

<b>NRC FORM 313</b> (05-2012) 10 CFR 30, 32, 33, 34, 35, 36, 39, and 40  <b>U.S. NUCLEAR REGULATORY COMMISSION</b>  <b>APPLICATION FOR MATERIALS LICENSE</b>	<b>APPROVED BY OMB: NO. 3150-0120</b> <b>EXPIRES: (05/31/2015)</b> 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 <a href="mailto:infocollects.Resource@nrc.gov">infocollects.Resource@nrc.gov</a> , and to the Desk Officer, Office of Information and Regulatory Affairs, NE0B-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.
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**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.**

<b>APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:</b>  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  <b>ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:</b>  <b>IF YOU ARE LOCATED IN:</b>  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,  <b>SEND APPLICATIONS TO:</b>  LICENSING ASSISTANCE TEAM DIVISION OF NUCLEAR MATERIALS SAFETY U.S. NUCLEAR REGULATORY COMMISSION, REGION I 2100 RENAISSANCE BOULEVARD, SUITE 200 KING OF PRUSSIA, PA 19406-2713	<b>IF YOU ARE LOCATED IN:</b> ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, <b>SEND APPLICATIONS TO:</b>  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,  <b>SEND APPLICATIONS TO:</b>  NUCLEAR MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION IV 1600 E. LAMAR BOULEVARD ARLINGTON, TX 76011-4511
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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.**

1. THIS IS AN APPLICATION FOR (Check appropriate item) <input checked="" type="checkbox"/> A. NEW LICENSE <b>47-31480-01</b> <input type="checkbox"/> B. AMENDMENT TO LICENSE NUMBER _____ <input type="checkbox"/> C. RENEWAL OF LICENSE NUMBER _____	2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)  Smith Land Surveying, Inc. PO Box 150 Glenville, WV. 26351
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3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED  226 West Main Street Glenville, WV. 26351  Anywhere where U. S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of radioactive materials	4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION  Michael D. Murphy  <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">BUSINESS TELEPHONE NUMBER (304) 462-5634</td> <td style="width:50%;">BUSINESS CELLULAR TELEPHONE NUMBER (304) 997-1597</td> </tr> <tr> <td colspan="2">BUSINESS EMAIL ADDRESS <a href="mailto:mmurphy@slssurveys.com">mmurphy@slssurveys.com</a></td> </tr> </table>	BUSINESS TELEPHONE NUMBER (304) 462-5634	BUSINESS CELLULAR TELEPHONE NUMBER (304) 997-1597	BUSINESS EMAIL ADDRESS <a href="mailto:mmurphy@slssurveys.com">mmurphy@slssurveys.com</a>	
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BUSINESS EMAIL ADDRESS <a href="mailto:mmurphy@slssurveys.com">mmurphy@slssurveys.com</a>					

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.		
7. 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.	12. LICENSE FEES (See 10 CFR 170 and Section 170.31)  <table style="width:100%;"> <tr> <td style="width:60%;">FEE CATEGORY 3P</td> <td style="width:40%;">AMOUNT ENCLOSED \$ 1,500.00</td> </tr> </table>	FEE CATEGORY 3P	AMOUNT ENCLOSED \$ 1,500.00
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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.

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE  Gregory R. Rhodes, Operations Manager	SIGNATURE  	DATE  8/30/12
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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

Element & Mass	Physical Form	Maximum amount of radioactivity which will be possessed at any one time.
A. Cs-137	Sealed source Troxler Electronic Labs Drawing Number A 102112	No source to exceed 9 mCi
B. Am-241: Be	Sealed source Troxler Electronic Labs Drawing Number A 102451	No source to exceed 44 mCi
C. Cs-137	Sealed source Amersham Corporation Model # CDCW 556 Capsule Type X. 1218 Model # CDCW 556 Capsule type XN.30 Isotope products Labs Model # HEG-137	No Source to exceed 9 mCi
D. Am-241: Be	Sealed source Amersham Corporation Model # AMNV.997 Capsule type X.1 Isotope Products Lab Am1.NO2 Model Nos. 3021 or 3027	No Source to exceed 44 mCi
E. Cs-137	Sealed source CPN 131	No source to exceed 10 mCi
F. Am-241: Be	Sealed source CPN 131	No source to exceed 50 mCi
G. Cs-137	Sealed source Amersham Corporation Model # CDCW 556 Capsule type X 1218 Model # CDCW 556 Capsule type XN. 30 Isotope Products Labs Model # HEG 0058 Capsule type 3024	No source to exceed 9mCi

# 6 Purpose for which licensed material will be used.

- A & B Used in Troxler model 3401 and 3411 to measure physical properties of materials.
- C & D Used in Troxler model 3430 and 3440 to measure physical properties of materials.
- E & F Used in CPN, MC Series to measure physical properties of materials.
- G Used in Troxler 4640 and 4640B to measure physical properties of material.

We anticipate that we will need the following quantities of Gauges:

Two (2) Troxler Model 3401.

Two (2) Troxler Model 3411.

Two (2) Troxler Model 3430.

Two (2) Troxler Model 3440.

Two (2) Troxler Model 4640.

Two (2) Troxler Model 4640B.

Two (2) CPN, MC Series.

For a total of fourteen (14) gauges.

# 7 Individual responsible for radiation safety program and their training experience.

Michael Murphy will be solely responsible for the Radiation Safety Program.

Training:

Hazmat Certification by Troxer, tracking Code: K995GBD7C7K99J6\_32332

Date: August 1, 2012

Nuclear Gauge Safety Certification by Troxler, Tracking Code: K995GBD7C7K99J6\_32333

Date August 1, 2012

# 8 Training for individuals working in or frequenting restricted areas.

Before using licensed materials, authorized users will have successfully completed one of training course described in Criteria in the section entitled "Training for Individuals Working In or Frequenting Restricted Areas" in NUREG 1556, Vol. 1, Rev. 1, dated November 2001.

# 9 Facilities and Equipment.

Radioactive material will be stored in a locked shipping crate 15 feet away from any full time work station. Area will have the required postings.

# 10 Radiation Safety Program.

Personnel Monitoring

- Ensure all radioactive materials are used only by individuals who are authorized and that personal monitoring devices are worn at all times. Badges will be exchanged at intervals not to exceed 3 months and be provided by an accredited NVLAP processor.
- Dose reports shall be reviewed by the RSO to determine compliance with regulatory exposure limits and to confirm that personnel exposures are ALARA.
- The monitoring report shall be posted and the RSO will maintain a copy on file.

Sealed Source Leak Testing

- Leak test will be performed at intervals approved by NRC or an Agreement State and specified in the Sealed 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 for 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

Radiation Detection Instruments

- We 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, dated November 2001.

Material Receipt and Accountability

- Ensure that all terms and conditions of the license and applicable regulations are complied with.
- Ensure radioactive materials are properly secured against unauthorized removal.
- Ensure audits of the program are performed annually and corrective action is taken.
- Ensure licensed is maintained current and amendment and renewal requests are submitted in a timely manner.
- Physical inventories of sealed sources will be conducted at intervals not to exceed 6 months.
- Records of receipt, transfer, and disposal of gauges will be maintained for at least 3 years.
- Annual audits will be performed and corrective action taken.

Public Dose

- Ensure that gauges are used, transported, and stored in a manner that no member of the public receives more than 100 mrem in one year.
- Ensure that the dose in any unrestricted area does not exceed 2 mrem in any one hour.

Operating and Emergency Procedures

- We will implement and maintain the operating and emergency procedures in Appendix H of NUREG-1556, Vol. 1, Rev. 1, dated November 2001, and provide copies of these procedures to all gauge users and at each job site.

The RSO will take the following action upon notification of an incident. An incident is defined as:

1. Lost, stolen or missing sources.
2. Events that cause or threaten exposures to individuals in excess of regulatory limits.
3. Leaking or contaminated sealed sources.

Arrange for a radiation survey to be conducted as soon as possible by a knowledgeable person using the appropriate radiation detection equipment to assess the integrity of the source encapsulation and shielding, and determine the extent of contamination, if any, of personnel, equipment, and facilities, or areas. Notify regulatory authorities as required. If initial notification was made by phone, a written report must be submitted within 30 days.

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 the removal of the source or source rod from the gauge.

Transportation

Transportation of radioactive material will be in accordance with all applicable Department of Transportation requirements. HAZMAT training will be accomplished at intervals not to exceed 3 years for ground transportation and 2 years intervals if shipping by air.



# 11 Waste Management

No radioactive waste per se is generated by the operations conducted under this license.

# Nuclear Gauge Safety Certification

This certifies that

Michael David Murphy

has successfully completed training on radiation safety and regulatory requirements for the use of portable nuclear gauges on this date.

August 01, 2012

**This certificate is not valid until signed by the licensee RSO.**

I attest that the person named above, and no other, has completed the online course and tests. I certify that the individual has completed practical skills training for setting up and making measurements, routine maintenance, packaging and transport, storage, and emergency procedures for portable nuclear gauges.

Licensee RSO

Michael David Murphy  
(print name)

Michael David Murphy  
Signature

8-1-12  
Date

Troxler Online Training meets the requirements in Chapter 64E, Part XIII, Florida Administrative Code.



© Troxler Electronic Laboratories, Inc.

P.O. Box 12057 - 3008 E. Cornwallis Road - Research Triangle Park, NC 27709

Phone: (919) 549-8661 - Fax: (919) 549-0761 - [www.troxlerlabs.com](http://www.troxlerlabs.com)

Course:

Nuclear Gauge Safety - OL

Tracking Code: K995GBD7C7K99J6\_32333

# HAZMAT CERTIFICATION

*as required by U.S. DOT and IATA*

This certifies that

Michael David Murphy

has been trained and tested in accordance with the U.S. Department of Transportation and International Air Transport Association (IATA) hazardous material requirements for general awareness/familiarization, function-specific, safety, and security awareness training as related to the transportation of nuclear gauges. A description of the training course materials is available from Troxler Electronic Laboratories, Inc. This certificate expires three years from the training date shown below.

August 01, 2012

## EMPLOYER CERTIFICATION

I certify that the hazmat employee identified on this certificate has been trained and tested as required by U.S. DOT Hazardous Material Regulations (49 CFR 172 Subpart H).

Signature Michael David Murphy Title Radiation Safety Officer



The Leader in Construction Testing Equipment

Troxler Electronic Laboratories, Inc.  
PO Box 12057-3008 Cornwallis Road - Research Triangle Park, NC 27709  
Phone: (919) 549-8661 - Fax (919) 549-0761 - [www.troxlerlabs.com](http://www.troxlerlabs.com)

Course: Hazmat

Tracking Code: K995GBD7C7K99J6\_32332