

NRC FORM 313
(1-2012)
10 CFR 30, 32, 33,
34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR MATERIALS LICENSE

APPROVED BY OMB: NO. 3150-0120

EXPIRES: (03/31/2012)

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.

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
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

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

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

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

Greenway Engineering, Inc.
151 Windy Hill Lane
Winchester, VA 22602

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Temporary Job Site

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Lloyd C. Winters, C.E.T., RSO

TELEPHONE NUMBER

540-662-4185

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)

FEE CATEGORY P-3

AMOUNT ENCLOSURE \$ 1,500.00

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.

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

Mark D. Smith, President

SIGNATURE

DATE

3.26.12

FOR NRC USE ONLY

TYPE OF FEE FEE LOG FEE CATEGORY AMOUNT RECEIVED CHECK NUMBER COMMENTS

\$

APPROVED BY

DATE



Founded in 1971

GREENWAY ENGINEERING, INC.

151 Windy Hill Lane
Winchester, Virginia 22602

March 26, 2012

#1 New License

#2 Greenway Engineering, Inc.
151 Windy Hill Lane
Winchester, VA 22602

Federal ID# [REDACTED]

#3 Temporary Job/Project Site

#4 Lloyd C. Winters, C.E.T., RSO
Work: 540-662-4185
Cell: 540-539-0691

**PERSONAL INFORMATION WAS REMOVED
BY NRC. NO COPY OF THIS INFORMATION
WAS RETAINED BY THE NRC.**

#5 Radioactive Material (Element & Mass Number)

A	B	C
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 and total not to exceed 200 millicuries
B. Am-241: Be	Sealed source Troxler Electronic Labs Drawing Number A 102451	No source to exceed 44 mCi and total not to exceed 1,000 millicuries

#6 Purpose(s) for which Licensed Material will be used?

Testing of Construction Materials, (ie.. -soils, aggregate and asphalt)

#7 Individual(s) Responsible for Radiation Safety Program and their Training Experience?

Lloyd C. Winters, C.E.T.
Initial Radiation Training – March 29, 1983
Troxler Radiation Safety Officer Course – May 1, 1996
Haz-Mat Refresher Course – September 27, 2012

#8 Training for Individuals working in or frequenting Restricted Areas

Training for individuals working in or frequenting restricted areas will be successful completion of an authorized radiation safety training class in accordance with appendix D of NUREG 1556.

#9 Facilities and Equipment

Radioactive material will be stored, when not in use, in the locked storage cage storage area in the west corner of the garage. Storage cage will be double locked and only personnel with the proper training will have access. Storage area will be 15 feet away from any full time work station. And the area will have the required postings and monitoring.

#11 Waste Management

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

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 tests will be performed at intervals not to exceed 6 months. Leak test samples will be analyzed by an organization authorized by the NRC or agreement state to perform analysis.

RADIATION DETECTION INSTRUMENTS

We will possess a survey meter in the event of an incident involving the gauge. It will be calibrated annually.

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 license 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

- Locate sources
- Seal off or cordon off a 15 foot radius around the gauge to prevent unauthorized entry.
- If a vehicle is involved, it must not be moved until the extent of contamination (if any) is determined.
- Visually inspect the gauge to determine whether the any damage to the source, shielding, or housing has been sustained.
- As soon as possible notify the RSO. Describe the present conditions and follow the instructions of the RSO.

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

Maintenance shall be conducted by the manufacturer or other persons specifically licensed by the US Nuclear Regulatory Commission or an Agreement State to perform such services.

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 year intervals if shipping by air.

ITEMS 5 AND 6: MATERIALS TO BE POSSESSED AND PROPOSED USES

Yes	No	Radioisotope	Manufacturer or Distributor Model No.	Quantity	Use As Listed on SSD Certificate	Specify Other Uses Not Listed on SSD Certificate
✓		Cesium-137	Sealed source manufacturer or distributor and model number: <u>Troxler</u> <u>Drawing # A102112</u> Device manufacturer or distributor and model number: <u>Troxler - 3411B</u>	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes <input checked="" type="checkbox"/> Specific description of the gauge use: _____ _____ _____ _____ _____	<input checked="" type="checkbox"/> Not applicable _____ <input type="checkbox"/> Uses are: _____ (Submit safety analysis supporting safe use)
✓		Americium-241	Sealed source manufacturer or distributor and model number: <u>Troxler</u> <u>Drawing # A102451</u> Device manufacturer or distributor and model number: <u>Troxler - 3411B</u>	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes <input checked="" type="checkbox"/> Specific description of the gauge use: _____ _____ _____ _____ _____	<input checked="" type="checkbox"/> Not applicable _____ <input type="checkbox"/> Uses are: _____ (Submit safety analysis supporting safe use)

APPENDIX B

Yes	No	Radioisotope	Manufacturer or Distributor Model No.	Quantity	Use As Listed on SSD Certificate	Specify Other Uses Not Listed on SSD Certificate
	✓	Californium-252	Sealed source manufacturer or distributor and model number: _____ Device manufacturer or distributor and model number: _____	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	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)
	✓	Other Isotope (Specify):	Sealed source manufacturer or distributor and model number: _____ Device manufacturer or distributor and model number: _____	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	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)
Financial Assurance Required and Evidence of Financial Assurance Provided						

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
<p>7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE – RADIATION SAFETY OFFICER</p> <p>Name: <u>Lloyd C. Winters</u></p>	Before obtaining licensed materials, the proposed RSO 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, dated November 2001.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS</p>	Before using licensed materials, authorized users will have successfully completed one of the 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>9. FACILITIES AND EQUIPMENT</p>	No information needs to be submitted in response to this item; key issues are addressed under "Radiation Safety Program – Public Dose" and "Radiation Safety Program – Operating and Emergency Procedures."	<p>Separate Item 9 Response</p> <p>Need Not Be Submitted With Application</p>	
<p>10. RADIATION SAFETY PROGRAM – AUDIT PROGRAM</p>	The applicant is <i>not</i> required to, and should not, submit its audit program to NRC for review during the licensing phase.	<p>Need Not Be Submitted With Application</p>	
<p>10. RADIATION SAFETY PROGRAM – TERMINATION OF ACTIVITIES</p>	The applicant is <i>not</i> required to submit a response to the termination of activities section during the initial application. However, when the license expires when the licensee ceases operation, NRC Form 314 must be submitted.	<p>Need Not Be Submitted With Application</p>	
<p>10. RADIATION SAFETY PROGRAM – SURVEY INSTRUMENTS</p>	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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Item No. And Title	Suggested Response	Yes	Alternative Procedures Attached
10. RADIATION SAFETY PROGRAM – MATERIAL RECEIPT AND ACCOUNTABILITY	Physical inventories will be conducted at intervals not to exceed 6 months, to account for all sealed sources and devices received and possessed under the license.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. RADIATION SAFETY PROGRAM – OCCUPATIONAL DOSIMETRY	Either we will maintain, for inspection by NRC, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of 10 percent of the allowable limits in 10 CFR Part 20, or we will provide dosimetry processed and evaluated by an NVLAP-approved processor that is exchanged at a frequency recommended by the processor.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. RADIATION SAFETY PROGRAM – PUBLIC DOSE	The applicant is <i>not</i> required to submit a response to the public dose section during the licensing phase. This matter will be examined during an inspection.	Need Not Be Submitted With Application	
10. RADIATION SAFETY PROGRAM – OPERATING AND EMERGENCY PROCEDURES	<p>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.</p> <p style="text-align: center;">OR</p> <p>Operating and emergency procedures will be developed, implemented, and maintained and will meet the criteria in the section entitled “Radiation Safety Program – Operating and Emergency Procedures” in NUREG-1556, Vol. 1, Rev. 1, dated November 2001.</p>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/>
10. RADIATION SAFETY PROGRAM – LEAK TEST	Leak tests 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/> The information in Appendix J supporting a request to perform leak testing and sample analysis is attached.

Item No. And Title	Suggested Response	Yes	Alternative Procedures Attached
10. RADIATION SAFETY PROGRAM – MAINTENANCE	<i>Routine Cleaning and Lubrication</i> We will implement and maintain procedures for routine maintenance of our gauges according to each manufacturer's recommendations and instructions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<i>Non-Routine Maintenance</i> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/> The information listed in Appendix G supporting a request to perform non-routine maintenance in-house is attached.
10. RADIATION SAFETY PROGRAM – TRANSPORTATION	The applicant is <i>not</i> required to submit its response to transportation during the licensing process. However, this issue will be reviewed 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 to waste management during the licensing process. However, the licensee should develop, implement, and maintain gauge transfer and disposal procedures in its radiation protection program.	Need Not Be Submitted With Application	

This is to acknowledge the receipt of your letter (application) dated

3/26/2012, and to inform you that the initial processing which includes an administrative review has been performed.

☒ New License (03038534)
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 577240.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.