



**LAW**

ENGINEERING AND ENVIRONMENTAL SERVICES

DL-092994\_02

September 29, 1994

Nuclear Materials Licensing Section  
U.S. Nuclear Regulatory Commission Region II  
101 Marietta Street NW  
Suite 2900  
Atlanta, GA 30323-0199

Attention: Diane Heim

Subject: License No. 45-185377-01

Please find attached our application for material license renewal. The attached information was compiled from instructions provided. All other information is the same as provided in the previous license.

Sincerely,

LAW ENGINEERING, INC.  
DBA LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

*William B. Horstman*

William B. Horstman  
Radiation Safety Officer

LAW ENGINEERING, INC.

804 PROFESSIONAL PLACE WEST • CHESAPEAKE, VA 23320  
(804) 436 2040 • FAX (804) 436 9553

ONE OF THE LAW COMPANIES

## 5. RADIOACTIVE MATERIAL

Element & mass number	Chemical and/or physical form	Maximum amount that licensee may possess at any one time under this license
A. Cesium-137	A. Sealed sources (Troxler Dwg. No. A-102112)	A. Not to exceed 10 millicuries per source
B. Americium-241	B. Sealed neutron sources (Troxler Dwg. No. A-102451)	B. Not to exceed 50 millicuries per source
C. Cesium-137	C. Sealed sources (Campbell Pacific Nuclear Model CPN-131)	C. Not to exceed 10 millicuries per source
D. Americium-241	D. Sealed neutron sources (Campbell Pacific Nuclear Model CPN-131)	D. Not to exceed 50 millicuries per source
E. Americium-241	E. Sealed neutron sources (Troxler Dwg. No. A-102451)	E. Not to exceed 50 millicuries per source

## 6. PURPOSE FOR WHICH LICENSED MATERIAL WILL BE USED

- A. and B. For use in Troxler Model 3400 Series moisture/density gauges for measurement of properties of materials.
- C. and D. For use in Campbell Pacific Portaprobe Model MC Series moisture/density gauges for measurement of properties of materials.
- E. For use in Troxler Models 3216, 3217 or 3218 moisture gauges for measurement of properties of materials.

7. The designated radiation safety officer is William B. Horstman. Radiation safety training was conducted by Campbell Pacific Nuclear Corporation in January 1979.

8. Licensed material shall be used by K.L. Perry, J.P. McManus, T. Ribble, C.F. Crawley or individuals who have completed the manufacturer's training and have been instructed in the licensee's operating and emergency procedures.

## **9. FACILITIES AND EQUIPMENT**

Devices are stored in locked storeroom designated for storage of nuclear gages only. Access is limited to individuals with proper manufacturers training. During transportation devices are transported in locked transport cases provided by manufacturer. The cases are chained and locked to transport vehicle. During operation gages are operated by trained individuals in conformance with manufacturers training programs upon completion of operation gages are returned to locked transport case and locked to transport vehicle.

## **10. RADIATION SAFETY PROGRAM**

Individuals operating equipment are trained by manufacturers in radiation safety and operation of gages periodic inspections of radiation safety are performed by the radiation safety officer. These inspections are performed in the field. A checklist of items inspected is maintained by the licensee

### **10.1 PERSONNEL MONITORING EQUIPMENT**

All personnel wear a film badge monitoring device. The badges are changed monthly. Exposure records are maintained by the licensee

### **10.2 LEAK-TESTING**

Leak test are performed at 6 month intervals. Leak tests are performed by the licensee with kits provided by

Troxler  
3008 Cornwallis Road  
P.O. Box 12057  
Research Triangle Park  
North Carolina, NC 27709

Leak tests are performed by the radiation safety officer

11. Maintenance or repair of portable devices involving removal of the sealed sources from the devices or removal, dismantling or disposal of source material may be performed only by the device manufacturer or by other persons specifically authorized by the commission or an agreement state to perform such services.