

FORM NRC-313 I (3-80) 10 CFR 30	U.S. NUCLEAR REGULATORY COMMISSION	1. APPLICATION FOR: (Check and/or complete as appropriate) By Product Materials License
APPLICATION FOR BYPRODUCT MATERIAL LICENSE INDUSTRIAL		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.

b. AMENDMENT TO:
LICENSE NUMBER 6/30/81 3L
c. RENEWAL OF:
LICENSE NUMBER
35-17054-01

2. APPLICANT'S NAME (Institution, firm, person, etc.) Standard Testing & Engineering Co. TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION (405) 528-0541	3. NAME AND TITLE OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION Burrell D. Griffin TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION (405) 528-0541
4. APPLICANT'S MAILING ADDRESS (Include Zip Code) (Address to which NRC correspondence, notices, bulletins, etc., should be sent.) 3400 Lincoln Blvd. Oklahoma City, Okla. 73105	5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED (Include Zip Code) 3400 Lincoln Blvd., Oklahoma City, OK 73105 and at temporary job sites in the United States

(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)		RECEIVED BY LFMB
FULL NAME	TITLE	
a. Burrell D. Griffin	Applicant... Vice President	Date... 6/24/81
b. Larry V. Mars	Amount/Fee... Laboratory Manager	Log... JUNE 23 1981
c. Daniel B. Hapke	Type of Fee... Chief Engineer	By... Brown
7. RADIATION PROTECTION OFFICER	Date Check Rec'd... 6/24/81	Orig To...
Burrell D. Griffin	Received By... BROWN	Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under the Act.

8. LICENSED MATERIAL				
L I N E	ELEMENT AND MASS NUMBER	CHEMICAL AND/OR PHYSICAL FORM	NAME OF MANUFACTURER AND MODEL NUMBER (If Sealed Source)	MAXIMUM NUMBER OF MILLCURIES AND/OR SEALED SOURCES AND MAXIMUM ACTI- VITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME
NO.	A	B	C	D
(1)	Cesium 137	Sealed Source	Troxler DRWA-102112 Campbell Pacific Nec. 131	Not to exceed 10 millicuries per source
(2)	Americum 241	Sealed source	Troxler DRWA-102451 Campbell Pacific NEC 131	Not to exceed 50 millicuries per source
(3)	Hydrogen 3	Titanium Tritide Folts	Varian 02-966-01	Not to exceed 250 Millicuries per foil
(4)				

DESCRIBE USE OF LICENSED MATERIAL E	
(1)	For use in Campbell, MC Series and Troxler 3401, 3401B, 3411 or 3411B gauge to measure moisture/density of materials
(2)	For use in Campbell MC Series and Troxler 3401, 3401B, 3411 or 3411B gauges to measure moisture/density of materials.
(3)	For use in gas chromatographs for sample analysis
(4)	

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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)	Source Housing	Troxler Campbell Pacific Nuclear	3401, 3401B MC-2
(2)	Source Housing	Troxler Campbell Pacific Nuclear	3411, 3411B MC-2
(3)	Foil	Varian	02-966-01
(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 3 years
Troxler Electronic Laboratories
P.O. Box 12057-Cornwallis Road
Research Triangle Park, NC 27709

☐ 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	Radiation Detection Company P.O. Box 1414 Sunnyvale, CA 94088	<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

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

Sealed sources and they would 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)

b. CERTIFYING OFFICIAL (Signature)

c. NAME (Type or print)

Burrell D. Griffin

(1) LICENSE FEE CATEGORY: 3L

d. TITLE

Vice-President

(2) LICENSE FEE ENCLOSED: \$ 110.00

e. DATE

6-18-81

15. RADIATION PROTECTION PROGRAM. All gauge users have completed the appropriate training program of Troxler Electronic Laboratory, or Campbell Pacific Nuclear, and we follow all the recommended procedures as outlined in their Instruction Manuals.

The Radiation Protection Officer is responsible for, wipe test of all the equipment, security, monthly dosimetry badges and reports.

The moisture/density gauges are taken from their vault each day for field use and are transported in the locked position. At the end of each day they are returned to the vault.

Leak tests are performed semi-annually, using kits from Radiation Detection Company of Sunnyvale, CA., they also do our Leak Test.

16. FORMAL TRAINING IN RADIATION SAFETY. All personnel using this equipment has completed the Troxler or Campbell Training course.
17. EXPERIENCE. All personnel's experience with Radioactive Equipment have been with the low level moisture/density equipment and foils used in the gas.

RESUME

DANIEL B. HAPKE, P.E.

Born: July 8, 1920
Alva, Oklahoma

Education: College: Oklahoma State University
Stillwater, Oklahoma
B.S. in Civil Engineering 1943

Registration:
Oklahoma No. 1939 - Registered 1950
Texas No. 28099 - Registered 1966
Arkansas No. 2466 - Registered 1968

Experience: Burns and McDonnell Engineering Company
Kansas City, Missouri
Structural Engineer - 6 years
Engaged in structural design of steam fired and diesel fired electric generating plants, water and waste water treatment plants, and apportenant structures.

The Refinery Engineering Company
Tulsa, Oklahoma
Squad Leader - Structural Design Squad - 2 years
Supervised nine engineers and draftsmen engaged in design of structures and foundations for oil refineries and chemical plants.

Portland Cement Association
Oklahoma City, Oklahoma
District Structural Engineer - 8½ years
Assisted architects, engineers, and contractors in design and construction of reinforced concrete structures. Also, responsible for Quality Concrete Program in area assigned.

City of Ponca City
Ponca City, Oklahoma
City Engineer - 2½ years
Supervised 17 employees in department. Enforced building, plumbing, and electrical codes. Responsible for design, specifications, and supervision of construction of city streets, storm sewers, sanitary sewers, and incidental construction. Ex-officio member Planning Commission and Traffic Commission.

Fenix R. Scissor, Inc.
Tulsa, Oklahoma
Plant Manager - 2 years
Managed prestressed concrete products plant producing structural elements for bridges and buildings. Responsible for production, shipping, and quality control.

Standard Testing and Engineering Company
Oklahoma City, Oklahoma
Chief Engineer - 5 years
Serve as chief technical officer of a large, multi-faceted construction materials testing and geotechnical company. Responsible for personnel training, review of equipment and methods, design of special test apparatus for special work.

RESUME

Educational & Work Resume

Lawrence V. Mars

1939-Graduated from High School at Watertown, Minnesota.

1945-46 attended University of Minnesota.

Service Schools:

Graduated Army Air Corps Pilot Training 1943

Graduated 2 year College Level Math Course 1949

1950-1955 - Oklahoma State Highway Department Engineering Technician-specializing in Field and Laboratory testing of soils, Stabilized Aggregate Base Course, and design of soil asphalt and soil cement bases for Highway construction. (Total 5 years).

1955 - Present Time: Standard Testing & Engineering Company.
Engineering technician in charge of Laboratory work, Coordinator and Leason of Correspondence and test reports between Engineering Firm, Turnpike Authority and Standard Testing & Engineering Company during construction of Northeast Turnpike - 2 years.

Laboratory Manager of first Branch Laboratory at Enid, Oklahoma, responsible for all Laboratory and Field testing, design of concrete and asphalt mixes, wrote recommendations and submitted Laboratory reports to Clients- 10 years.

Presently Laboratory Manager and Vice President of our Central Laboratory. Supervising Laboratory and Field personnel in all phases of Soils, Asphalt and Concrete Testing. Responsible for the design of concrete and asphalt mixes. Performs and supervises all the various tests performed at our Central Laboratory. Prepares reports and writes recommendations for various projects and design - 7th year. (Total of 18 years)

Certified Senior Engineering Technician since 1963.

Charter Member of American Society of Certified Engineering Technicians and Charter Member of Central Oklahoma Chapter of ASCET.

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RESUME

BURRELL D. GRIFFIN

Born: December 15, 1932

Education: 1 year Pharmacy Major
Southwestern State University

Experience: Standard Testing & Engineering Company
28 years
Soils, Concrete, Steel, Inspection and testing.
Troxler Training Project - 6-9-76 and 6-10-76.

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