

30 - 17849

FORM NRC-313 I (3-80) 10 CFR 30		U.S. NUCLEAR REGULATORY COMMISSION	
<b>APPLICATION FOR BYPRODUCT MATERIAL LICENSE INDUSTRIAL</b>		1. APPLICATION FOR: <i>(Check and/or complete as appropriate)</i>	
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.		a. NEW LICENSE	
		b. AMENDMENT TO: LICENSE NUMBER	
		c. RENEWAL OF: LICENSE NUMBER	
		XX 04-15259-02	
2. APPLICANT'S NAME <i>(Institution, firm, person, etc.)</i> U.S. DEPARTMENT OF THE INTERIOR BUREAU OF INDIAN AFFAIRS CENTRAL CALIFORNIA AGENCY - ROADS TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION (916) 978-4341 - (FTS) 460-4341		3. NAME AND TITLE OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION FRED E. DOKA TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION (916) 978-4341 - (FTS) 460-4341	
4. APPLICANT'S MAILING ADDRESS <i>(Include Zip Code)</i> <i>(Address to which NRC correspondence, notices, bulletins, etc., should be sent.)</i> U.S. DEPARTMENT OF THE INTERIOR BUREAU OF INDIAN AFFAIRS - ROADS 1800 TRIBUTE ROAD, SUITE 111, SACRAMENTO, CA 95815		5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED <i>(Include Zip Code)</i> Various central & northern California Indian rancherias/reservations on road construction projects. To be stored at: 631 NORTH MARKET BLVD., UNIT "N" SACRAMENTO, CALIFORNIA 95834	
(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 <i>(See Items 16 and 17 for required training and experience of each individual named below)</i>			
FULL NAME		TITLE	
a. HAROLD M. BRAFFORD		AGENCY ROAD ENGINEER	
b. FRED E. DOKA		CIVIL ENGINEERING TECHNICIAN	
c. JAMES C. MOOREHEAD		LABORER - CONSTRUCTION INSPECTOR	
7. RADIATION PROTECTION OFFICER  FRED E. DOKA		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 <i>(If Sealed Source)</i>  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	TROXLER #A-102112 ONE SOURCE 8mCi
(2)	AMERICIUM 241	" "	TROXLER #A-102541 ONE SOURCE 40 mCi
(3)			
(4)			
DESCRIBE USE OF LICENSED MATERIAL E			
(1)	SEALED IN ONE TROXLER ELECTRONIC LABORATORIES, INC. MODEL 3411 SURFACE GAUGE, WHICH		
(2)	WILL BE USED TO MEASURE THE MOISTURE AND DENSITY OF ENGINEERING MATERIALS		
(3)	8510310562 850925 REG 5 LIC 30 04-15259-02 PDR		
(4)			

19204

## 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)	PORTABLE MOISTURE-DENSITY GAUGE	TROXLER ELECTRONIC LAB., INC.	3411
(2)			
(3)			
(4)			

## 10. RADIATION DETECTION INSTRUMENTS

LINE NO.	TYPE OF INSTRUMENT	MANUFACTURER'S NAME	MODEL NUMBER	NUMBER AVAILABLE	RADIATION DETECTED (alpha, beta, gamma, neutron)	SENSITIVITY RANGE (milliroentgens/hour or counts/minute)
	A	B	C	D	E	F
(1)	N/A					
(2)						
(3)						
(4)						

## 11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

☐ a. CALIBRATED BY SERVICE COMPANY

NAME, ADDRESS, AND FREQUENCY

N/A

☐ 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 <input type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD) <input type="checkbox"/> (3) OTHER (Specify): _____	RADIATION DETECTION COMPANY P.O. BOX 1414 SUNNYVALE, CA 94088 (408) 735-8700	<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.

(SEE EXAMPLE SKETCH)

## 14. WASTE DISPOSAL

a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED

**SOURCE WILL BE RETURNED TO THE MANUFACTURER**

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.

# 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)*  
Part 170.11 - Exemptions -  
(a)(5) Gov't Agency

b. CERTIFYING OFFICIAL *(Signature)*

c. NAME *(Type or print)*

HAROLD M. BRAFFORD

(1) LICENSE FEE CATEGORY:

d. TITLE

AGENCY ROAD ENGINEER

(2) LICENSE FEE ENCLOSED: \$

e. DATE

SEPTEMBER 5, 1985

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS  
CENTRAL CALIFORNIA AGENCY  
1800 TRIBUTE ROAD, SUITE 111  
SACRAMENTO, CA 95815-4314

ITEM 15 - RADIATION PROTECTION PROGRAM

A. SAFETY PROCEDURES

1. Do not operate or attempt to operate a gauge unless you have been authorized to do so.
2. Do not attempt to repair, modify or open the sealed source under any circumstances.
3. Wear a film badge at all times while operating or transporting a gauge.
4. Follow operating procedures, when using the gauge, in accordance with the Troxler instruction manual, the radiation control regulations and this safety program.
5. Keep unauthorized persons away from the gauge.
6. Do not leave the gauge unattended when in use or outside of the storage enclosure or locked vehicle.
7. Keep the gauge in the "SAFE" or storage position when not in use.
8. Be sure that the gauge is locked within an authorized enclosure (e.g. closet, cabinet, vehicle, etc.) when it is not in use. Security against the theft of a radioisotope is of utmost importance and must not be neglected. The storage enclosure must be labeled with a radiation warning sign bearing the symbol as described in 10 CFR 20.203 and the words "CAUTION RADIOACTIVE MATERIALS".
9. Gauge(s) may be only transported by authorized personnel in approved vehicles. The gauge(s) may not be transported on the front or rear seats of any vehicle. If a pickup truck is used the gauge(s) must be locked in an enclosure (e.g. cabinet, shipping case, etc.) and the enclosure tied securely (e.g. chained, bolted, etc.) to the body of the truck in order to prevent loss or theft.
10. Ensure that the gauge is leak tested at the intervals required by the licensee's Radioactive Materials License. The wipe sample will be collected by the Radiation Safety Officer using a Troxler model 3880 leak test kit. The leak test measurement on the wipe sample will be performed by Troxler Electronic Laboratories, Inc., P.O. Box 12057, Research Triangle Park, NC 27709.
11. When in doubt, ask your Radiation Safety Officer.

\*\*\*CONTINUED NEXT PAGE\*\*\*

19209

ITEM 15 (Continued) - RADIATION PROTECTION PROGRAM

B. EMERGENCY PROCEDURES

1. Accidents

- a. In the event of possible damage to source or source control mechanism, the operator will keep unauthorized persons at least ten feet from gauge and prevent removal of gauge from site until authorized by RSO or appropriate authority.
- b. If there is any possibility the source capsule might be ruptured, the location must be covered by a sheet of material (plastic, tarp, etc.), held down by weights (rocks, bags of materials, etc.) to prevent scattering of radioactive material by the elements.
- c. The operator must then immediately notify his RSO of the incident and give an appraisal of the probable condition of the source.
- d. The RSO will then immediately notify the following authority who will provide instructions and assistance in accordance with the circumstances of the incident.

Region V, USNRC  
Office of Inspection & Enforcement  
1990 N. California Blvd., Suite 202  
Walnut Creek, CA 94596

(415) 486-3141 - Day, night, holidays

RSO - BUDEAU OF INDIAN AFFAIRS

Fred E. Doka  
BUREAU OF INDIAN AFFAIRS  
CENTRAL CALIFORNIA AGENCY  
1800 TRIBUTE ROAD, SUITE 111  
SACRAMENTO, CA 95815-4314

(916) 978-4341 - Day  
(916) 338-4325 - Night

2. Source Stolen or Lost

- a. The operator must immediately notify local police or other law enforcement agency within whose jurisdiction the incident occurred.
- b. The operator must also notify his RSO who will notify the authority listed in item B-1-d above.

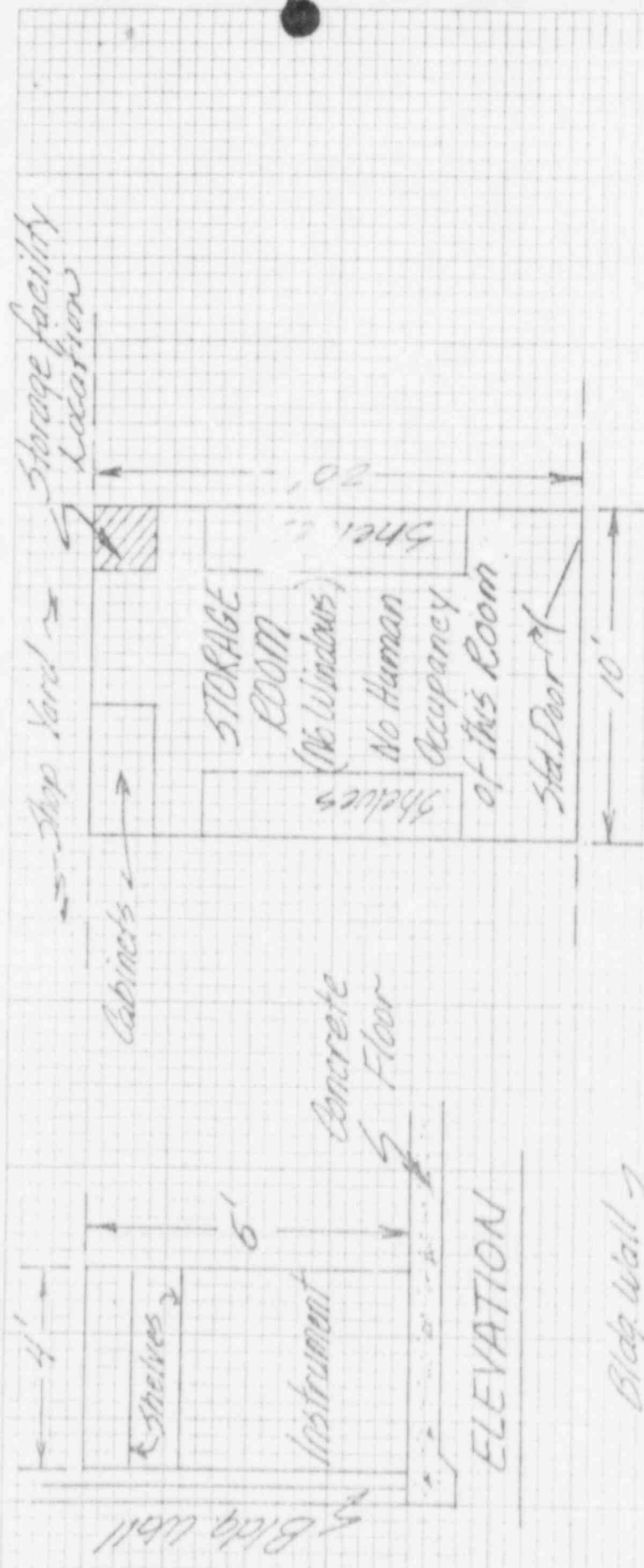
\*\*\*CONTINUED NEXT PAGE\*\*\*

ITEM 15 (Continued) - RADIATION PROTECTION PROGRAM

C. DUTIES OF THE RADIATION SAFETY OFFICER

1. Assure compliance with all pertinent parts of the controlling agency's (NRC or agreement state as applicable) regulations.
2. Assure compliance with the conditions in licensee's Radioactive Materials license and amendments and above items given in this safety program.
3. Maintain the following items in a radiation file and keep available for inspection by controlling agency if requested.
  - (a) Current Radioactive Materials License.
  - (b) Copies of license application, attachments and all pertinent correspondence referred to in the conditions of the license and amendments.
  - (c) Gauge Source Certificate(s) issued with the gauge(s) by the manufacturer.
  - (d) Film badge or TLD reports.
  - (e) Leak test reports.
  - (f) Records concerning disposal, inventory and useage of source(s).
  - (g) Copies of this safety program.
  - (h) A current copy of the controlling agency's regulations.

STORAGE ADDRESS: 631 NORTH MARKET BLVD., UNIT "N", SACRAMENTO, CA 95834



# SKETCH OF GAUGE STORAGE FACILITY



# TROXLER ELECTRONIC LABORATORIES, INC.

HEREBY CERTIFIES THAT

Harold M. Brefford  
of  
Bureau of Indian Affairs

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

Harold Brefford  
INSTRUCTOR

March 11 & 12, 1975  
DATE

Earl J. Loh  
PRESIDENT



# TROXLER ELECTRONIC LABORATORIES, INC.

HEREBY CERTIFIES THAT

Fred E. Doka

of

Bureau of Indian Affairs

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:

## Radioisotopes 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

*David R. Howe*  
INSTRUCTOR

January 8 & 9, 1980

DATE

William F. Troxler  
PRESIDENT

# TROXLER ELECTRONIC LABORATORIES, INC.

HEREBY CERTIFIES THAT

JIM MOOREHEAD

of

U.S.D.I. BUREAU OF INDIAN AFFAIRS

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:

## Biological Safety

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

## Gauge Operation

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

*Michael R. Murphy*  
INSTRUCTOR

2/4/83

DATE

NO 8890

W.F. TROXLER  
PRESIDENT