

APPLICATION FOR BYPRODUCT MATERIAL LICENSE
INDUSTRIAL

X a. NEW LICENSE

b. AMENDMENT TO:
LICENSE NUMBER

c. RENEWAL OF:
LICENSE NUMBER

30-17525

L+L 19387

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.)

Vecellio & Grogan, Inc.

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION
304-252-6575

3. NAME OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION

Ralph L. Beckett

03120

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION
304-252-6575 Ext. 40

4. APPLICANT'S MAILING ADDRESS (Include Zip Code)

Drawer V
Beckley, West Virginia 25801

5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED
(Include Zip Code)

Throughout the State of West
Virginia, Ohio and Virginia

(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. Only those personnel who as a minimum have completed the manufacturer's safety or
b. equivalent, demonstrated their knowledge in safe use of the equipment and have been
designated by the Radiation Protection officer, will be allowed to operate the
c. equipment.

7. RADIATION PROTECTION OFFICER

David F. Mathias and
Ralph L. Beckett

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	Sealed Source	#A-102112 Troxler drawing	8 MC: \pm 10%
(2)	Americium 241	Sealed Source	#A-102451 Troxler drawing	40 MC: \pm 10%
(3)	Beryllium	Sealed Source	#A-102451 Troxler drawing	40 MC: \pm 10%
(4)				

DESCRIBE USE OF LICENSED MATERIAL
E

- (1) Troxler Model 34118 Surface Moisture - Density Gauge
(2) Troxler Model 34118 Surface Moisture - Density Gauge
(3) Troxler Model 34118 Surface Moisture - Density Gauge

License Fee Information

on [unclear] side

(4) 8005130406

LD PP

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)	Stainless Steel doubly encapsulated and shielded by Tungsten and lead.	Troxler International Ltd.	3411-B
(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)	Radiation Monitoring device	Victoreen	492	1	Gamma, X-Ray	0-10MR/HR. 0-100MR/HR.
(2)						
(3)						
(4)						

11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

☒ a. CALIBRATED BY SERVICE COMPANY

NAME, ADDRESS, AND FREQUENCY

Troxler International Ltd.
Research Triangle Park
North Carolina 27709

☐ b. CALIBRATED BY APPLICANT

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

N/A

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. Landayer Jr. Co. Glenwood Science Park Glenwood, Illinois 60425	<input checked="" type="checkbox"/> MONTHLY
<input type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD)		<input 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.
- ☐ c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC.
- ☐ d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC.

14. WASTE DISPOSAL

a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED

Troxler International Ltd.

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.

N/A

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.

See Attachment #1

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.

See Attachment #2

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.

See Attachment #2

Applicant.....
Check No. 340
Amount/Fee Category \$110.00 (3L)
Date of Fee Application 5/2/80
Date Check Rec'd. 5/2/80
Received By. Joshua

18. CERTIFICATE

This item must be completed by applicant

RECEIVED BY LFMB	
Date 5/2/80	
Log May 80 - 104	
By JF	
Orig. To	
Action Compl. 5/5/80	

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) <i>Ralph L. Beckett</i>	
c. NAME (Type or print) David F. Mathias & Ralph L. Beckett		d. TITLE Engineer ; Engineer	
e. DATE 4-16-1980			
(1) LICENSE FEE CATEGORY:	\$110.00		
(2) LICENSE FEE ENCLOSED: \$	\$110.00		



RADIATION PROTECTION PROGRAM

Radiation Protection Officer

A. Duties and Responsibilities

1. The safe use of gauge.
2. Assure compliance with the requirements of Title 10 CFR Parts 19, 20, 30, 71 and all applicable US Dot. Regulations.
3. Assure by products materials possessed under the License are in conformity to materials listed on License.
4. Assure that use of devices (particularly in field) is only by person name as users under the License or person who have completed acceptable training.
5. Assure all users wear personnel monitoring equipment when using gauges.
6. Assure gauges are properly secured against unauthorized removal at all times.
7. To serve as point of contact and give assistance in case of emergency - to insure all proper authorities are notified promptly in case of accidents.
8. Assure that terms conditions of License are met such as:
 - (a) Periodic Leak tests are performed (Procedure Item H).
 - (b) All required records are kept and reviewed periodically for compliance with regulations - these include source certificate, Leak test records, personnel exposure records, and transfer of radioactive materials.

B. Handling Procedures

1. All persons must be approved by David Mathias or Ralph Beckett (Radiological Safety Officers) before using or operating gauge.
2. When not in use, the source will be kept in the safe or storage position.
3. All persons must wear Film Badge when transporting or using gauge.
4. Never expose yourself to the bare source.
5. Unauthorized persons shall be kept out of operating area. (5 meter minimum). The general public must not be unnecessarily exposed to radiation.
6. When not in use the source lock will be in place and gauge will be kept in a locked vehicle when being transported. When stored, the room will be locked.
7. Insure yourself that gauge has been leak tested before operating.
8. Any questions about gauge - ask David Mathias or Ralph Beckett (Radiological Safety Officers).

C. Security

Maintain lock on all gauges to prevent accidental exposure of sealed source when not under direct supervision of approved personnel. Also, storage container shall be physically secured to prevent tampering or removal by unauthorized personnel.

D. Personnel Monitoring

All personnel will wear film badge when operating gauges. These will be provided to you by the Radiological Safety Officers. All film badge reports will be maintained for inspection.



VECELLIO & GROGAN INC.

RADIATION PROTECTION PROGRAM

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E. Record and Reports

1. Inventory conducted weekly to account for all units.
2. All gauges will be Leak tested by the Radiological Safety Officers at intervals not to exceed six (6) months. If Leak test has not been performed, the gauge will not be used until tested.
3. All film badge reports will be maintained for inspection at P. O. Drawer V, Beckley, West Virginia 25801.
4. Upon termination of employment, the individual will receive a record of total dose received.

F. Incidents

1. Any theft or loss of License material will be reported via telegram or telephone to the appropriate agency, including state agency. Also, a written report will be furnished to those agencies within thirty (30) days detailing source description, circumstances of loss, disposition statement, possible radiation hazard and exposure, action taken to recover the source and action taken to prevent the recurrence of loss or theft.
2. All over exposures of operator, which exceed limits set forth in 10 CFR Part 20, will be furnished to agency detailing circumstances of exposure and possible injury.

G. Handling and Emergency Procedures

1. Only personnel approved by Radiological Safety Officers may use or transport gauges and these requirements are met.
2. Before approval is obtained each individual will demonstrate their ability to correctly and safely use the gauge to the Radiological Safety Officers.
3. The gauge will be returned to its temporary storage area at the end of each day.
4. In the event of physical damage to the gauge, a ten (10) foot radius exclusion area will be maintained until the extent of source damage (if any) is determined. If a vehicle is involved, it will be stopped and remain stopped until the extent of contamination hazard (if any) is determined. If visual examination of the instrument and source rod indicate damage to the source rod tip, including fracture of the top or weld, you should notify the Department of Health and Troxler Electronics Laboratories, Inc. and keep personnel clear of the instrument. You should remove the instrument from the site by using a long handled shovel or long handled instrument and place it in a suitable container such as a metal drum. You should make provisions to have the site surveyed after the removal of instrument to determine if a breakage had occurred. Disposition by the factory, as covered later, would be arranged after a leak test had been performed to determine the integrity of the source before transport back to factory.
5. Notification via telephone will be made immediately to the following in the event of an accident (4 above) or loss of a sealed source, whether it be due to an accident or theft.

RADIATION PROTECTION PROGRAM

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H. Company Radiological Safety Officers:1. David Mathias:

304-252-6575 - Office
304-763-4936 - Home

Ralph Beckett:

304-252-6575 - Office
304-253-4655 - Home

2. NRC Regional Office - if applicable: 404-526-4503

3. State Health Department -
Radiological Protection Division: 304-348-3526

4. Local Authorities:

	<u>Fire Dept.</u>	<u>Sheriff</u>	<u>State Police</u>	<u>City Police</u>
Beckley	255-6189	255-6171	253-8311	255-1421

I. Leak Test Procedure:1. External Source

- Lay gauge on its side and base away from operator.
- Position the handle in the 4" direct transmission position.
- Using tongs and wood dowel for pressure, wipe the weld area on the source rod tip with the filter paper.
- Retract the source and sit gauge upright.

2. Internal Source:

- Remove the data processor.
- Look into cavity, a yellow and magneta label can be seen just forward of the printed circuit board assembly.
- Using the tongs and dowel for pressure as before, wipe the edge of this label with filter paper.
- Lay filter paper on the towel and allow to air dry in a flat position.
- Seal in a plastic envelope.
- Place plastic envelope into another envelope and write your company name, address and other information. This envelope is marked Radioactive Material.
- Place this envelope into another envelope and address it to Troxler Electronics Labs, Inc.
- Before mailing, check with survey meter.
No dose rate greater than 0.5 millirem per hour to comply with U. S. Postal Reduction.

TROXLER ELECTRONIC LABORATORIES, INC.

HEREBY CERTIFIES THAT

DAVID F. MATHIAS

of

VECELLIO & GROGAN, INC.

HAS SUCCESSFULLY COMPLETED THE TROXLER ELECTRONIC LABORATORIES, INC.
TRAINING COURSE FOR THE USE OF NUCLEAR TESTING EQUIPMENT.

SUBJECTS INCLUDED IN THIS COURSE WERE AS FOLLOWS:

Radiological Safety

1. Principles and practices of radiation protection.
2. Leak testing procedures.
3. Mathematics and calculations basic to the use and measurement of radioactivity.
4. Biological effects of radiation.
5. Radioactivity measurement standardization and monitoring techniques and instruments.
6. Accident and incident procedures.
7. Procedures for nuclear gauge storage and transportation.
8. General safety precautions.

Gauge Operation

1. Instrument theory
2. Operating procedures
3. Maintenance
4. Field application
5. Gauge calibration


INSTRUCTOR

1/28-29/80

DATE

WILLIAM F. TROXLER

PRESIDENT

Page 1 of 2

Attachment 2

TROXLER ELECTRONIC LABORATORIES, INC.

HEREBY CERTIFIES THAT

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TRAINING COURSE FOR THE USE OF NUCLEAR TESTING EQUIPMENT.

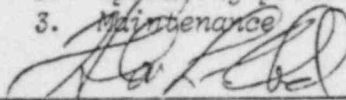
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Gauge Operation

- | | |
|-------------------------|----------------------|
| 1. Instrument theory | 4. Field application |
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| 3. Maintenance | |


INSTRUCTOR

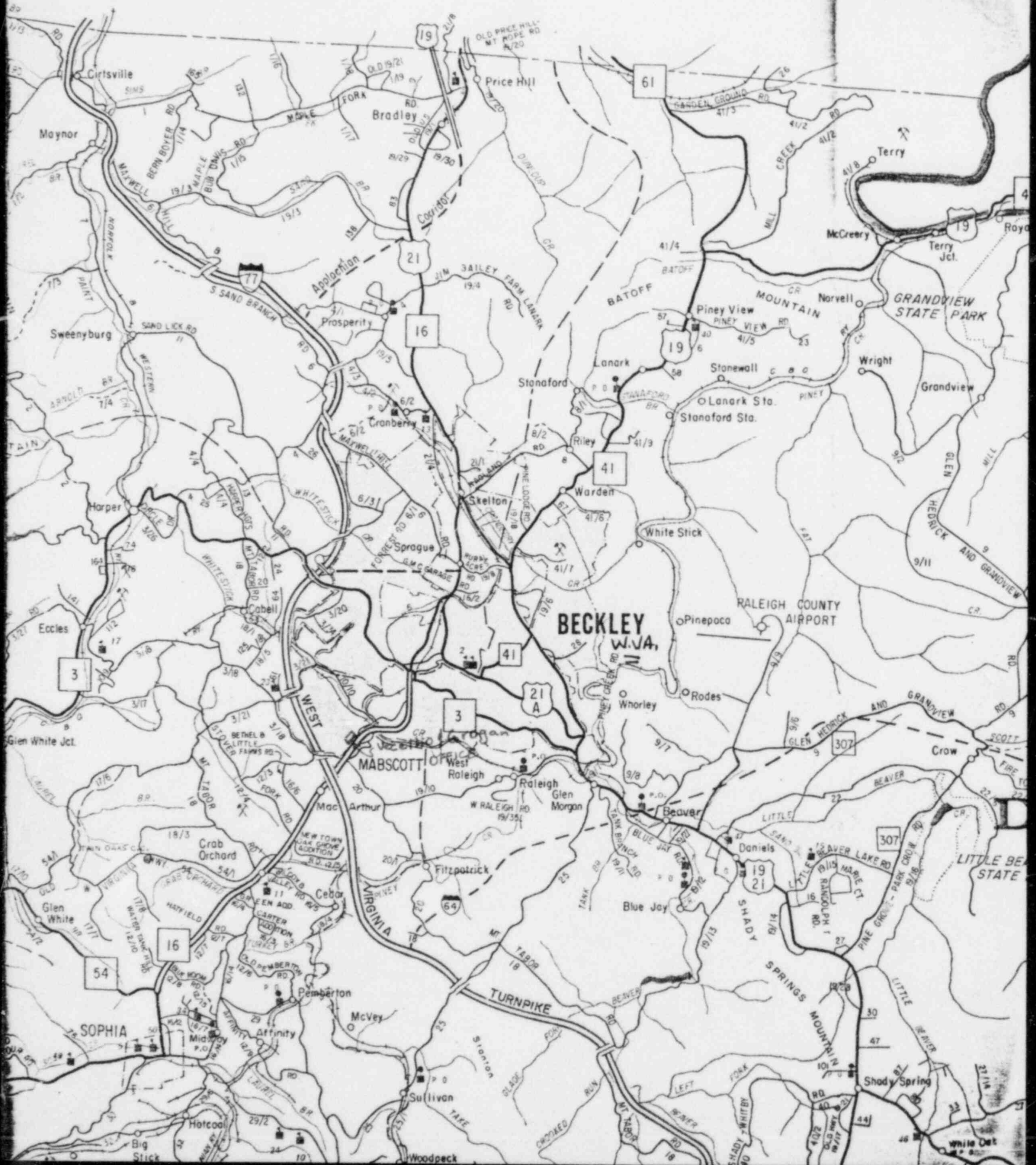
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DATE

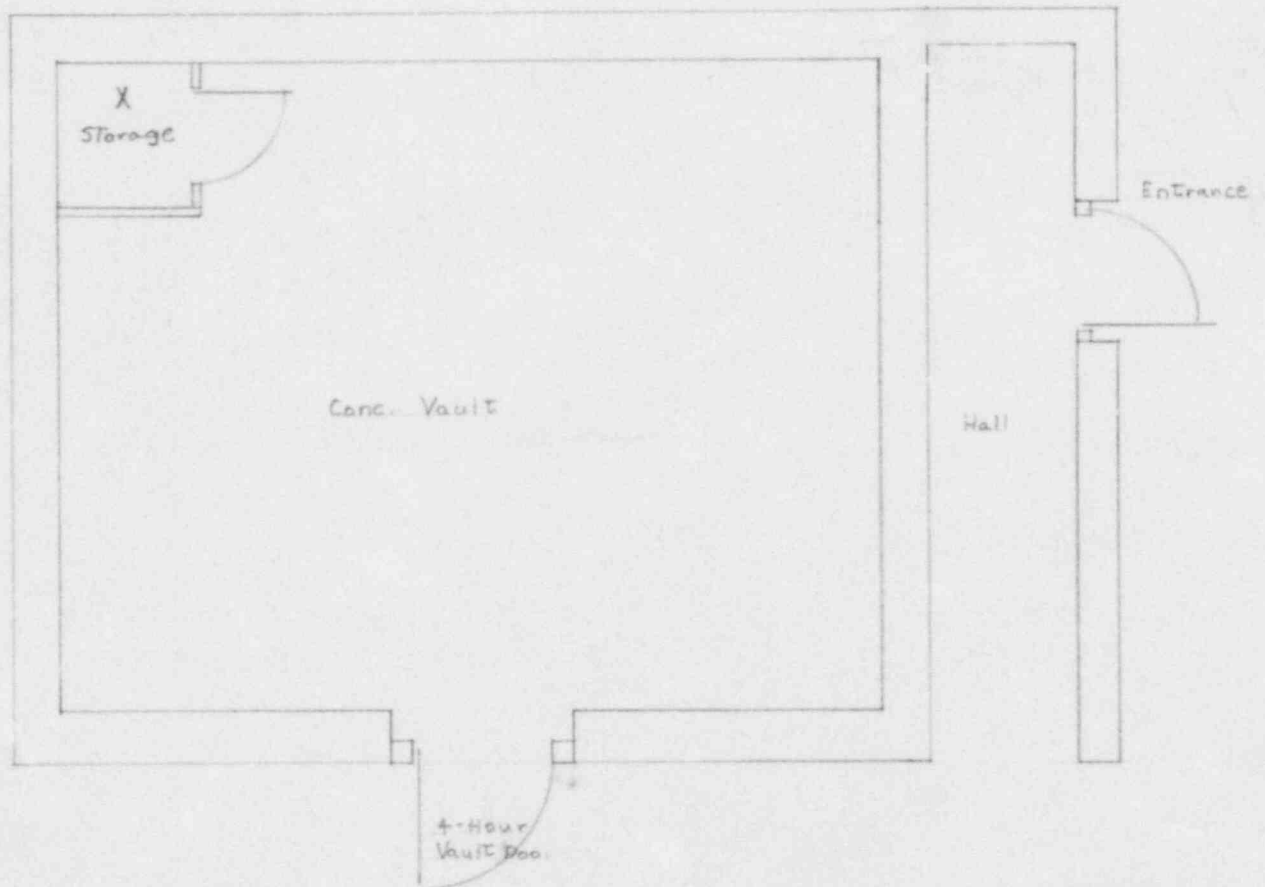
WILLIAM F. TROXLER

PRESIDENT

F A Y E T T E



Permanent Storage Facility at Vecellio & Grogan, Inc. Office



03536