

JAN 28 1983

License No. 37-20585-01
Docket No. 030-19945
Control No. 01100

Valley Forge Laboratories, Inc.
ATTN: Richard H. Miller, Sr.
6 Berkeley Road
Devon, Pennsylvania 19333

Gentlemen:

Enclosed is License No. 37-20585-01. You should review this license for correctness and to assure that the procedures required by the conditions are implemented.

We wish you success with your licensed program.

Sincerely,

Original Signed By
John E. Glenn, Ph.D.

John E. Glenn, Ph.D., Chief
Nuclear Materials Section B
Division of Engineering and
Technical Programs

Enclosures:

1. License No. 37-02585-01
2. Form NRC-313I
3. Form NRC-3

OFFICE ▶	RI:DETP	RI:DETP					
SURNAME ▶	Jones/Jp	Glenn					
DATE ▶	1/21/83	1/27/83					

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter 1, Parts 30, 31, 32, 33, 34, 35, 36, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s); and to import such byproduct and source material. This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee		
1. Valley Forge Laboratories, Inc. 2. 6 Berkeley Road Devon, Pennsylvania 19333	3. License number	37-20585-01 ⁴
	4. Expiration date	January 31, 1988
	5. Docket or Reference No.	030-19945
6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Cesium 137	A. Sealed sources (Troxler Drawing No. A-102112)	A. Not to exceed 10 millicuries per source
B. Americium 241	B. Sealed source (Troxler Drawing No. A-102451)	B. Not to exceed 50 millicuries per source

9. Authorized use
A. and B. For use in Troxler Model Series 3400 gauges to measure properties of materials.

CONDITIONS

- Licensed material may be used at 6 Berkeley Road, Devon, Pennsylvania, and at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
- The licensee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions and Reports to Workers; Inspections" and Part 20, "Standards for Protection Against Radiation."
- Licensed material shall be used by, or under the supervision and in the physical presence of, individuals who have completed the training course provided by Troxler Electronic Laboratories, Inc., have been instructed in the licensee's operating and emergency procedures and are approved by the Radiation Protection Officer. Copies of the certificate of training for each user will be maintained.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

37-20585-01

Docket or Reference number

030-19945

(continued)

CONDITIONS

13. Sealed sources containing licensed material shall not be opened or removed from the portable moisture/density gauges by the licensee.
14. A. (1) Each sealed source containing licensed material, other than Hydrogen 3, with a half-life greater than thirty days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six months. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, a sealed source received from another person shall not be put into use until tested.
- (2) The periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within six months prior to the date of use or transfer.
- B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.
- C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Commission regulations. A report shall be filed within 5 days of the test with the U. S. Nuclear Regulatory Commission, Region I, 631 Park Avenue, King of Prussia, Pennsylvania 19406, describing the equipment involved, the test results, and the corrective action taken.
- D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Commission or an Agreement State to perform such services.
15. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for two (2) years from the date of the inventory for inspection by the Commission, and shall include the quantities and kinds of byproduct material, location of sealed sources, and the date of the inventory.
16. The licensee may transport licensed material or deliver licensed material to a carrier for transport in accordance with the provisions of Title 10, Code of Federal Regulations, Part 71, "Packaging of Radioactive Material for Transport and Transportation of Radioactive Material Under Certain Conditions."

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License number

37-20585-01

Docket or Reference number

030-19945

(continued)

CONDITIONS

- 17. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 6, 7, and 8 of this license in accordance with statements, representations, and procedures contained in application dated January 6, 1983. The Nuclear Regulatory Commission's regulations shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.



For the U.S. Nuclear Regulatory Commission

Original Signed By

John E. Glenn, Ph.D.

By

Nuclear Materials and Safeguards Branch
Region I
King of Prussia, Pennsylvania 19406

Date

JAN 28 1983

VALLEY
FORGE
LABORATORIES, INC.

ENGINEERING CONSULTANTS: SOILS • TRANSPORTATION • ENVIRONMENTAL STUDIES
CONSTRUCTION INSPECTION • MATERIALS TESTING • RESEARCH
SIX BERKELEY ROAD, DEVON, PENNSYLVANIA 19333 • TELEPHONE (215) 688-8517

January 17, 1983

Nuclear Regulatory Commission
1008 Eighth Avenue
King of Prussia, PA 19406

Attention: Dr. John Glenn

Dear Dr. Glenn:

Enclosed is a check for one hundred and ten (\$110.00) dollars and a completed application for a license for a nuclear density gage. If any additional information is needed, please contact me.

Very truly yours,

Richard H. Miller, Sr.

Richard H. Miller, Sr.
President

RHM:1cw
Enclosures

01100

JAN 18 1983

NRC Form 313 I (12-81) 10 CFR 30	U.S. NUCLEAR REGULATORY COMMISSION	1. APPLICATION FOR: <i>(Check and/or complete as appropriate)</i>
APPLICATION FOR BYPRODUCT MATERIAL LICENSE INDUSTRIAL		<input checked="" type="checkbox"/> a. NEW LICENSE

See attached instructions for details.

Completed applications are filed in duplicate with the Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety, and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555 or applications may be filed in person at the Commission's office at 1717 H Street, NW, Washington, D. C. or 7915 Eastern Avenue, Silver Spring, Maryland.

2. APPLICANT'S NAME <i>(Institution, firm, person, etc.)</i> Valley Forge Laboratories, Inc. <hr/> TELEPHONE NUMBER: AREA CODE – NUMBER EXTENSION 215/688-8517	3. NAME AND TITLE OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION Richard H. Miller, Sr. <hr/> TELEPHONE NUMBER: AREA CODE – NUMBER EXTENSION 215/688-8517
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4. APPLICANT'S MAILING ADDRESS <i>(Include Zip Code)</i> <i>(Address to which NRC correspondence, notices, bulletins, etc., should be sent.)</i> 6 Berkeley Road Devon, PA 19333	5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED <i>(Include Zip Code)</i> At address listed in Item #4 & at temporary job sites throughout the U.S. where the U.S. NRC maintains jurisdiction over by-product materials.
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(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

6. INDIVIDUAL(S) WHO WILL USE OR DIRECTLY SUPERVISE THE USE OF LICENSED MATERIAL
(See Items 16 and 17 for required training and experience of each individual named below)

FULL NAME	TITLE
a. David Blackmore	Geotechnical Engineer
b. or any individuals who have completed the training course provided by Troxler Electronic Laboratories, Inc., have been instructed in our operating and emergency procedures and are approved by the Radiation Protection Officer. Copies of the certificate of training for each user will be maintained in our files.	

7. RADIATION PROTECTION OFFICER David Blackmore	<i>Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15.</i>
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8. LICENSED MATERIAL

LINE NO.	ELEMENT AND MASS NUMBER A	CHEMICAL AND/OR PHYSICAL FORM B	NAME OF MANUFACTURER AND MODEL NUMBER <i>(If Sealed Source)</i> C	MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTIVITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME D
(1)	CS-137	Sealed Source	Troxler Drawing #A-102112	Not to exceed 10 MCi per source
(2)	AM 241:Be	Sealed Source	Troxler Drawing #A-102451	Not to exceed 50 MCi per source
(3)				
(4)				

License Fee Information

next page on reverse side

DESCRIBE USE OF LICENSED MATERIAL
E

(1) For use in Troxler Model 3400 Series Surface Moisture Density Gauges to measure properties of construction materials.

(3) 01100

9. STORAGE OF SEALED SOURCES

LINE NO.	CONTAINER AND/OR DEVICE IN WHICH EACH SEALED SOURCE WILL BE STORED OR USED. A.	NAME OF MANUFACTURER B.	MODEL NUMBER C.
(1)	Surface Moisture Density Gauge	Troxler Electronics	3400 Series
(2)			
(3)			
(4)			

10. RADIATION DETECTION INSTRUMENTS

LINE NO.	TYPE OF INSTRUMENT A	MANUFACTURER'S NAME B	MODEL NUMBER C	NUMBER AVAILABLE D	RADIATION DETECTED (alpha, beta, gamma, neutron) E	SENSITIVITY RANGE (milliroentgens/hour or counts/minute) F
(1)	None					
(2)						
(3)						
(4)						

11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

<input type="checkbox"/> a. CALIBRATED BY SERVICE COMPANY NAME, ADDRESS, AND FREQUENCY N/A	<input type="checkbox"/> b. CALIBRATED BY APPLICANT Attach a separate sheet describing method, frequency and standards used for calibrating instruments.
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12. PERSONNEL MONITORING DEVICES

TYPE (Check and/or complete as appropriate.) A	SUPPLIER (Service Company) B	EXCHANGE FREQUENCY C
<input checked="" type="checkbox"/> (1) FILM BADGE <input type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD) <input type="checkbox"/> (3) OTHER (Specify): _____ _____ _____	R.S. Landauer, Jr. & Co. Glenwood Science Park Glenwood, Illinois 60425 312/755-7000	<input checked="" type="checkbox"/> MONTHLY <input type="checkbox"/> QUARTERLY <input type="checkbox"/> OTHER (Specify): _____ _____ _____

13. FACILITIES AND EQUIPMENT (Check where appropriate and attach annotated sketch(es) and description(s).)

<input type="checkbox"/> a. LABORATORY FACILITIES, PLANT FACILITIES, FUME HOODS (Include filtration, if any), ETC. <input checked="" type="checkbox"/> b. STORAGE FACILITIES, CONTAINERS, SPECIAL SHIELDING (fixed and/or temporary), ETC. <input type="checkbox"/> c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC. <input type="checkbox"/> d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC.	See Attached Drawing
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14. WASTE DISPOSAL

a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED b. IF COMMERCIAL WASTE DISPOSAL SERVICE IS NOT EMPLOYED, SUBMIT A DETAILED DESCRIPTION OF METHODS WHICH WILL BE USED FOR DISPOSING OF RADIOACTIVE WASTES AND ESTIMATES OF THE TYPE AND AMOUNT OF ACTIVITY INVOLVED. IF THE APPLICATION IS FOR SEALED SOURCES AND DEVICES AND THEY WILL BE RETURNED TO THE MANUFACTURER, SO STATE. Sources will be returned to the manufacturer of another authorized licensee when use is discontinued.

INFORMATION REQUIRED FOR ITEMS 15, 16 AND 17

Describe in detail the information required for Items 15, 16 and 17. Begin each item on a separate page and key to the application as follows:

- 15. **RADIATION PROTECTION PROGRAM.** Describe the radiation protection program as appropriate for the material to be used including the duties and responsibilities of the Radiation Protection Officer, control measures, bioassay procedures *(if needed)*, day-to-day general safety instruction to be followed, etc. If the application is for sealed source's also submit leak testing procedures, or if leak testing will be performed using a leak test kit, specify manufacturer and model number of the leak test kit.

- 16. **FORMAL TRAINING IN RADIATION SAFETY.** Attach a resume for each individual named in Items 6 and 7. Describe individual's formal training in the following areas where applicable. Include the name of person or institution providing the training, duration of training, when training was received, etc.
 - a. Principles and practices of radiation protection.
 - b. Radioactivity measurement standardization and monitoring techniques and instruments.
 - c. Mathematics and calculations basic to the use and measurement of radioactivity.
 - d. Biological effects of radiation.

- 17. **EXPERIENCE.** Attach a resume for each individual named in Items 6 and 7. Describe individual's work experience with radiation, including where experience was obtained. Work experience or on-the-job training should be commensurate with the proposed use. Include list of radioisotopes and maximum activity of each used.

RECEIVED BY LFMD
 Date 1/24/83
 By Jan. 9 #
 Pg. 8
 Orig. To.....
 Action Compl. 1/25/83

Item 15 - See attached Radiation Safety Program
 Items 16-17 - Certificates not yet available. Three individuals from the company will be attending the Troxler Electronics Training Program on February 22, 23, 1983. (see attached confirmation)

18. CERTIFICATE

(This item must be completed by applicant)

Applicant # 1268
 Date 1/10/83
 Application
 1/24/83
 Richard H. Miller

The applicant and any official executing this certificate on behalf of the applicant named in Item 2 certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Part 30, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our 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.

a. LICENSE FEE REQUIRED <i>(See Section 170.31, 10 CFR 170)</i> \$110.00	b. CERTIFYING OFFICIAL <i>(Signature)</i> <i>Richard H. Miller</i>
	c. NAME <i>(Type or print)</i> Richard H. Miller
(1) LICENSE FEE CATEGORY: New 3L	d. TITLE President
(2) LICENSE FEE ENCLOSED: \$ 110.00	e. DATE January 6, 1983

ITEM 15 RADIATION SAFETY PROGRAM

1. Radiation Protection Officer

A. (Name of Individual Listed in Item 7) has been designated as the company Radiation Safety Officer and will assume the duties and responsibilities that include:

1. To assure that all terms and conditions of the license are being met; and, that the information contained in the license is up-to-date.
2. To ensure that the equipment has been leak tested in the required timely manner; and, that the leak test is performed in the manner prescribed by the equipment manufacturer.
3. To assure that the use of the equipment is only by individuals that have been authorized by the Radiation Protection Officer; and, that all users wear personnel monitoring equipment when utilizing the equipment.
4. To maintain the records as required by the license and the regulations. These records shall include personnel exposure records, leak test records and training certificates for all users.
5. To assure that the equipment is properly secured against unauthorized removal at all times when they are not in use.
6. To serve as a point of contact and give assistance in case of emergency such as equipment damaged in the field or theft; and, to notify the proper authorities in case of emergency.
7. To assure that all users have read and understand the Radiation Safety operating and emergency procedures.

2. Operating Procedures

A. Transportation of Equipment

1. All possible means shall be provided to ensure that the equipment is fully secured in the transporting vehicle; and, the equipment is away from the passenger compartment. When transporting in an enclosed vehicle (car or van) the vehicle will be locked. When transporting in an open bed vehicle, the gauge will be securely fastened and locked to the truck bed.
2. The gauge will be transported in the Troxler transportation case. The US Department of Transportation requires that the gauge be transported in a properly labeled carrying case.

B. Utilization Procedures

1. When the gauge is in the field, you as the authorized user must maintain control over the gauge at all times. The gauge must never be left unattended.
2. When not making measurements, the gauge should be placed in the transportation case, and returned to its permanent storage area as soon as possible. The gauge is to be used for its intended use only, by doing so you will maintain any radiation exposure to as low as reasonably attainable.
3. When using the equipment, you will wear the personnel monitoring device that has been assigned to you. When you are not using the equipment, your monitoring device is to be stored in the radiation free area that has been designated in the office.

C. Maintenance and Leak Test Procedures

1. Periodic maintenance will include cleaning the gauge. During any maintenance, you must wear your personnel monitoring device.
2. No maintenance will be performed in which the radioactive source is removed from the gauge. For this type of maintenance, the gauge will be returned to the manufacturer.
3. The leak test will be performed using the Troxler Model 3880 Leak Test Kit. The leak test will be performed under the manufacturer's instructions. Again, the personnel monitoring device will be worn and all means to limit radiation exposure will be employed. Gauges will be leak tested at intervals not to exceed six (6) months.

3. Emergency Procedures

- A. In the event of physical damage to a gauge, the following will be performed:

1. Immediately cordon off an area around the gauge. An area radius of 15 feet will be sufficient.
2. If a vehicle is involved, it must be stopped until the extent of contamination, if any, can be established.
3. A visual inspection of the gauge is to be made to determine if the source housing and/or shielding has been damaged.
4. At the earliest possible time, when the situation is under control, you must contact David Blackmore at 215/688-8517. Describe the present conditions and follow the instructions of the Radiation Safety Officer.

- B. In the event the gauge is lost or stolen, immediately notify the Radiation Safety Officer as listed above in Item 3.A.4.

TROXLER

January 13, 1983

Mr. Richard H. Miller, Sr.
Valley Forge Laboratories, Inc.
6 Berkeley Road
Devon, Pennsylvania 19333

Dear Mr. Miller:

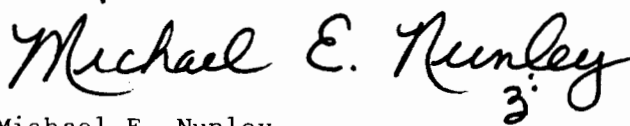
This will acknowledge receipt of your registration form for our Annual Nuclear Gauge Conference. This letter will be your confirmation for 3 individual(s) to attend the conference.

I have attached a schedule of activities which includes the location and telephone number of the motel at which this meeting will be held. For those attending the Raleigh, North Carolina conference, the meeting will be held at our main office in the Research Triangle Park, and I have included a suggested list of motels in the Raleigh area.

If I can provide any additional information or be of assistance, please let me know.

Sincerely,

TROXLER ELECTRONIC LABORATORIES, INC.

A handwritten signature in cursive script that reads "Michael E. Nunley". There is a small number "3" written below the signature.

Michael E. Nunley
Training Engineer

MEN:jj

Enclosures

01100

Troxler Electronic Laboratories, Inc.

P.O. Box 12057, Cornwallis Road, Research Triangle Park, North Carolina 27709, U.S.A. Telephone 919/549-8661, Cable Troxelec, Telex 579474

RECEIVED

'83 JAN 24 A11 :48

U.S. P.R.C.
LIC. FEE (MGM) 31-41201

PRE-REGISTRATION FORM

TROXLER NUCLEAR GAUGE CONFERENCE

CONFERENCE SITE

CHECK ONE

Detroit, Michigan..	January	20 - 21	_____
Orlando, Florida..	January	20 - 21	_____
Arlington, Texas..	February	3 - 4	_____
Research Triangle Park, North Carolina..	February	3 - 4	_____
Denver, Colorado..	February	7 - 8	_____
Sacramento, California..	February	14 - 15	_____
Seattle, Washington..	February	17 - 18	_____
Valley Forge, Pennsylvania..	February	22 - 23	<input checked="" type="checkbox"/>
Valley Forge, Pennsylvania..	February	24 - 25	_____

We will send 3 person(s) to the Annual Conference noted above. Enclosed is our _____ check _____ purchase order in the amount of \$330.00 (\$110.00 per person)

Name(s) RICHARD H. MILLER, Sr.

Company VALLEY FORGE LABORATORIES, INC.

Address 6 BERKELEY ROAD,

City/State/Zip DEVON, PA. 19333 Business Phone ²¹⁵⁻688-8517

Please return this form along with your check or purchase order to:

CONFERENCE
TROXLER ELECTRONIC LABORATORIES, INC.
P.O. BOX 12057
RESEARCH TRIANGLE PARK, N.C. 27709

PAID
330.00
JAN 6 1983
AQ. 1852
CK. # 1202

TROXLER ELECTRONIC LABORATORIES, INC.
NUCLEAR GAUGE CONFERENCE
SCHEDULE OF ACTIVITIES

LOCATION:

HOLIDAY INN VALLEY FORGE
260 Goddard Boulevard
King of Prussia, PA 19406
(215) 265-7500
(800) 238-8000

FEBRUARY 22, 1983

8:30 A.M. - 9:00 A.M.-----Registration
9:00 A.M. - 9:15 A.M.-----Welcome and Opening Remarks
9:15 A.M. - 10:30 A.M.-----Radiological Safety
10:30 A.M. - 10:45 A.M.-----Break
10:45 A.M. - 12:00 NOON-----Radiological Safety Continued
12:00 NOON - 1:30 P.M.-----Lunch (Not A Planned Function)
1:30 P.M. - 3:00 P.M.-----Gauge Operations
3:00 P.M. - 3:15 P.M.-----Break
3:15 P.M. - 5:00 P.M.-----General Discussion of Field Testing Techniques
and Gauge Applications
5:30 P.M. - 6:30 P.M.-----Cocktail Hour-----Holiday Inn
6:30 P.M. - 7:30 P.M.-----Dinner-----Holiday Inn

FEBRUARY 23, 1983

9:00 A.M. - 10:30 A.M.-----3241 Asphalt Content Gauge Operations
10:30 A.M. - 10:45 A.M.-----Break
10:45 A.M. - 12:00 NOON-----Gauge Calibration, Maintenance and Repair