

Rec'd u Comp Rm
5/16/80

FORM NRC-313 I (1-79) 10 CFR 30		U.S. NUCLEAR REGULATORY COMMISSION		1. APPLICATION FOR: (Check and/or complete as appropriate)	
APPLICATION FOR BYPRODUCT MATERIAL LICENSE INDUSTRIAL				a. NEW LICENSE	
				b. AMENDMENT TO: LICENSE NUMBER	
				c. RENEWAL OF: LICENSE NUMBER 45-16546-01	
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 (Institution, firm, person, etc.) Atec Associates of Virginia, Inc. TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION 804-583-1557		3. NAME OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION Peter A. Lipphardt TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION 804-583-1557			
4. APPLICANT'S MAILING ADDRESS (Include Zip Code) 7611 Sewells Point Road Norfolk, Virginia 23513		5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED (Include Zip Code) Address in item 4; and temporary jobsites of the licensee in states under the USNRC jurisdiction			
(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. Peter A. Lipphardt		Director, Materials Testing Division			
b. Roland E. Dubbe', P. E.		Vice President			
c. C. H. Powers		Technician, Assistant R. S. O.			
7. RADIATION PROTECTION OFFICER Peter A. Lipphardt		Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15.			
8. LICENSED MATERIAL					
L I N E NO.	ELEMENT AND MASS NUMBER A	CHEMICAL AND/OR PHYSICAL FORM B	NAME OF MANUFACTURER AND MODEL NUMBER (If Sealed Source) C	MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTI- VITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME D	
(1)	Cesium 137/ Americium 241:Be	Sealed Source	Troxler Dwq. A-100281, Rev. B	See Attached (#1)	
(2)	Cesium 137	Sealed Source	Troxler Dwq. A-102112	10 Millicuries of cesium 137 per source	
(3)	Americium 241	Sealed Source	Troxler Dwq. A-102451	50 millicuries Americium per source	
(4)					
DESCRIBE USE OF LICENSED MATERIAL E					
(1)	Density and moisture determinations of soils, etc.				
(2)	Density measurement of soils, asphalt, etc.				
(3)	Moisture determinations				
(4)	Applicant... Check No. 311... Type or Fee Category... Date Check Rec'd... Received By...				
COPIES SENT TO OFF. OF INSPECTION AND ENFORCEMENT					
RECEIVED BY LFMD Date MAY 7 1980 Log. May 7 1980 By BROWN Orig. To... Action Compl. 5/8/80					
FORM NRC-313 (1-79) Fee Category... Type or Fee Category... Date Check Rec'd... Received By...					

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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	2401, 2402, 2451, or 2452
(2)	Surface Moisture/Density Gauge	Troxler	3401, 3401 B, 3411, or 3411 B
(3)	Surface Moisture/Density Gauge	Troxler	3401, 3401 B, 3411, 3411 B
(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)	N/A					
(2)						
(3)						
(4)						

11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

☒ a. CALIBRATED BY SERVICE COMPANY

NAME, ADDRESS, AND FREQUENCY

Troxler Electronic Laboratories Inc.
Research Triangle Park, N. C. 27709
(annually)

☐ b. CALIBRATED BY APPLICANT

Attach a separate sheet describing method, frequency and standards used for calibrating instruments.

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	R. S. Landauer Jr & Co. Division of Technical Operations Inc.	<input type="checkbox"/> MONTHLY
<input type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD)	Glenwood Scient Park Glenwood, Ill. 60485	<input checked="" type="checkbox"/> QUARTERLY
<input type="checkbox"/> (3) OTHER (Specify): _____		<input type="checkbox"/> OTHER (Specify): _____

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

- ☐ a. LABORATORY FACILITIES, PLANT FACILITIES, FUME HOODS (include filtration, if any), ETC.
- ☒ b. STORAGE FACILITIES, CONTAINERS, SPECIAL SHIELDING (fixed and/or temporary), ETC. See Pg 2 (addend.)
- ☐ c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC.
- ☐ d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC.

14. WASTE DISPOSAL

a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED

N/A

- 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.

If necessary they will be returned to manufacture. (See 11a above)

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.

18. CERTIFICATE

(This item must be completed by applicant)

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
(See Section 170.31, 10 CFR 170)

b. CERTIFYING OFFICIAL (Signature)

c. NAME (Type or print)

Peter A. Lipphardt

(1) LICENSE FEE CATEGORY: 3.L.

d. TITLE

Director Technical Services, Radiation

(2) LICENSE FEE ENCLOSED: \$ 110.00

e. DATE

4/18/80

Protection Officer

FORM NRC 313 (I) SUPPLEMENTARY PAGE #1

APPLICANT: ATEC ASSOCIATES OF VIRGINIA, INC.

LICENSE # 45-16546-01 (RENEWAL)

Continuation of Item #8 (1-D)

"Not to exceed 10 millicuries of Cesium 137 and 50 millicuries of Americium
241 per source"

Atec Associates

Geotechnical and Materials Engineers

CLIENT

(LINE 13b.)

FILE NUMBER NRC 313-(I)

SHEET 2 OF 5

DATE 4/18/80

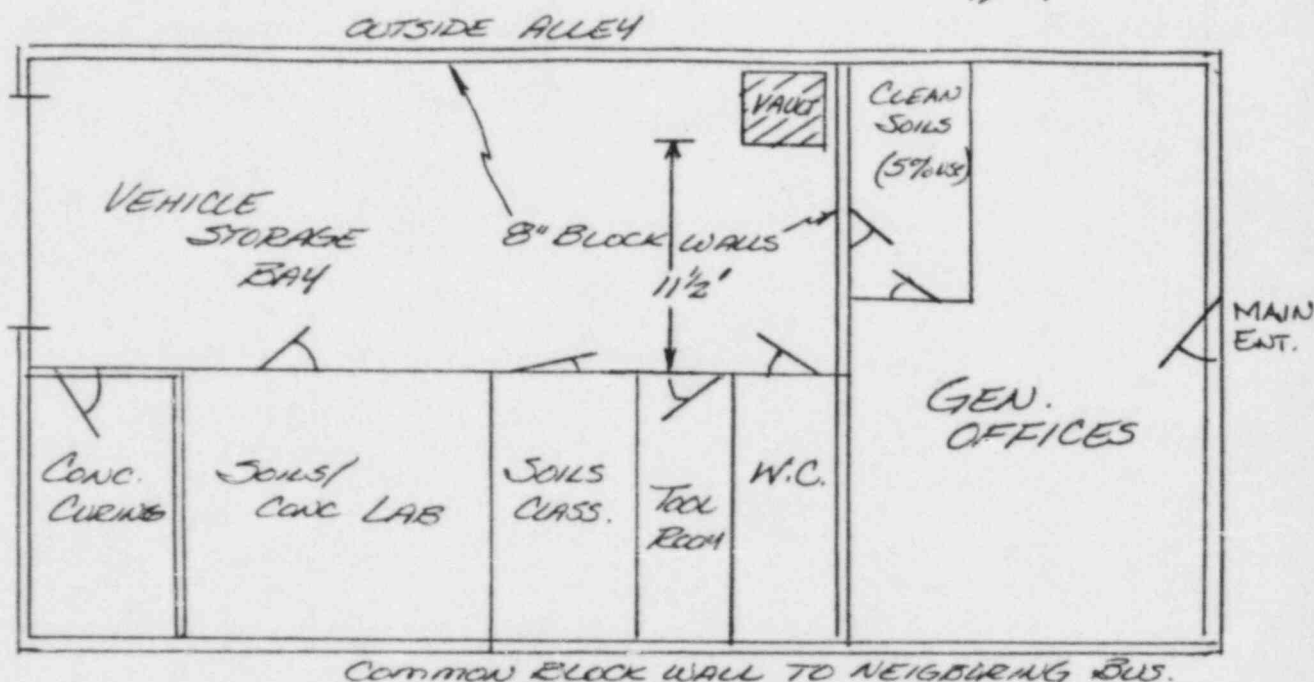
COMPUTED BY PAL

CHECKED BY

PROJECT APPLICATION FOR RENEWAL,
MAT'L'S LICENSE # 45-16546-01

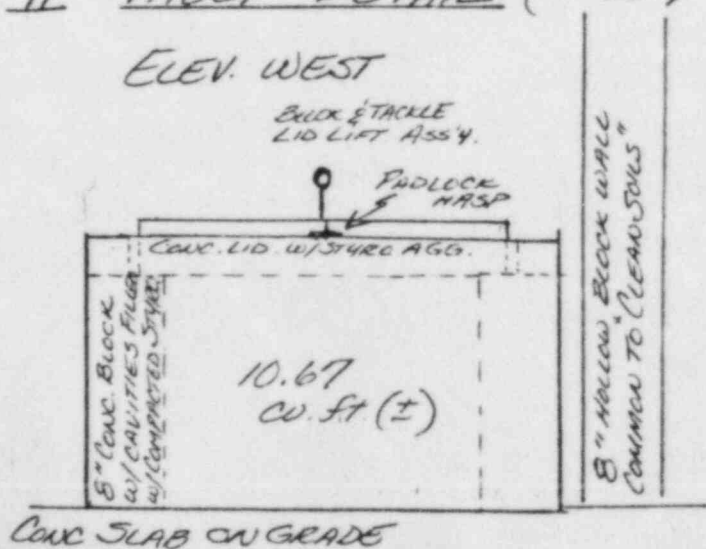
LOCATION & DETAILS - STORAGE FACILITY (TROXLER GAUGES)

I. STORAGE AREA LOCATION - ATEC OFFICE (NOT TO SCALE)

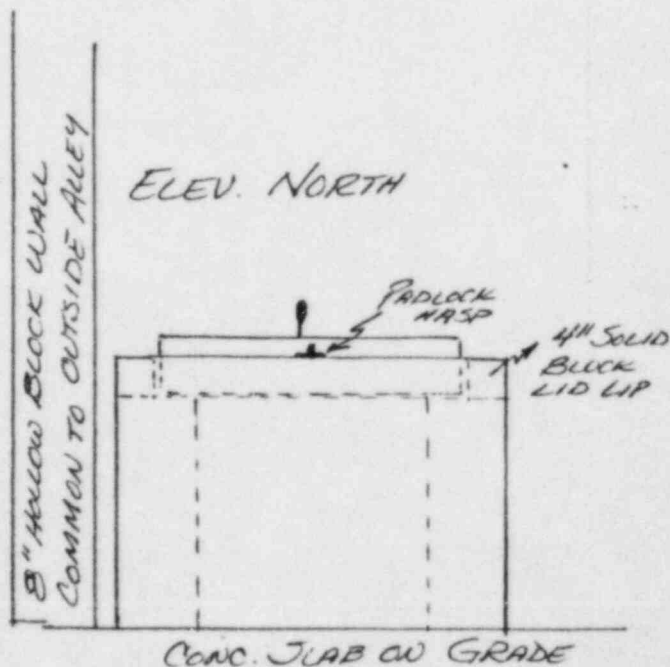


II VAULT DETAIL (1" = 20")

ELEV. WEST



ELEV. NORTH



FORM NRC 313 (1) SUPPLEMENTARY PAGE #3

APPLICANT: ATEC ASSOCIATES OF VIRGINIA, INC.

LICENSE # 45-16546-01 (RENEWAL)

"Item 15 Radiation Protection Program"

The radiation protection program conforms to the provisions of Title 10, chapter 1, code of Federal Regulations, Part 20, and the submittal accompanying the application for the license expiring 6/30/80. The program requires: the safe storage of the nuclear gauges (see attached sketch); the gauges, when in the field must be operated by, or under the direct supervision of personnel who have successfully completed the manufacture's certification program (2 days) of radiological safety and gauge operation; all gauge operators will have individually assigned film badges (evaluated by R. S. Landauer Jr, Co. at the end of each calendar quarter); all operators are supplied with the final dosimetry summary for their badge if employment is terminated.

The Radiation Safety Officer's duties and responsibilities include the following: prompt dispatch and reissuance of film badges; posting of quarterly and annual dosimeter reports; inventory and maintenance of gauges; semi-annual leak testing of gauges (by means of Troxler Wipe Test kit Model 3880 - analyzed by manufacturer); to ensure proper storage procedures are maintained; updating of NRC license; posting of current regulations and information bulletins from NRC; to ensure required conditions for transporting gauges are met.

FORM NRC 313 (I) SUPPLEMENTARY PAGE #4

APPLICANT: ATEC ASSOCIATES OF VIRGINIA, INC.

LICENSE # 45-16546-01 (RENEWAL)

Item 16, number 1

Peter A. Lipphardt, Director of Technical Services, Radiation Protection Officer, Atec Associates of Virginia, Inc.

a,b,c,d and gauge operation training: In-house training Atec Associates of Virginia, Inc. Most recent formal training from Troxler 1/23-1/24/79.

Number 2

Roland E. Dubbe', P. E. Vice President/District Manager, Atec Associates of Virginia, Inc.

a,b,c,d and gauge operation training: same as above, except Troxler date is 2/27-2/28/75.

Number 3

C. H. Powers, Field Technician, Assistant Radiation Safety Officer, Atec Associates of Virginia, Inc.

a,b,c,d, and gauge operation training. In-house training, Atec Associates of Virginia, Inc. Most recent formal training from Troxler 9/5-9/6/79.

FORM NRC 313 (I) SUPPLEMENTARY PAGE # 5

APPLICANT: ATEC ASSOCIATES OF VIRGINIA, INC.

LICENSE # 45-16546-01 (RENEWAL)

Item 17, number 1

Peter A. Lipphardt, Radiation experience limited to Troxler Nuclear Gauges in 2400 and 3400 series (see item 8, lines 1-3 for radioisotopes involved).

Experience (on the job training) began in 1973 operating 2401 gauge under direct supervision of Radiation Protection Officer, Atec Associates of Maryland, Inc. Basic use-soil density determinations in the field. Has since used gauges for density determinations of asphalt and base course (including FAA projects) materials and moisture content analysis of built-up roofing. Presently certified by Manufacturer.

Number 2

Roland E. Dubbe'

Experience (on the job training) began in 1974, operating 2401 gauge under direct supervision of Radiation Protection Officer, Atec Associates of Maryland, Inc.

Number 3

C. H. Powers, On the job training in soils and asphalt density determinations, under supervision of number 1 above, began June, 1979, employing 2400 and 3400 series gauges (see item 8, lines 1-3 for radioisotopes and max. activity). Presently certified by manufacturer. Currently undergoing instruction on duties and responsibilities of Radiation Protection Officer.

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