STN 28297

NRC FORM 313
(1-84)
10 CFR 30, 32, 33, 34, 35 and 40

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED BY OMB
3150-0120
Expires 8-31-87

APPLICATION FOR MATERIAL LICENSE

030-30864

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.

FEDERAL AGENCIES FILE APPLICATIONS WITH:

U.S. NUCLEAR REGULATORY COMMISSION
DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS
WASHINGTON, DC 20555

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

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

U.S. NUCLEAR REGULATORY COMMISSION, REGION I
NUCLEAR MATERIAL SECTION B
~~631 PARK AVENUE~~ 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
MATERIAL RADIATION PROTECTION SECTION
101 MARIETTA STREET, SUITE 2900
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
MATERIAL RADIATION PROTECTION 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)*

- [X] A. NEW LICENSE
- [ ] B. AMENDMENT TO LICENSE NUMBER _____
- [ ] C. RENEWAL OF LICENSE NUMBER _____

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

DAVID BLACKMORE AND ASSOCIATES, INC.
3335 WEST RIDGE PIKE
POTTSTOWN, PENNSYLVANIA 19464

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

DAVID BLACKMORE AND ASSOCIATES, INC.
3335 WEST RIDGE PIKE
POTTSTOWN, PENNSYLVANIA 19464

9001170220 881112
REG1 LIC30
37-28297-01 PDR

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Joseph Hughes

TELEPHONE NUMBER: (215) 495-6255

SUBMIT ITEMS 5 THROUGH 11 ON 8½ x 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL
a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSEE FEES *(See 10 CFR 170 and Section 170.31)*
FEE CATEGORY: 3P
AMOUNT ENCLOSED: $ 230.00

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	TITLE	DATE
[signature]	Joseph Hughes	Executive Vice President	10/18/88

14. VOLUNTARY ECONOMIC DATA

a. ANNUAL RECEIPTS

[ ]	<$250K	[ ]	$1M–$3M
[ ]	$250K–500K	[ ]	$3.5M–7M
[ ]	$500K–750K	[ ]	$7M–10M
[X]	$750K–1M	[ ]	>$10M

b. NUMBER OF EMPLOYEES *(Total for entire facility excluding outside contractors)*: 17

c. NUMBER OF BEDS: none

d. WOULD YOU BE WILLING TO FURNISH COST INFORMATION *(dollar and/or staff hours)* ON THE ECONOMIC IMPACT OF CURRENT NRC REGULATIONS OR ANY FUTURE PROPOSED NRC REGULATIONS THAT MAY AFFECT YOU? *(NRC regulations permit it to protect confidential commercial or financial—proprietary—information furnished to the agency in confidence.)*

[X] YES [ ] NO

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	COMMENTS	APPROVED BY
App	Oct 27 I	3f	OFFICIAL RECORD COPY ML 10	M. Fresser
AMOUNT RECEIVED	CHECK NUMBER			DATE
$230	3046			10/18/88

109718
20 OCT 1988

PRIVACY ACT STATEMENT ON THE REVERSE

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 313. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45334 (October 1, 1975).

1. **AUTHORITY:** Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).

2. **PRINCIPAL PURPOSE(S):** The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 CFR Parts 30, 32, 33, 34, 35 and 40 to determine whether the application meets the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, for the issuance of a radioactive material license or amendment thereof.

3. **ROUTINE USES:** The information may be (a) provided to State health departments for their information and use; and (b) provided to Federal, State, and local health officials and other persons in the event of incident or exposure, for their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.

4. **WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION:** Disclosure of the requested information is voluntary. If the requested information is not furnished, however, the application for radioactive material license, or amendment thereof, will not be processed. A request that information be held from public inspection must be in accordance with the provisions of 10 CFR 2.790. Withholding from public inspection shall not affect the right, if any, of persons properly and directly concerned need to inspect the document.

5. **SYSTEM MANAGER(S) AND ADDRESS:** U.S. Nuclear Regulatory Commission
Director, Division of Fuel Cycle and Material Safety
Office of Nuclear Material Safety and Safeguards
Washington, D.C. 20555

APPLICATION FOR MATERIAL LICENSE
ITEMS 5 THROUGH 11

PORTAPROBE MC-3-122 GAUGE

5. Radioactive Material:

a.) Radionuclei	b.) Form	c.) Maximum Amount
Cesium 137	Sealed source CPN drawing CPN-131	No single source to exceed 10 mci
Americium 241-BE	Sealed source CPN drawing CPN-131	No single source to exceed 50 mci

6. Purpose(s) for which licensed material will be used:

For use in CPN Corporation MC-series surface moisture density gauge to measure various properties of construction and other materials.

7. Individual(s) responsible for radiation safety program and their training and experience:

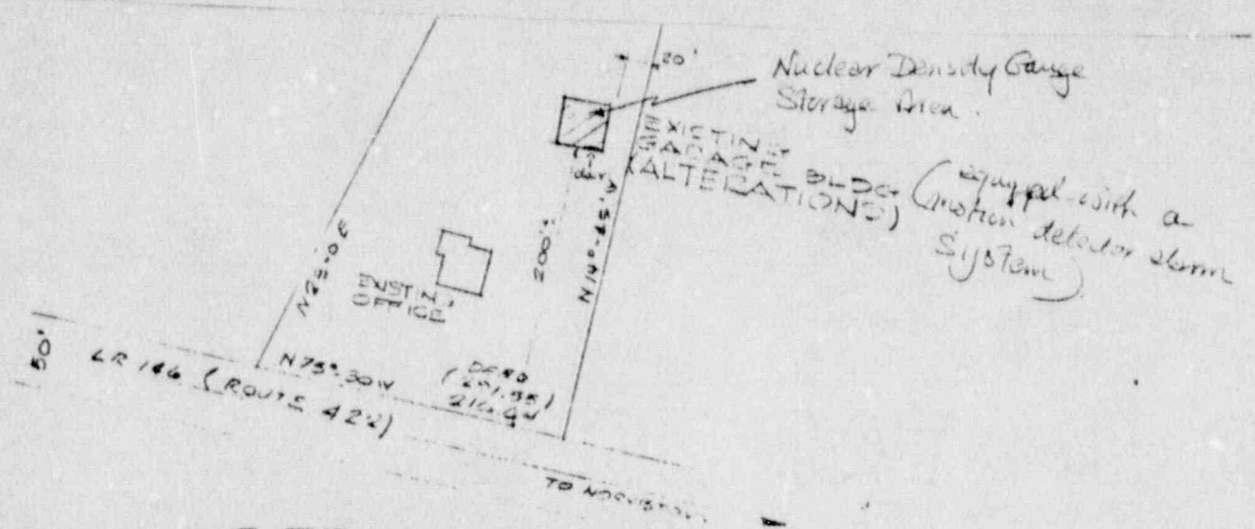
Joseph Hughes, certified February 13, 198[illegible] by Troxler Electronic Labs, Inc., and used Troxler Nuclear Density Gauge while employed by Valley Forge Laboratories, Devon, Pennsylvania.

8. Training for individuals working in or frequenting restricted areas:

Joseph Hughes (copy of certification enclosed)

David B. Blackmore (copy of certification enclosed)

9. Facilities and equipment:



SITE PLAN

10. Radiation safety program:

1. Radiation Safety Officer

A. Joseph Hughes has been designated as the company Radiation Safety Officer (RSO) and will assume the duties and responsibilities that include the following:

1. To ensure that all terms and conditions of the license are being complied with and that the information contained in the license is up-to-date and accurate.

2. To ensure that the equipment has been leak tested at the required intervals and that the leak test is performed in the manner prescribed by CPN Corporation.

   The leak test shall be carried out using CPN# TD11B leak test kit.

3. To ensure that the gauge is only used by individuals authorized by the RSO and that they use the gauge in accordance with all relevant regulations. This will include the wearing of a suitable radiation film badge.

4. To maintain the records as required by the license and the regulations. These records shall include personnel exposure, leak test records, and training certificates for all users.

5. To ensure that the equipment is properly secured against unauthorized removal at all times.

6. To serve as a point of contact and give assistance in case of an emergency, such as equipment damaged in the field or theft, and to notify the proper authorities in case of an emergency.

7. To ensure that all users have read and understood the radiation safety operation and emergency procedure.

8. To arrange appropriate training for new users as required.

9. To post all required signs and notices for new users as required.

2. Operational Procedures

A. Transportation of Equipment

1. All possible means shall be provided to ensure that the equipment is fully secured in the transporting vehicle and the equipment is away from the passenger compartment. When transporting in an enclosed vehicle (car or van), the vehicle will be locked. When transporting in an open bed vehicle, the gauge should be securely fastened and locked to the truck bed.

2. The gauge will be transported in the CPN transportation case. The U.S. Department of Transportation requires that the gauge be transported in a properly labeled carrying case.

3. At all times while the gauge is being transported the operator will carry the required shipping papers and a copy of the emergency plan.

B. Operational Procedures

1. The operator will exercise suitable control over the gauge at all times.

2. Under no circumstances will the gauge be left unattended or under the supervision of an unauthorized person.

3. When not being used for field measurements, the gauge shall have its source mechanism locked and will be locked in its transportation case. The gauge will also be returned to the vehicle.

4. When testing is completed the gauge will be returned to its permanent place of storage, as soon as possible.

5. When using the equipment operators will wear the personal monitoring device that has been assigned to them. When the operator is not using the equipment, the monitoring device will be kept in a radiation free area, as designated by the RSO.

6. At all times operators will observe the principle of A.L.A.R.A.

   By following the A.L.A.R.A. principal operators will receive a radiation dose that is:

   As Low As Reasonably Achievable

   As required by the NRC.

C. Maintenance and Leak Test Procedures

1. Periodic maintenance will include cleaning of the gauge. The operator will have received proper instructions on how to do this and will wear his film badge and observe the A.L.A.R.A. while carrying this out.

2. No maintenance will be performed in which the radioactive source is removed from the gauge. For this type of maintenance, the gauge will be returned to the manufacturer.

3. The leak test will be performed using an approved leak test kit (such as the CPN# TD11B leak test kit), and in accordance with the manufacturer's instructions. The operator will wear their personal monitoring device while carrying this out.

4. The shipping case will be checked periodically to ensure all the required labels are present.

3. Emergency Procedures

A. In the event of physical damage to a gauge, the following will be performed:

1. Immediately cordon off an area around the gauge. An area radius of fifteen (15) feet will be sufficient.

2. If a vehicle is involved, it must be stopped until the extent of contamination, if any, can be established.

3. A visual inspection of the gauge is to be made to determine if the source housing and/or shielding has been damaged.

4. At the earliest possible time, when the situation is under control, you must contact Joseph Hughes at (215)495-6255. Describe the present conditions and follow the instructions of the RSO.

The RSO will contact the appropriate NRC office as listed below:

Region I	24 hour telephone number	(215) 337-5000
Region II	24 hour telephone number	(404) 331-4503
Region III	24 hour telephone number	(312) 790-5500
Region IV	24 hour telephone number	(817) 860-8100
Region V	24 hour telephone number	(415) 943-3700

CPN will also be contacted for advice at the numbers listed below:

CPN (California office)	(415) 228-9770
CPN (Ohio office)	(614) 766-1276

Other contacts will be established with the NRC or local authorities for response to a damaged gauge.

B. In the event the gauge is lost or stolen, immediately notify Joseph Hughes as noted in Section 3.4 above.

TROXLER ELECTRONIC LABORATORIES, INC.

HEREBY CERTIFIES THAT

JOSEPH HUGHES

of

DAVID BLACKMORE & ASSOCIATES

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*

Kenneth Brown, Jr.
INSTRUCTOR

2-13-84
DATE

W. F. Troxler
PRESIDENT

№ 24055

TROXLER ELECTRONIC LABORATORIES, INC.

HEREBY CERTIFIES THAT

DAVID B. BLACKMORE

of

DAVID BLACKMORE & ASSOCIATES

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

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Gauge Operation

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

Kenneth Brown, Jr.	2-22-83	W. F. Troxler
INSTRUCTOR	DATE	PRESIDENT

№ 24056

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

(FOR LFMS USE)
INFORMATION FROM LTS

PROGRAM CODE: _____
STATUS CODE: 3
FEE CATEGORY: _____
EXP. DATE: 0
FEE COMMENTS: _____

LICENSE FEE TRANSMITTAL

A. REGION 1

1. APPLICATION ATTACHED
APPLICANT/LICENSEE: BLACKMORE, DAVID & ASSOCIATES, INC.
RECEIVED DATE: 881020
DOCKET NO: 3030864
CONTROL NO.: 109748
LICENSE NO.:
ACTION TYPE: NEW LICENSEE

2. FEE ATTACHED
AMOUNT: $230.00
CHECK NO.: 3846

3. COMMENTS

SIGNED L. L. Brown
DATE 88-10-25

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED / 1)

1. FEE CATEGORY AND AMOUNT: 3C ($230)

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:
AMENDMENT _____
RENEWAL _____
LICENSE ✓

3. OTHER _____
_____

SIGNED M. Russell
DATE 10/28/88