

January 10, 2024

Licensing Assistance Team
Division of Nuclear Materials Safety
U.S. Nuclear Regulatory Commission, Region 1
475 Allendale Rd., Suite 102
King of Prussia, PA 19406-1415

RE: Amendment of License Number 47-25539-01 Application and Attachments #5 through #11

To Whom It May Concern:

Please see the attached Application to amend TERRADON Corporation's material license as well as the required documents #5 through #11.

We are requesting an amendment to our license due to a corporate re-structuring which requires the election of a new Radiation Safety Officer (RSO). TERRADON Corporation's new RSO shall be Michael Sword. His Safety and USDOT HAZMAT certifications as well as his RSO certification are attached.

Thank you and please let us know if there is anything else needed for processing.

Sincerely,



Brittany Beckwith
Radiation Safety Officer



Bill Hunt
President

(07-31-2023)
10 CFR 30, 32,
33, 34, 35, 36,
37, 39, and 40



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.

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/

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

MATERIALS SAFETY AND TRIBAL LIAISON BRANCH
DIVISION OF MATERIALS SAFETY, SECURITY, STATE AND TRIBAL 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 RADIOLOGICAL SAFETY AND SECURITY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD, SUITE 102
KING OF PRUSSIA, PA 19406-1415
R1DRSSMail.Resource@nrc.gov

*Note: The preferred method to submit NRC Form 313 is email. Any other document (e.g., financial assurance documents) should be sent via mail.

IF YOU ARE LOCATED IN:

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

MATERIALS LICENSING BRANCH
DIVISION OF RADIOLOGICAL SAFETY AND SECURITY
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352
R3-DRSSMAIL.Resource@nrc.gov

*Note: The preferred method to submit NRC Form 313 is email. Any other document (e.g., financial assurance documents) should be sent via mail.

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:

MATERIALS LICENSING BRANCH
DIVISION OF RADIOLOGICAL SAFETY AND SECURITY
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
1600 E. LAMAR BOULEVARD
ARLINGTON, TX 76011-4511
R4licensing@nrc.gov

*Note: The preferred method to submit NRC Form 313 is email. Any other document (e.g., financial assurance documents) should be sent via mail.

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 47-25539-01
C. RENEWAL OF LICENSE NUMBER

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

TERRADON CORPORATION
P.O. BOX 519
NITRO, WV 25143

3. LIST ADDRESS AND/OR TEMPORARY JOB SITE (TJS) ADDRESS, WHERE LICENSED MATERIALS WILL BE USED OR POSSESSED

- 1. 411 JACOBSON DRIVE, POCA, WV 25159 (38.4543,-81.8228)
2. 790 COURT STREET SOUTH, LEWISBURG, WV 24901 (37.8007,-80.4476)

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

BILL HUNT

BUSINESS TELEPHONE NUMBER
304-729-9133

BUSINESS CELLULAR TELEPHONE NUMBER
304-395-4179

BUSINESS E-MAIL ADDRESS
BILL.HUNT@TERRADON.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.

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

AMOUNT ENCLOSED \$

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. FAX THE COMPLETED NRC FORM 531 TO (301) 415-6725.

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

BILL HUNT, PRESIDENT

SIGNATURE

[Handwritten signature of Bill Hunt]

DATE

01-10-2024

FOR NRC USE ONLY

Table with columns: TYPE OF FEE, FEE LOG, FEE CATEGORY, \$ AMOUNT RECEIVED, CHECK NUMBER, COMMENTS. Includes rows for APPROVED BY and DATE.

Item 5: Radioactive Material

- Identify each radionuclide and nominal activity in each portable gauge.
Cesium – 137 0.3 GBq (8mCi)
Americium-241/Beryllium – 1.48 GBq (40mCi)
- Identify the manufacturer (or distributor) and model number of each type of portable gauge.
Troxler 3430, 3430P, 3440
- State the number of each type of portable gauge requested.
N/A
- Provide a description of the use of the gauges.
Gauges are used for compaction testing of soil, stone, and asphalt
- Confirm that the activity per source and maximum activity per gauge being requested will not exceed the maximum activity listed in the approved certificate of registration issued by the NRC or by an Agreement State.
TERRADON has 15 Troxler Nuclear Gauges.

The total Cesium-137 is 120 mCi, which is under our maximum 180mCi.
The total Americium-241/Beryllium is 600 mCi, which is under the 880mCi.

Item 6: Purpose(s) for Which Licensed Material Will Be Used

All gauges will be used to measure physical properties of materials, such as soil, stone, and asphalt.

Item 7: Individual(s) Responsible for Radiation Safety Program and Their Training and Experience –
Radiation Safety Officer

Brittany Beckwith is responsible for TERRADON's Radiation Safety Program. Brittany obtained her Safety and U.S. D.O.T. HAZMAT Certification on October 29, 2019 and completed a refresher course on Safety and U.S. D.O.T. HAZMAT Certification on February 15, 2021. Brittany obtained her Radiation Safety Officer (RSO) Certification on February 16, 2021. Due to a corporate re-structuring, Michael Sword will now be TERRADON'S RSO. Michael obtained his Safety and U.S. D.O.T. HAZMAT Certification on May 3, 2018 and completed a refresher U.S. D.O.T. HAZMAT Certification on August 1, 2022. Michael obtained his Radiation Safety Officer (RSO) Certification on January 9, 2024.

See attached certificates.

Item 8: Training for Individuals Working In or Frequenting Restricted Areas

Before using licensed materials, authorized users will have successfully completed one of the following courses described under “Criteria” in the section titled “Training for Individuals Working in or Frequenting Restricted Areas” in NUREG-1556. Volume 1, Revision 2, ‘Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses.’

Item 9: Facilities and Equipment

We ensure that portable gauges will be used, transported, and stored in such a way that members of the public will not receive more than 1 mSv [100 mrem] in a year, and the dose in any unrestricted area will not exceed 0.02 mSv [2 mrem] in any one hour, from licensed operations. We control and maintain constant surveillance over gauges that are not in storage and secure stored gauges from unauthorized removal or use, per Section 8.10.5 “Public Dose” in NUREG-1556, Vol. 1, Rev. 2, “Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses.”

We will implement and maintain the operating, emergency, and security procedures in Section 8.10.6 “operating, Emergency, and Security Procedures in 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.

Storage Locations:

- **411 Jacobson Dr., Poca, WV 25159 Facility (no change)**
- **790 Court Street South, Lewisburg, WV 24901 Diagram (no change)**

Item 10: Radiation Safety Program

- 10.1: Audit Program

TERRADON is not required to submit our Audit Program with this application

- 10.2: 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, Volume 1, Revision 2, “Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses,” in the event of an incident.

- 10.3: 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.

We will develop, implement, and maintain procedures for ensuring accountability of licensed materials at all times.

- 10.4: Occupational Dose

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.

- 10.5: Public Dose

TERRADON is not required to submit a response to this item.

- 10.6: Operating, Emergency, and Security Procedures

We will implement and maintain the operating, emergency, and security procedures in Appendix G to NUREG–1556, Volume 1, Revision 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.

- 10.7: Leak Test

Leak tests will be performed at intervals approved by the NRC or an Agreement State and specified in the Sealed Source and Device 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.

- 10.8: Maintenance

We will implement and maintain procedures for routine maintenance of our gauges according to each manufacturer's written recommendations and instructions.

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.

- 10.9: Transportation

TERRADON is not required to submit a response to this item.

Item #11 Waste Management – Gauge Disposal and Transfer
TERRADON is not required to submit a response to this item.

APNNGA Portable Nuclear Gauge Safety & U.S. D.O.T. Hazmat Certification Class

Certificate of Completion to:

Mike Sword

HAZMAT refresher training is required within 3 years after today's date:

May 3, 2018

This course covers training criteria of NUREG 1556, The Agreement States, and 49 CFR 172, Subpart H.

The Company RSO completes the training requirements by familiarizing the employee with:

- State specific regulations including introduction to the state regulatory website
- The company radiation safety program, specifically gauge safety operating and emergency procedures
- A tour of storage area with emphasis on security, documents and postings
- Loading, security and transporting gauges in company vehicles
- Hands-on training with the gauge and methods in use by the company
- Introduction to gauge safety content on gauge manufacturer website
- Certificate covers both Gauge Safety and USDOT HAZMAT requirements

The acknowledgement and signature of the RSO/Official makes the training and certificate relevant and valid.

Company Name

TERRADOST

Signature of RSO

Director of APNNGA

American Portable Nuclear Gauge Association
P.O. Box 423, Emmitsburg, MD 21727 • www.apnnga.com

J8TE6312Fo

George E. Marshall - Director
240-888-6426

U.S. D.O.T. HAZMAT CERTIFICATION

Refresher Training for Portable Nuclear Gauges

Certificate of Completion to:

Michael Sword

Training must be renewed within three years from today's date:

August 1, 2022

17775-165-937-8076

Certificate Serial Number

This course satisfies the training requirements of 49 CFR 172, Subpart H, including:

- General Awareness/Familiarization
- Function Specific Training
- Safety Training
- Security Awareness
- Driver Training

The organization RSO/Official must certify that the employee has been properly trained and tested per the requirements of 49 CFR 172, Subpart H. The acknowledgement and signature of the RSO/Official makes the training and certificate relevant and valid.

TERRADON CORPORATION

Company Name

BRITTANY BECKWITH

Company RSO/Official (print)



Signature of RSO/Official

American Portable Nuclear Gauge Association
P.O. Box 475, Pearce, AZ 85625 • www.apnga.com



George E. Marshall - Director
240-888-6426



APNGA
Certificate of Achievement

This confirms that

Michael Sword

Has successfully completed the APNGA Portable Nuclear Gauge

Radiation Safety Officer Class

on this day

January 9, 2024

51414-170-482-2675

Certificate Serial Number

American Portable Nuclear Gauge Association
P.O. Box 475, Pearce, AZ 85625 • www.apnga.com


George E. Marshall - Director
240-888-6426