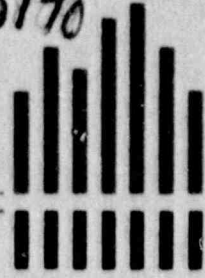


252684  
-20170



CONSTRUCTION ENVIRONMENT, INC.

89 FEB 11

5655-D GENERAL WASHINGTON DRIVE • ALEXANDRIA, VIRGINIA 22312 • (703) 750-0525

February 14, 1988

U. S. Nuclear Regulatory Commission, Region II  
Nuclear Materials Safety Section  
101 Marietta Street, Suite 2900  
Atlanta, GA 30323

Reference: Renewal of License No. 45-17380-02

Gentlemen:

Enclosed find an application for renewal of License No. 45-17380-02 and a check in the amount of \$120.00 for the appropriate renewal fee.

Sincerely,

CONSTRUCTION ENVIRONMENT, INC.

Robert N. Endebrock, P.E.  
Vice President

29 FEB 27 1988

Log	Feb-4-D
Number	
Check No.	7137
Amount	\$120
Fee/Amount	38
Type of License	Ren
Date Check Cashed	2/27/89
Date Completed	2/28/89
By	Mission

9003080035 890419  
REG2 LIC30  
45-17380-02 PDR

Construction Environment, Inc., Alexandria, VA.  
Renewal of License No. 45-17380-02

5. Radioactive Material:

Delete: (a) CS-137 and AM-241:Be  
(b) Sealed source  
(c) Troxler model 2401 gauge  
(d) 0.0087 Ci./0.04 Ci.

Add: (a) CS-137 and AM 241:Be  
(b) Sealed source  
(c) Troxler model 3440 Nuclear Density Gauge,  
Serial No. 14144  
(d) 0.008 Ci./0.040 Ci.

6. Purpose for which licensed material will be used:

Gauges to measure moisture content, density and compaction of soils, soil-stone aggregates, cement and asphalt treated bases and asphalt surfacing.

7. Radiation Protection Officer:

Delete: Jeffrey F. Mosher

Add: Mirkazem Farhangi, P. E., Project Manager

Individuals who will use equipment:

Delete: Jeffrey F. Mosher  
Anthony D. Charfauros

Add: Mirkazem Farhangi, Project Manager  
Enefiok Anwana, Field Engineer  
Nehme Pierre Klat, Field Engineer

Construction Environment, Inc., Alexandria, Va.  
Renewal of License No. 45-17380-02

Page 2

8. Training:

Mirkazem Farhangi - Successfully completed the Troxler Electronic Laboratories, Inc. training course for the use of nuclear testing equipment. Included in this course were subjects on radiological safety and gauge operation. Certification received May 14, 1987. One and one-half years of relevant field experience with the nuclear soil gauge.

Enefiok Anwana - Successfully completed the Troxler Laboratories, Inc. training course for the use of nuclear testing equipment. Included in this course were subjects on radiological safety and gauge operation. Certification received November 24, 1987. One year of relevant field experience with the nuclear soil gauge.

Nehme Pierre Klat - Completed the Campbell Pacific Nuclear Corporation basic training course on Radiation Safety and Use of Nuclear Soil Gauges, receiving certification on February 26, 1987. Two years of relevant field experience with the nuclear soil gauge.

## APPLICATION FOR MATERIAL LICENSE

**INSTRUCTIONS:** SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

**APPLICATIONS FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:**

U.S. NUCLEAR REGULATORY COMMISSION  
DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS  
WASHINGTON, DC 20546

**ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS, IF YOU ARE LOCATED IN:**

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION I  
NUCLEAR MATERIALS SAFETY SECTION B  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PA 19406

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION II  
NUCLEAR MATERIALS SAFETY SECTION  
101 MARIETTA STREET, SUITE 2800  
ATLANTA, GA 30323

**IF YOU ARE LOCATED IN:**

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

U.S. NUCLEAR REGULATORY COMMISSION, REGION III  
MATERIALS LICENSING SECTION  
799 ROOSEVELT ROAD  
GLEN ELLYN, IL 60137

ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION IV  
MATERIAL RADIATION PROTECTION SECTION  
611 RYAN PLAZA DRIVE, SUITE 1000  
ARLINGTON, TX 76011

ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION V  
NUCLEAR MATERIALS SAFETY SECTION  
1450 MARIA LANE, SUITE 210  
WALNUT CREEK, CA 94596

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 JURISDICTION.

**1. THIS IS AN APPLICATION FOR (Check appropriate item)**

- A. NEW LICENSE  
 B. AMENDMENT TO LICENSE NUMBER \_\_\_\_\_  
 C. RENEWAL OF LICENSE NUMBER 45-17380-02

**2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip Code)**

Construction Environment, Inc.  
5655-D General Washington Drive  
Alexandria, Virginia 22312

**3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED.**

- a. 5655-D General Washington Drive, Alexandria, Virginia 22312  
b. Various construction sites in Virginia, Maryland and the District of Columbia

**4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION**

Robert N. Endebrock, Vice President

**TELEPHONE NUMBER**

(703) 750-0525

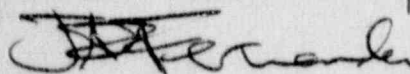
SUBMIT ITEMS 5 THROUGH 11 ON 8 1/2 x 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

<p><b>5. RADIOACTIVE MATERIAL</b> a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time.</p>	<p><b>6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.</b></p>
<p><b>7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.</b></p>	<p><b>8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.</b></p>
<p><b>9. FACILITIES AND EQUIPMENT.</b></p>	<p><b>10. RADIATION SAFETY PROGRAM.</b></p>
<p><b>11. WASTE MANAGEMENT.</b></p>	<p><b>12. LICENSEE FEES (See 10 CFR 170 and Section 170.31)</b> FEE CATEGORY <u>3P</u>      AMOUNT ENCLOSED \$ <u>120.00</u></p>

**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, 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.

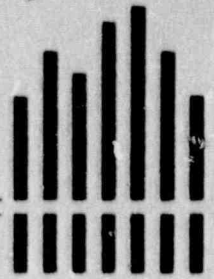
SIGNATURE—CERTIFYING OFFICER 	TYPED/PRINTED NAME Jose. I. Fernandez	TITLE President	DATE 2/13/89
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**FOR NRC USE ONLY**

TYPE OF FEE	FEE LOG	FEE CATEGORY	COMMENTS	APPROVED BY
AMOUNT RECEIVED	CHECK NUMBER			DATE

03121

# CONSTRUCTION ENVIRONMENT, INC.



5655 D GENERAL WASHINGTON DRIVE • ALEXANDRIA, VIRGINIA 22312 • (703) 750-0525

October 14, 1983

Mr. Robert A. Brown  
U. S. Nuclear Regulatory Commission  
Region III  
101 Marietta Street, N. W., Suite 3100  
Atlanta, Georgia 30303

Reference: License No. #5-17380-01

Dear Mr. Brown:

The enclosed materials are submitted pursuant to your request. We apologize for the delay and trust that you will find everything in order to bring our license validity up to date.

If there are any questions, please contact the undersigned directly. Thank you for your kind consideration.

Very truly yours,

CONSTRUCTION ENVIRONMENT, INC.

Jose I. Fernandez, P.E.  
Chief Engineer

JIF/vdd

Enclosures

RECEIVED  
83 NOV -9 AM 0:21  
U.S. NUC. REG. COMM. SPANISH

Applicant	4430
Check No.	4430
Amount/Fee Category	#110-3L
Type of Fee	Application
Date Check Recd	11/30/84
Received By	Brown

RECEIVED BY LFMB	
Date	11/9/83
Log	Nov 4H
By	6
Orig To	
Action Compl	11/27/83 2/2/84

Applicant	
Check No.	385
Amount/Fee Category	#110-3L
Type of Fee	Application
Date Check Recd	11/18/82
Received By	

Per PB This fee will be transferred from this acct not supply C.N. 11/29 into acct July-1882 PF 82 request of sub C. 11/29

50101

Received 10/24/83  
76

APPLICATION FOR BYPRODUCT MATERIAL LICENSE  
INDUSTRIAL

a. NEW LICENSE

b. AMENDMENT TO:  
LICENSE NUMBER

c. RENEWAL OF:  
LICENSE NUMBER  
45-17380-01

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.)

Construction Environment, Inc.

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION  
(703) 750-0525

3. NAME OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION

Jose I. Fernandez, President

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION  
(703) 750-0525

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

5655-D General Washington Drive  
Alexandria, VA 22312

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

Various construction sites in Virginia, Washington, D. C. and Maryland.

(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.	Jeffrey F. Mosher	Laboratory-Field Coordinator
b.	<del>Raymond M. ...</del>	<del>...</del>
c.	Anthony D. Charfauros	Field Technician

7. RADIATION PROTECTION OFFICER

Jeffrey F. Mosher

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)	CS-137 and AM-241-BE	Sealed source	Troxler 3411	.0076/.04
(2)	CS-137 and AM-241-BE	Sealed source	Troxler 3411	.0076/.04
(3)	CS-137 and AM-241-BE	Sealed source	Troxler 2401	.0087/.04
(4)				

DESCRIBE USE OF LICENSED MATERIAL  
E

(1) For use in the determination of moisture and density of in-place soil in  
(2) connection with construction testing and inspection.

(3)

(4)

**9. STORAGE OF SEALED SOURCES**

LINE NO.	CONTAINER AND/OR DEVICE IN WHICH EACH SEALED SOURCE WILL BE STORED OR USED.	NAME OF MANUFACTURER	MODEL NUMBER
	A.	B.	C.
(1)	Container supplied by manufacturer	Troxler Electronic Laboratories, Inc.	3411
(2)	" " " "	" "	3411
(3)	" " " "	" "	2401
(4)			

**10. RADIATION DETECTION INSTRUMENTS**

LINE NO.	TYPE OF INSTRUMENT	MANUFACTURER'S NAME	MODEL NUMBER	NUMBER AVAILABLE	RADIATION DETECTED <i>(alpha, beta, gamma, neutron)</i>	SENSITIVITY RANGE <i>(milliroentgens/hour or counts/minute)</i>
	A	B	C	D	E	F
(1)	Geiger Counter	Eberline Instrument Corp.	E-130G	2		0.25 MR/HR
(2)	See item 12					
(3)						
(4)						

**11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10**

<input checked="" type="checkbox"/> <b>a. CALIBRATED BY SERVICE COMPANY</b> NAME, ADDRESS, AND FREQUENCY Health Physics Services, Inc. 7825 Tuckerman Lane, Suite 201 Potomac, MD 20854	<input type="checkbox"/> <b>b. CALIBRATED BY APPLICANT</b> Attach a separate sheet describing method, frequency and standards used for calibrating instruments.
---	--

**12. PERSONNEL MONITORING DEVICES**

TYPE <i>(Check and/or complete as appropriate.)</i>	SUPPLIER <i>(Service Company)</i>	EXCHANGE FREQUENCY
A	B	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.	<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).)

- 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  
 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.  
 No radioactive wastes are generated by this equipment, since it uses sealed sources.  
 Any source in need of repair or replacement will be returned to the manufacturer.

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:

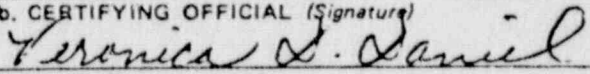
15. RADIATION PROTECTION PROGRAM. Describe the radiation protection program as appropriate for the material to be used including the duties and responsibilities of the Radiation Protection Officer, control measures, bioassay procedures (if needed), day-to-day general safety instruction to be followed, 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)  \$50.00	b. CERTIFYING OFFICIAL (Signature) 
	c. NAME (Type or print) Veronica D. Daniel
(1) LICENSE FEE CATEGORY: 170.31-3	d. TITLE Assistant Secretary
(2) LICENSE FEE ENCLOSED: <del>\$ 50.00</del>	e. DATE April 2, 1982



CONSTRUCTION ENVIRONMENT, INC.

SUPPLEMENTAL INFORMATION FOR NRC-3131

ITEM 5 - Duties of Radiation Safety Officer include:

- (1) Checking to see that nuclear density gauges are used safely and properly in the field and used only by authorized personnel, wearing film badges.
- (2) Keeping all records in accordance with license terms and conditions concerning nuclear density gauges, such as, license and supporting documentation, radiation badge reports, leak test records, etc.
- (3) Performing periodic leak tests on nuclear density gauges.
- (4) Giving assistance and/or information in case of emergency if an accident or damage occurs with the nuclear density gauges.
- (5) Securing gauges against unauthorized use or removal.

ITEM 6 - Sealed sources are the following:

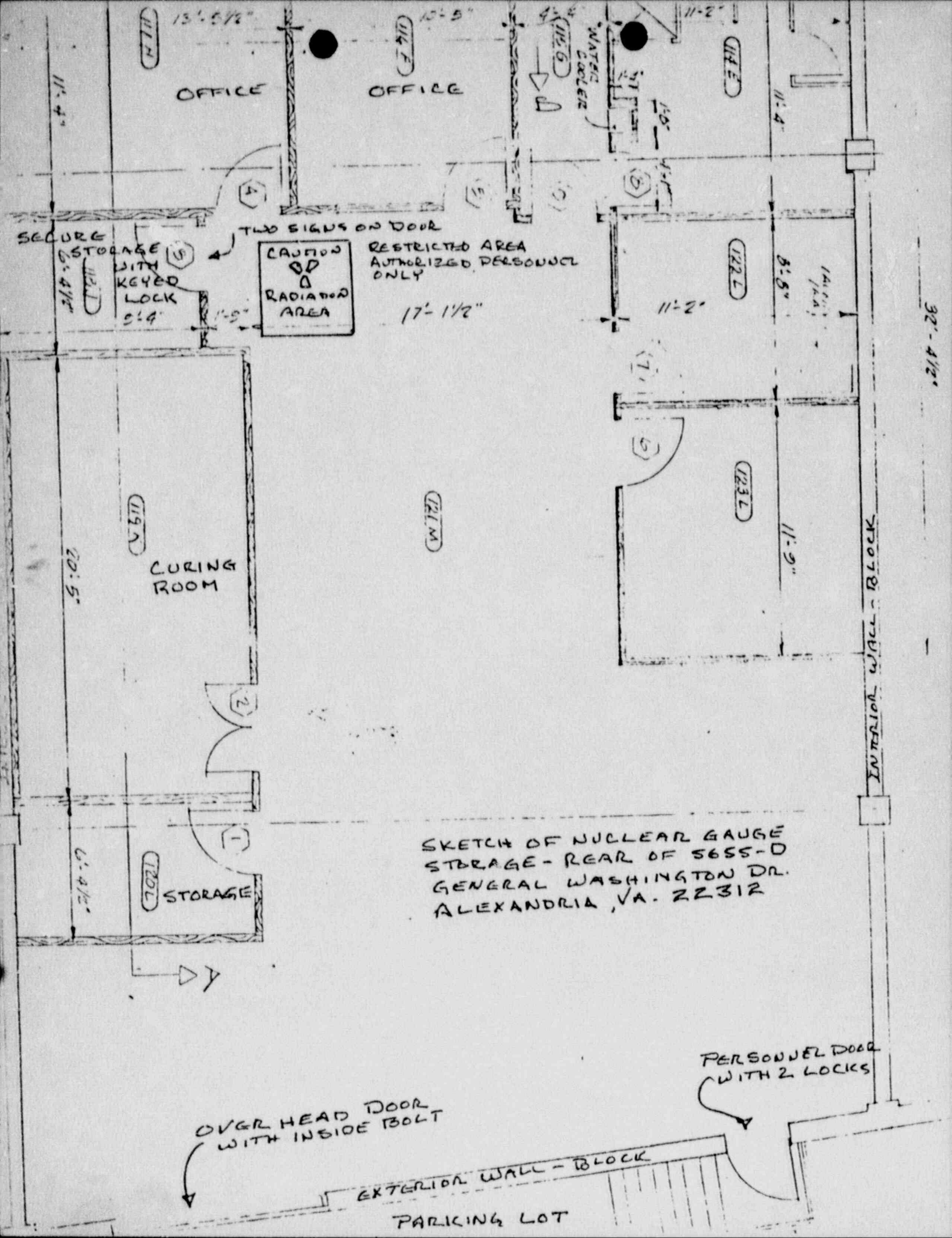
- One (1) Troxler Model 2401 - Cesium 137/Americium 241  
Maximum of 10 millicuries CS-137 and 40 millicuries AM-241-BE
- Two (2) Troxler Model 3411  
Cesium 137/Americium 241  
Maximum of 8 millicuries CS-137 and 40 millicuries AM-241-BE

ITEMS 8 and 9 - Raphael Benvegnu is no longer with the firm.

ITEM 13 - See attached sketch.

ITEM 14 - Leak test results are shipped to Troxler Electronic Laboratories for analysis.

ITEM 14(a) - 14(e) See attached "GENERAL INSTRUCTIONS FOR USE OF NUCLEAR MOISTURE/DENSITY GAUGES".



OFFICE

OFFICE

SECURE STORAGE WITH KEYED LOCK 6'-4 1/2"

CAUTION RADIATION AREA

RESTRICTED AREA AUTHORIZED PERSONNEL ONLY

CURING ROOM

STORAGE

SKETCH OF NUCLEAR GAUGE STORAGE - REAR OF 5655-D GENERAL WASHINGTON DR. ALEXANDRIA, VA. 22312

PERSONNEL DOOR WITH 2 LOCKS

OVERHEAD DOOR WITH INSIDE BOLT

EXTERIOR WALL - BLOCK

PARKING LOT

INTERIOR WALL - BLOCK

32'-4 1/2"

CONSTRUCTION ENVIRONMENT, INC.

GENERAL INSTRUCTIONS FOR USE OF  
NUCLEAR MOISTURE/DENSITY GAUGES

A. ELIGIBILITY

No person shall use a nuclear moisture/density gauge (NMDG) unless that person has:

- (1) Successfully completed a training course conducted by a representative of a NMDG manufacturer, or
- (2) Successfully completed a training course conducted by the CEI Radiation Protection Officer or his authorized representative, and is using the NMDG under the direct physical supervision of a person trained under (1) above.
- (3) Been assigned a film badge and wears that specific film badge at all times while using, handling or transporting the NMDG.

B. PREPARATION

No person shall use a NMDG unless, prior to leaving the CEI laboratory, or other approved temporary storage for the gauge, that person has verified that:

- (1) The NMDG meets the calibration standards supplied by the manufacturer, and
- (2) All accessories required for the proper and safe operation of the NMDG are available and carried with the NMDG to the place of use.

C. TRANSPORT

The NMDG must be transported in its case to, from and between project locations; under such conditions ("YELLOW 11" LABEL), it may be transported by motor vehicle without placarding the vehicle. In addition, the person transporting the NMDG shall:

- (1) Verify that the source shield is in place prior to placing the NMDG in its case.
- (2) Verify that all closure devices of the case are secured.

CONSTRUCTION ENVIRONMENT, INC.

GENERAL INSTRUCTIONS FOR USE OF  
NUCLEAR MOISTURE/DENSITY GAUGES

(Continued)

- (3) Place the NMDG/case in a portion of the vehicle that can be locked. Whenever possible, carry in locked trunk; otherwise in cabin as far as practicable from the driver or other persons in the vehicle. Maintain a minimum distance of 12 in. between the case and occupant of the vehicle.
- (4) In the event of an accident resulting in any visible damage to the case, immediately inform any police/fire/rescue personnel at the scene regarding the contents of the case. As soon as possible, notify the CEI Radiation Protection Officer or the CEI Chief Engineer. If incapacitated, ask police/fire/rescue personnel to please notify CEI.
- (5) In the event of an accident that results in substantial damage to the case and any visible damage to the NMDG itself, have police/fire/rescue personnel contact the local Health Department immediately, and also notify the above-mentioned CEI personnel immediately. If incapacitated, ask police/fire/rescue personnel to please make the notifications for you.

D. OPERATION

Operation of the NMDG shall be only in accordance with the manufacturer's manual for each specific gauge model. In all cases, observe the following procedures.

- (1) At the beginning of each day of use and upon first arrival at a project site, verify that the NMDG meets the calibration standards supplied by the manufacturer.
- (2) Verify that the source shield is in place when the NMDG is not in use.
- (3) Keep all persons (other than authorized personnel wearing film badges) at least 15 ft. away from the NMDG while in use.
- (4) Maintain security of the NMDG at all times. Keep NMDG under constant visual surveillance between tests (NMDG shall not be left at any time under the care of any other party). Store only in locked areas, if temporary storage at a project site is necessary.
- (5) In the event of an accident, follow procedures outlined above under "TRANSPORT".
- (6) When in doubt about anything, ASK the CEI Radiation Protection Officer or the CEI Chief Engineer.

# CONSTRUCTION ENVIRONMENT, INC.



5655-D GENERAL WASHINGTON DRIVE • ALEXANDRIA, VIRGINIA 22312 • (703) 750-0525

April 2, 1982

Division of Fuel Cycle & Material Safety  
Office of Nuclear Material Safety & Safeguards  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Reference: Renewal of License No. 45-17380-01

Gentlemen:

The personnel listed below have the following relevant training and experience:

Jose I. Fernandez - Troxler Electronic Laboratories, Inc., two day training in Radiation Safety and Use of Nuclear Soil Gauge, receiving certification on January 31, 1980. Two and one-half years relevant field experience with the nuclear soil gauge.

Jeffery F. Mosher - Campbell Pacific Nuclear Corp., one day training course on Radiation Safety and Use of Nuclear Soil Gauge, receiving certification on January 31, 1980. Two and one-half years relevant field experience with the nuclear gauge.

Anthony D. Charfauros - Campbell Pacific Nuclear Corp., one day training course on Radiation Safety and Use of Nuclear Soil Gauge, receiving certification on April 8, 1981. One year relevant field experience with the nuclear soil gauge.

Raphael Benvegna - Received 2 weeks supervised on the job training on the nuclear soil gauge with a prior employer and had two years field experience with the soil gauge while working for the prior employer. Verification by CEI of proper use and safety training and two years experience with the soil gauge at CEI.

We hope that the above information will be satisfactory, if there are any further questions or information you may need please contact us.

Very truly yours,

CONSTRUCTION ENVIRONMENT, INC.

Veronica D. Daniel  
Administrative Assistant

Attachment

11929

30-19816

APPLICATION FOR BYPRODUCT MATERIAL LICENSE  
INDUSTRIAL

a. NEW LICENSE

See attached instructions for details.

b. AMENDMENT TO:  
LICENSE NUMBER  
17380

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.

c. RENEWAL OF:  
LICENSE NUMBER  
X 45-17380-01

2. APPLICANT'S NAME (Institution, firm, person, etc.)  
Construction Environment, Inc.  
TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION  
(703) 750-0525

3. NAME OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION  
Jose I. Fernandez, President 03/20  
TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION  
(703) 750-0525

4. APPLICANT'S MAILING ADDRESS (Include Zip Code)  
5655-D General Washington Drive  
Alexandria, VA 22312

5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED (Include Zip Code)  
Various construction sites in Virginia, Washington, D. C. and Maryland.

(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.	Jeffrey F. Mosher	Laboratory-Field Coordinator
b.	Raphael Bevegnu	Field Engineer
c.	Anthony D. Chafrauos	Field Technician

RECEIVED BY LFMB  
Date: 7/20/82  
Log: JULY 1982  
By: [Signature]

Check Number: 3854  
Amount/Fee: \$110.32  
Type of Fee: Renewal  
Date Check Recd.: 8/24/82  
Received By: Jacques

7. RADIATION PROTECTION OFFICER  
Jeffrey F. Mosher  
Orig. To: [Signature]  
Action Compl: 8/25/82

Attach a resume of person's training and experience as required in Items 16 and 17 and describe his responsibilities under Item 15.

B. LICENSED MATERIAL

L I N E N O.	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 ACTIVITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME D
	CS-137 and AM-241-BE	Sealed source	Troxler 3411	.0076/.04
(2)	CS-137 and AM-241-BE	Sealed source	Troxler 3411	.0076/.04
(3)	CS-137 and AM-241-BE	Sealed source	Troxler 2401	.0087/.04
(4)				

DESCRIBE USE OF LICENSED MATERIAL  
E

- (1) For use in the determination of moisture and density of in-place soil in
- (2) connection with construction testing and inspection.
- (3)
- (4)

11929

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Postmarked April 2 and June 25, 1982

**9. STORAGE OF SEALED SOURCES**

LINE NO.	CONTAINER AND/OR DEVICE IN WHICH EACH SEALED SOURCE WILL BE STORED OR USED.	NAME OF MANUFACTURER	MODEL NUMBER
	A.	B.	C.
(1)	Container supplied by manufacturer	Troxler Electronic Laboratories, Inc.	3411
(2)	" " " "	" "	3411
(3)	" " " "	" "	2401
(4)			

**10. RADIATION DETECTION INSTRUMENTS**

LINE NO.	TYPE OF INSTRUMENT	MANUFACTURER'S NAME	MODEL NUMBER	NUMBER AVAILABLE	RADIATION DETECTED <i>(alpha, beta, gamma, neutron)</i>	SENSITIVITY RANGE <i>(milliroentgens/hour or counts/minute)</i>
	A	B	C	D	E	F
(1)	Geiger Counter	Eberline Instrument Corp.	E-130G	2		0.25 MR/HR
(2)	See item 12					
(3)						
(4)						

**11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10**

<input checked="" type="checkbox"/> <b>a. CALIBRATED BY SERVICE COMPANY</b> NAME, ADDRESS, AND FREQUENCY Health Physics Services, Inc. 7825 Tuckerman Lane, Suite 201 Potomac, MD 20854	<input type="checkbox"/> <b>b. CALIBRATED BY APPLICANT</b> Attach a separate sheet describing method, frequency and standards used for calibrating instruments.
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**12. PERSONNEL MONITORING DEVICES**

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

**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  
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.  
 No radioactive wastes are generated by this equipment, since it uses sealed sources. Any source in need of repair or replacement will be returned to the manufacturer.

**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)*

\$50.00

(1) LICENSE FEE CATEGORY: 170.31-3

(2) LICENSE FEE ENCLOSED: \$ 50.00

b. CERTIFYING OFFICIAL *(Signature)*

c. NAME *(Type or print)*  
Veronica D. Daniel

d. TITLE  
Assistant Secretary

e. DATE  
April 2, 1982

