



**APPLICATION FOR MATERIALS
LICENSE**

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.

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. *AMENDMENTS/RENEWALS THAT INCREASE THE SCOPE OF THE EXISTING LICENSE TO A NEW OR HIGHER FEE CATEGORY WILL REQUIRE A FEE.

<p>APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:</p> <p>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</p> <p>ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:</p> <p>IF YOU ARE LOCATED IN:</p> <p>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,</p> <p>SEND APPLICATIONS TO:</p> <p>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</p>	<p>IF YOU ARE LOCATED IN:</p> <p>ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:</p> <p>MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION III 2443 WARRENVILLE ROAD, SUITE 210 LISLE, IL 60532-4352</p> <p>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,</p> <p>SEND APPLICATIONS TO:</p> <p>NUCLEAR MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION IV 1600 E. LAMAR BOULEVARD ARLINGTON, TX 76011-4511</p>
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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.

<p>1. THIS IS AN APPLICATION FOR (Check appropriate item)</p> <p><input type="checkbox"/> A. NEW LICENSE</p> <p><input type="checkbox"/> B. AMENDMENT TO LICENSE NUMBER</p> <p><input checked="" type="checkbox"/> C. RENEWAL OF LICENSE NUMBER <u>24-25896-01</u></p>	<p>2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)</p> <p>Bowen Engineering and Surveying, P.C. 2121 Megan Drive Cape Girardeau, MO 63701</p>								
<p>3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED</p> <p>2121 Megan Drive Cape Girardeau, MO 63701</p>	<p>4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION</p> <p>Wade Metcalf, RSO</p> <table border="1"> <tr> <td>BUSINESS TELEPHONE NUMBER</td> <td>BUSINESS CELLULAR TELEPHONE NUMBER</td> </tr> <tr> <td>(573) 339-5900</td> <td>(573) 803-9100</td> </tr> <tr> <td colspan="2">BUSINESS EMAIL ADDRESS</td> </tr> <tr> <td colspan="2">wademetcalf@bowenengsurv.com</td> </tr> </table>	BUSINESS TELEPHONE NUMBER	BUSINESS CELLULAR TELEPHONE NUMBER	(573) 339-5900	(573) 803-9100	BUSINESS EMAIL ADDRESS		wademetcalf@bowenengsurv.com	
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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.

<p>5. RADIOACTIVE MATERIAL</p> <p>a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.</p>	<p>6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.</p> <p>7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.</p>				
<p>8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.</p>	<p>9. FACILITIES AND EQUIPMENT.</p>				
<p>10. RADIATION SAFETY PROGRAM.</p>	<p>11. WASTE MANAGEMENT.</p>				
<p>12. LICENSE FEES (Fees required only for new applications, with few exceptions*) (See 10 CFR 170 and Section 170.31)</p>	<table border="1"> <tr> <td>FEE CATEGORY</td> <td>AMOUNT ENCLOSED \$</td> </tr> <tr> <td>n/a</td> <td>0.00</td> </tr> </table>	FEE CATEGORY	AMOUNT ENCLOSED \$	n/a	0.00
FEE CATEGORY	AMOUNT ENCLOSED \$				
n/a	0.00				

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, 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.

<p>CERTIFYING OFFICER – TYPED/PRINTED NAME AND TITLE</p> <p>Chris Bowen, President, Bowen Engineering and Surveying, P.C.</p>	<p>SIGNATURE</p>	<p>DATE</p> <p>1/23/14</p>
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FOR NRC USE ONLY					
TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	

5. Radioactive Material

Bowen Engineering owns and operates two Troxler 3440 moisture / density gauges.

<u>Element and Mass Number</u>	<u>Physical Form</u>	<u>Quantity per Gauge</u>
Cesium 137	Sealed Source	0.30 GBQ (8.0 MCI)
Americium 241	Sealed Source	1.48 GBQ (40.0 MCI)

 * SPECIAL FORM RADIOACTIVE SOURCE CERTIFICATE *
 * ORIGINAL *

THIS DOCUMENT MUST BE RETAINED BY THE RECIPIENT UNTIL SUCH TIME THAT THE MATERIAL IS TRANSFERRED INTO THE POSSESSION OF ANOTHER LICENSEE. A COPY OF THIS DOCUMENT MUST BE KEPT WITH THE GAUGE WHILE BEING TRANSPORTED ON PUBLIC HIGHWAYS IN THE UNITED STATES. INTERNATIONAL USERS SHOULD CONTACT THE LOCAL REGULATORY AGENCY TO DETERMINE THE DOCUMENTATION REQUIREMENTS.

SEALED SOURCE

 CS-137
 50 4478
 .30 GBQ(8.0MCI)

 22 JAN, 1988
 102112
 GB/140/S
 C64444
 20 APR, 1988

RADIOACTIVE MATERIAL
 SOURCE SERIAL NUMBER
 ACTIVITY
 NEUTRON OUTPUT (NPS)
 DATE OF MEASUREMENT
 TROXLER DRAWING NUMBER
 SPECIAL FORM CERTIFICATE
 ANSI SPECIFICATION
 ****DATE OF LEAK TEST****

SEALED SOURCE

 AM241:BE
 4710910
 1.48 GBQ(40MCI)
 8.4 X10⁻⁴
 17 NOV, 1987
 102451
 GB/7/S
 C64544
 20 APR, 1988

SOURCE(S) ARE CONTAINED IN TROXLER MODEL: 3440 SERIAL: 15517
 TRANSFERRED ON 20 APR, 1988. SALES ORDER NUMBER 16534

TO
 CODE : 7744000
 LICENSE:24-25896-01
 NAME :BOWEN ENGINEERING & SURVEYING
 111 NORTH MISSOURI AVENUE

 JACKSON, MO 63755

FROM
 32-182-1
 TROXLER ELECT. LABORATORIES, INC
 P. O. BOX 12057
 RESEARCH TRIANGLE PARK, NC 27709

D. Beasley

 RADIATION SAFETY DEPARTMENT

*** SPECIAL FORM, PACKAGE & TRANSPORT INFORMATION ***

- A. SPECIAL FORM- RADIOACTIVE MATERIAL USED IN THIS GAUGE HAS BEEN TESTED BY THE SOURCE MANUFACTURER TO MEET THE REQUIREMENTS AS SPECIAL FORM MATERIAL. THE ABOVE REFERENCED SPECIAL FORM CERTIFICATE HAS BEEN ISSUED BY AN INTERNATIONALLY RECOGNIZED 'COMPETENT AUTHORITY'. THE ABOVE REFERENCED LEAK TEST REVEALED THE REMOVABLE ACTIVITY TO BE LESS THAN 0.005 MICRO-CURIE. A RECOMMENDED WORKING LIFE FOR THIS SOURCE IS 15 YEARS. THIS IS BASED ON TOXICITY, HALF-LIFE, INITIAL ACTIVITY, CAPSULE DESIGN AND OPERATIONAL EXPERIENCE.
- B. PACKAGE CLASSIFICATION- THE ABOVE LISTED NUCLEAR GAUGE HAS BEEN TESTED AND MEETS THE REQUIREMENTS OF US DOT & IAEA REGULATIONS AS A 'TYPE A' PACKAGE. THE GAUGE MUST ALWAYS BE TRANSPORTED IN ITS ACCOMPANYING TRANSPORT CASE TO ENSURE COMPLIANCE WITH THE LABELING REQUIREMENTS. A REPORT OF TESTING AND EVALUATION TO AFFIRM THAT THE GAUGE IS SHIPPED AS A USDOT 7A TYPE A PACKAGE IS MAINTAINED ON FILE AT TROXLER ELECTRONIC LABS. INC. RESEARCH TRIANGLE PARK, NC 27709.
- C. BILL OF LADING:

RADIOACTIVE MATERIAL
 SPECIAL FORM-N.O.S. UN2974
 TYPE A PACKAGE
 RADIOACTIVE YELLOW II
 T.I. - 0.5

6. Purpose for Which Licensed Material Will Be Used

Two Troxler 3440 moisture / density gauges will be used in the measurement of physical properties of materials.

7. Individual Responsible for Radiation Safety Program and Their Training Experience

The name of the RSO is: Wade Metcalf

HAZMAT Certification and field training through Troxler Electronic Laboratories

Experience: 25 years of operating gauges

8. Training for Individuals Working in or Frequently Restricted Areas

Before using licensed materials, authorized users will have successfully completed training as described in NUREG 1556, Volume 1.

9. Facilities and Equipment

We have pre-determined that our gauge storage area complies with public dose limits and that sufficient security and control over the gauges are provided.

10. Radiation Safety Program

A radiation safety program was been previously established, the program is maintained and updated annually.

11. Waste Management – Gauge Disposal and Transfer

We are familiar with disposal and transfer methods and options.



Bowen Engineering & Surveying, Inc.
2121 Megan Drive
Cape Girardeau MO 63701

Materials Licensing Branch
US Nuclear Regulatory Commission
Region III
2443 Warrenville Road Suite 210
Lisle IL 60532-4352