SECURITY PROCEDURES	<p>We will implement and maintain the operating, emergency, and security procedures in Appendix G to NUREG–1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses." Copies of these procedures will be provided to all gauge users and will be available at each jobsite.</p> <p style="text-align: center;">OR</p> <p>Operating, emergency, and security procedures will be developed, implemented, and maintained and will meet the criteria in section 8.10.6, "Radiation Safety Program—Operating, Emergency, and Security Procedures," NUREG–1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses." Copies of these procedures will be provided to all gauge users and will be available at each jobsite.</p>	<p><input type="checkbox"/></p> <p><input checked="" type="checkbox"/></p>	<p><input type="checkbox"/> For this item, checking this box indicates that alternative procedures will be provided as part of the application and that these procedures will be provided to all gauge users and will be available at each jobsite.</p>

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10.7 RADIATION SAFETY PROGRAM—LEAK TEST	<p>Leak tests will be performed at intervals approved by the NRC or an Agreement State and specified in the SSD registration certificate. Leak tests will be performed by an organization licensed by the NRC or an Agreement State to provide leak testing services to other licensees; or by using a leak test sample collection kit supplied by an organization licensed by the NRC or an Agreement State to provide leak test kits and/or sample analysis services to other licensees and according to the kit supplier's instructions. Records of leak test results will be maintained.</p> <p style="text-align: center;">OR</p> <p>We will implement the model leak test program published in Appendix I of NUREG-1556, Volume 1, Revision 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses." Records of leak tests will be maintained.</p>	<div style="text-align: center;"> <input checked="" type="checkbox"/> <input type="checkbox"/> </div>	<p><input type="checkbox"/> For this item, checking this box indicates that alternative equipment and/or procedures will be provided as part of the application and that records of leak tests will be maintained.</p>

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10.8 RADIATION SAFETY PROGRAM—MAINTENANCE	<p><i>Routine Cleaning and Lubrication</i> We will implement and maintain procedures for routine maintenance of our gauges according to each manufacturer's written recommendations and instructions.</p> <p><i>Nonroutine Maintenance</i> The gauge manufacturer or other person licensed by the NRC or an Agreement State will perform nonroutine maintenance or repair operations that require detaching the source or source rod from the gauge.</p>	<p><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/></p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/> The information listed in Appendix F of this NUREG supporting a request to perform nonroutine maintenance in house is attached.</p>
10.9 RADIATION SAFETY PROGRAM—TRANSPORTATION	The applicant is <i>not</i> required to submit a response about transportation during the licensing process. The NRC will review this issue during inspection.	Need Not Be Submitted with Application	
11. WASTE MANAGEMENT—GAUGE DISPOSAL AND TRANSFER	The applicant is <i>not</i> required to submit a response about waste management during the licensing process; however, the licensee should establish and include gauge transfer and waste disposal procedures in its radiation safety program.	Need Not Be Submitted with Application	



HULL

Environment / Energy / Infrastructure

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