



**State of Vermont**  
**Highway Division**  
Construction & Materials Bureau  
Central Laboratory  
2178 Airport Road, Unit B  
Berlin, Vermont 05641-8628  
<http://vtrans.vermont.gov>

[phone] 802-828-2561  
[fax] 802-828-2792  
[ttd] 800-253-0191

## Agency of Transportation

**DATE: January 18, 2019**

**TO: Mr. Dennis Lawyer, U.S. NRC, Health Physicist**

Dear Mr. Lawyer,

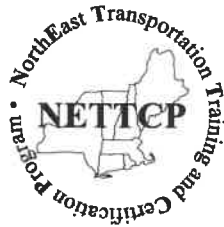
In response to your request for additional information regarding the letter dated December 17, 2019, requesting for amendment to Nuclear Regulatory Commission License No. 44-14149-02, Docket No. 03032893, control 610994.

1. The current name Construction & Materials Bureau's Central Laboratory on VTrans Material License No. 44-14149-02 is correct. Callie Ewald, P. E., Construction & Materials Bureau, Geotechnical Engineering Manager II is now in charge of the program. Callie's contact information is [callie.ewald@vermont.gov](mailto:callie.ewald@vermont.gov) and phone number is 802-828-1235. Mladen Gagulic is now the Director of the Construction & Materials Bureau, his email is [mladen.gagulic@vermont.gov](mailto:mladen.gagulic@vermont.gov). The reasoning for the change is, the Geotechnical Unit's personnel are the authorized users that use the Troxler portable nuclear gauges. The new to be Radiation Safety officer works in the Geotechnical Unit under Callie Ewald, P.E.
2. Included with this letter are the certificates for the Nuclear Gauge Safety & Hazmat 49 CFR Transportation, Radiation Safety officer Certificate, from Troxler on line course, and a certificate from the NorthEast Transportation Training & Certificate program, which includes portable nuclear gauge use, the RSO annual safety training course, signed, and the VTrans authorized user for the 2018 season. This was Mr. Staab's first year of an authorized user. Mr. Staab has assisted the IA unit in the past during Calibration & Verification of the nuclear gauges with the Instron Validator, (when that was an accepted process by AASHTO). Mr. Staab has been present during the RSO annual safety training for the past few years as well. This summer MR. Staab took part in the evaluation of the new Troxler E-gauge vs. the Troxler portable nuclear moisture/density gauge. He also filled in for the regional technician regarding compaction testing with a nuclear gauge when he was on leave.
3. Included with this letter are the last leak tests for the gauges SN:33641 & 33642 that were stored at the location in Hardwick, VT.

Regards,

John Domey, RSO  
Construction & Materials Bureau  
Central laboratory  
Independent Assurance Unit  
802-828-6914  
[John.domey@vermont.gov](mailto:John.domey@vermont.gov)

Callie Ewald, P. E.  
Construction & Materials Bureau  
Central laboratory  
Geotechnical Engineering Manager II  
[Callie.ewald@vermont.gov](mailto:Callie.ewald@vermont.gov)



# NorthEast Transportation Training and Certification Program

This is to certify that

John Staab III

has successfully completed the

Soils and Aggregate Inspector Certification  
Course and Examination

2037

Certification Number

Given on this date June 6, 2018

*Charles W. Brook*

Authorized NETTCP Signature





# *Radiation Safety Officer Certification*

This certifies that

**John Staab**

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has successfully completed the official Troxler Radiation Safety Officer Course. This person was taught and demonstrated knowledge of radiation safety and the regulatory requirements associated with the role of Radiation Safety Officer for a portable nuclear gauge license on this date:

**Dec 06, 2018**

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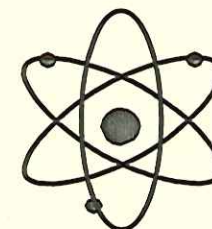
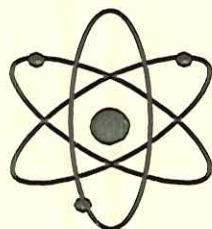


Troxler Electronic Laboratories, Inc.  
P.O.BOX 12057 - 3008 E. Cornwallis Road - Research Triangle Park, NC 27709  
Phone:(919) 549-8661 - Fax: (919) 549-0761 - [www.troxlerlabs.com](http://www.troxlerlabs.com)



# ***Q/C RESOURCE***

## ***Training Course Certification***



*This is to certify that*

**John J. Staab**

*has successfully completed the RSO and Operator's course as required by the U.S. Nuclear Regulatory Commission and the Agreement States, in the Fundamentals of Safety and Gauge operation, for the use of Nuclear Moisture / Density equipment. This course meets the requirements in NUREG 1556 Vol 1, Appendix D. It covered:*

*Atomic Physics*

*Radiation Safety*

*Dose/Shielding Calculations*

*Accidents/Storage*

*49 CFR Transportation*

*Risk*

*ALARA*

*Measurement Theory*

*Operation*

*Field Applications*

*Calibration*

*Maintenance*

*John E. Darnay  
UT Trans RSO  
John E. Darnay  
6/11/2018*

**April 30, 2018**

*Date Of Training*

**15262**

*Certificate Number*

*Instructor - Philip C. Palilla  
Manufacturer's Rep*

## **Individuals Designated for the Use of VTrans Portable Nuclear Moisture/Density Gauges 2018**

I John Domey the current Radiation Safety Officer (RSO) for VTrans, Designate John J. Staab III, in the Materials Testing & Certifications Laboratory, the use of the VTrans portable nuclear moisture/density gauges in accordance with the current NRC Materials License, number: 44-14149-02 Amendment number: 10, Section number: 11. This designation is for the current year 2018.

Along with this designation it gives you, (John J. Staab III), the responsibility of the VTrans nuclear gauge(s) that you have been assigned or use.

These responsibilities include the proper use of and the storage of the dosimeter badge that has been assigned to you.

It also includes the responsibilities for the VTrans portable nuclear gauge(s): proper storage, transportation, safe usage, proper log book documentation, and the monthly activity usage reports being sent to the current RSO.

Please keep this letter, print it off and place it in the volume 2 book next to your current certificate of training.

The serial numbers of the VTrans Nuclear gauges under this license are: 33221, 33222, 33274, 33357, 33641, 33642, 33644, and 33645.

Regards,

John E. Domey

Radiation Safety Officer

*John E. Domey 07/16/2018*



## Designated Individual for using a Portable Nuclear Moisture/Density Gauge During 2018

Name: John J. Staab III	Construction Region: Materials Testing & Certification Laboratory
RSO: John Domey	Date: 07/16/2018


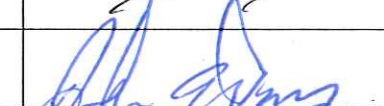
Is the personal certified /trained in safety use of a Troxler portable nuclear moisture/density gauge & Dot 23 CFR 172 for transporting? 04/30/2018 (Yes)

Has the personal been re-certified in the DOT 23 CFR 172 with in the 3-year limit? Yes  
Date of expiration= 04/30/2023

Has ALARA Principles, (As Low As Reasonably Achievable), Time- Minimize time with direct contact with device:  
Distance-Maximize distance from extended rod: Shielding-Never remove source from its shielding. (Yes)

- 1). Reviewed the storage procedures of a Troxler portable nuclear moisture/density gauge at a Construction Materials Regional Laboratory and or Materials Testing & Certification Laboratory. (Yes)
- 2). Reviewed the storage procedures of a Troxler portable nuclear moisture/density gauge if stored at their residence. (Yes)
- 3). Reviewed the transportation procedures of a Troxler portable nuclear moisture/density gauge. (Yes)
- 4). Review of safe usage of a Troxler nuclear gauge during T310 and while under surveillance in between tests. (Yes)
- 5). Reviewed the volume III booklet including Bill of Laden and the latest version of the Emergency Response Procedures with the personnel? (Yes)
- 6). Received training regarding the proper use of the dosimetry badge. (Yes)
- 7). Refresher training regarding the use of the radiation alert monitor. (Yes)
- 8). Reviewed the log sheet for storage facility/residence and the new monthly activity report that needs to be sent into the RSO monthly. (Yes)
- 9). Were electronic copies of the above reviews given to personal? (Yes)

With this training given by the RSO, (John Domey), John J. Staab III is designated the usage of the VTrans portable nuclear moisture/density gauges for the year of 2018.

Signature of Personal that received training in above Material:		DATE: 7.16.2018
Signature of RSO:		DATE: 7/16/2018

# Applied Health Physics, LLC

2986 Industrial Blvd., Bethel Park, Pa 15102 Phone: (412) 835-9555 Fax: (412) 835-9559

E-Mail address: kmobley.ahp@comcast.net - Web Page address: WWW.APPLIEDHEALTHPHYSICS.COM

## Mark V Leak Test Certificate

This certificate shall not be reproduced except in full, without written approval of Applied Health Physics, LLC.

### Device Information

Device Serial Number: 33641

Device Manufacturer: Troxler

Device Model: 3430

Device Type: Gauge

Make: Moisture Density

Radioisotope: Cs-137 / Am-241Be

Activity: 8 mCi / 40 mCi

Source Serial Number: 750-9309 / 47-1983

Source Manufacturer: Troxler

Source Model: 3430

Location: V Trans Berlin Materials Lab

### Leak Test Information

Leak Test Performed by: John Domey

Leak Test Specimen Number: A-046368

Leak Test Analysis Performed by: L. McAllister

Leak Test Results Indicate an Activity of: < 0.005 uCi

Leak Test Performed on: 9/26/2018

Leak Test Analysis Date: 10/9/2018

### Notification

Analysis of this leak test sample was provided by Applied Health Physics, LLC. Pennsylvania Department of Environmental Protection License Number PA-0228A. In the event this specimen indicates leakage and or contamination in excess of 0.005 microcuries, Applied Health Physics, LLC will notify you promptly by telephone; at such time you will need to take the appropriate actions required by the governing regulatory agency. Applied Health Physics, LLC utilizes the following for leak test (wet-swab) analysis: Model: MARK V Leak Test Kit. Applied Health Physics, LLC utilizes the following instruments for all MARK V Leak Test analysis: Protean Instruments - ASC-950 ; Perkin Elmer - Tri-Carb 2800TR ; Ludlum Measurements - 2200 and Ludlum Measurements - 2929.

### Client Information

State of Vermont Agency of Transportation

2178 Airport Rd Unit B

Construction & Materials Bureau

Contact: John Domey

Phone: (802) 828-6914

Contact: john.domey@vermont.gov

Phone: (802) 828-2792

Berlin VT 05641

This certificate is an essential record and should be maintained for review by a regulatory agency

Leak Test Due Dates are based upon Leak Test Analysis Date

Next LT Due 4/9/2019

# Applied Health Physics, LLC

2986 Industrial Blvd., Bethel Park, Pa 15102 Phone: (412) 835-9555 Fax: (412) 835-9559

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## Mark V Leak Test Certificate

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### Device Information

Device Serial Number: 33642

Device Manufacturer: Troxler

Device Model: 3430

Device Type: Gauge

Radioisotope: Cs-137/Am-241Be

Make: Moisture Density

Activity: 8 mCi / 40 mCi

Source Serial Number: 750-9310 / 47-3676

Source Manufacturer: Troxler

Source Model: 3430

Location: V trans Berlin Mats. Lab

### Leak Test Information

Leak Test Performed by: John Domey

Leak Test Specimen Number: A-046335

Leak Test Analysis Performed by: L. McAllister

Leak Test Results Indicate an Activity of:  $< 0.005 \text{ uCi}$

Leak Test Performed on: 9/26/2018

Leak Test Analysis Date: 10/9/2018

### Notification

Analysis of this leak test sample was provided by Applied Health Physics, LLC. Pennsylvania Department of Environmental Protection License Number PA-0228A. In the event this specimen indicates leakage and or contamination in excess of 0.005 microcuries, Applied Health Physics, LLC will notify you promptly by telephone; at such time you will need to take the appropriate actions required by the governing regulatory agency. Applied Health Physics, LLC utilizes the following for leak test (wet-swab) analysis: Model: MARK V Leak Test Kit. Applied Health Physics, LLC utilizes the following instruments for all MARK V Leak Test analysis: Protean Instruments - ASC-950 ; Perkin Elmer - Tri-Carb 2800TR ; Ludlum Measurements - 2200 and Ludlum Measurements - 2929.

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Construction & Materials Bureau

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VT 05641

Contact: John Domey

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