Lpth 28353

NRC FORM 313
(9-88)
10 CFR 30, 32, 33, 34, 35 and 40

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED BY OMB
3150-0120
Expires: 9-30-90

APPLICATION FOR MATERIAL LICENSE

030-31025

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 INDUSTRIAL AND MEDICAL NUCLEAR 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 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 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
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)*

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

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

DAMES & MOORE
2360 MARYLAND ROAD
WILLOW GROVE, PA 19090

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

AT ADDRESS LISTED IN ITEM 2 AND AT TEMPORARY JOB SITES THROUGHOUT THE UNITED STATES WHERE THE U.S. NUCLEAR REGULATORY COMMISSION MAINTAINS JURISDICTION OVER THE USE OF BY-PRODUCT MATERIALS.

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

ALAN SIEGEL

TELEPHONE NUMBER: (215)657-5000

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: 3 P

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
Alan Siegel	ALAN SIEGEL	ASSISTANT GEOLOGIST	2/14/89

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	COMMENTS
APP	Mar 21	3P	8907270285 880717 PDR REG1 LIC30 37-28353-01

AMOUNT RECEIVED	CHECK NUMBER	
$230	032-06300	110302

APPROVED BY: S. Kimberly

DATE: 2/17/89 FEB 17 1989

NRC FORM 313 (9-88)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 7.5 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE OFFICE OF INFORMATION AND REGULATORY AFFAIRS, OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

OFFICIAL RECORD COPY ML 10

INFORMATION REQUIRED FOR ITEMS 5, 6, 7, 8, 9, and 11 (APPLICATION FOR MATERIAL LICENSE)

ITEM 5. RADIOACTIVE MATERIAL

5a. Radionuclei	5b. Form	5c. Maximum Amount
CS-137	Special Form	Not to exceed 9 mCi per source/per gauge. Not to exceed 45 mCi Total.
AM-241:Be	Special Form	Not to exceed 44 mCi per source/per gauge. Not to exceed 220 mCi Total.

ITEM 6. PURPOSES FOR WHICH LICENSED MATERIAL WILL BE USED

To be used in Troxler Model 3400 Series Surface Moisture/Density Gauges.

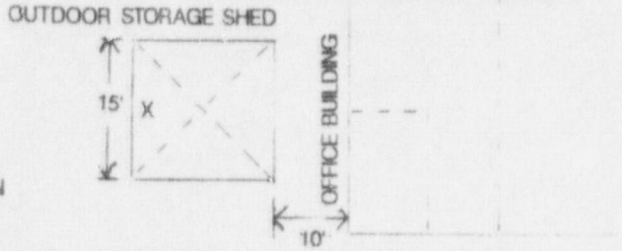
ITEM 7. INDIVIDUAL RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE

Alan Siegel is radiation safety officer and has attended the Troxler Nuclear Gauge Training Course. He also has approximately 6 months field experience.

ITEM 8. TRAINING FOR INDIVIDUALS WORKING IN, OR FREQUENTING RESTRICTED AREAS

Each operator will attend the Troxler Training Seminar. Alan Siegel will keep a copy of each individuals training certificate on file.

ITEM 9. FACILITIES AND EQUIPMENT



X TROXLER LOCATION

FIGURE NOT DRAWN TO SCALE

ITEM 10. RADIATION SAFETY PROGRAM

Please Refer to Attachment A of this application.

ITEM 11. WASTE MANAGEMENT

Disposal of radioactive material is very strictly enforced. Basically, you can transfer the gauge to another licensed user, a licensed burial ground, or back to the manufacturer.

5353A

ATTACHMENT A

INFORMATION REQUIRED FOR ITEM 10 (APPLICATION FOR MATERIAL LICENSE)

Radiation Safety Program

RADIATION SAFETY OFFICER

A. (Name of individual listed in item 7) has been designated as the company Radiation Safety Officer and will assume the duties and responsibilities that include the following:

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

2. To ensure that the equipment has been leak tested every six (6) months and that the leak test is performed in the manner prescribed by the equipment manufacturer.

3. To ensure that the use of the equipment is only by individuals that have been authorized by the Radiation Safety Officer and that all users wear personnel monitoring badges when utilizing the equipment.

4. To maintain the records as required by the Nuclear Regulatory Commission. These records shall include personnel quarterly exposure records, leak test reports and training certificates for all operators.

5. To insure that the equipment is properly secured against unauthorized removal at all times, especially when it is not in use. The RSO will have the keys to the gauge's storage room only.

6. To serve as a point of contact and give assistance in case an emergency such as damaged equipment or theft. At that point the NRC and Troxler Electronics will be notified.

7. To insure that all users have read and understand the radiation safety operating and emergency procedures as directed by the Radiation Safety Officer and Troxler Electronics.

8. To post "Caution Radioactive Material" on the storage location, along with NRC Form #3 "Notice to Employees" nearby in a visible area.

9. To conduct a written six (6) month inventory of all nuclear gauges, and kept on file for inspection.

OPERATING 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 when transporting in an enclosed vehicle, keep the gauge in the trunk or rear compartment area so as to limit the exposure rate to a minimum. The vehicle will also be locked at all times. 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 Troxler transportation case. The U.S. Department of Transportation requires that the gauge be transported in a properly labeled carrying case. A copy of the U.S. D.O.T. transport package certification will be kept with the transporter.

3. At all times during transport, the transporter (operater) will also have a properly completed Bill of Lading for each gauge, Source Certificate, Personal ID. and a copy of the Transport Package Certification.

B. Utilization Procedures:

1. A utilization log book will be used to control the gauges whereabouts at all times - signing it out and back in when returning from the field.

2. When the gauge is in the field, we will maintain control over the gauge at all times. The gauge will never be left unattended, as this type of negligence has led to stolen or damaged equipment.

3. When not making measurements, the gauge will be placed in the transportation case and returned to its permanent storage area as soon as possible. The gauge will be properly used as directed by Troxler Electronics. This will maintain any radiation exposure below the acceptable limits. When recharging the gauge, it will be kept in the locked storage room.

4. When using the equipment, we will wear Troxler Electronics ~~Electronic Associates~~. TLD badge that has been assigned to the specific operator. These badges will monitor both gamma and neutron radiation with quarterly exchange frequency and reports examined for unusually high dosages. Proper measures will be taken to correct this type of situation.

C. MAINTENANCE and LEAK TEST PROCEDURES

1. Periodic maintenance will include cleaning the gauge, at which point TLD badges will be worn.

2. No maintenance will be performed in which the radioactive source is removed from the gauge. Troxler Electronics will conduct source removal procedures only.

3. Leak tests will be done every 6 months using the Troxler Model 3880 kit, following the instructions as outlined within the kit. TLD badges will be worn.

EMERGENCY PROCEDURES

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

1. Immediately cordon off an area around the gauge of at least 15 feet.

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

3. A visual inspection of the gauge will 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, we will contact our Radiation Safety Officer at (phone #). We will describe the present conditions and follow his instructions.

B. In the event the gauge is lost or stolen, we will immediately notify the RSO, who in turn will contact the NRC and Troxler Electronics.

A COPY OF THIS RADIATION SAFETY PROGRAM WILL BE KEPT WITH THE GAUGE AT ALL TIMES FOR REFERENCE WHEN NEEDED.

MS-10
89-02-23
P-2

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: DAMES & MOORE
RECEIVED DATE: 890217
DOCKET NO: 3031025
CONTROL NO.: 110302
LICENSE NO.:
ACTION TYPE: NEW LICENSEE

2. FEE ATTACHED
AMOUNT: $230.00
CHECK NO.: 06300

3. COMMENTS

SIGNED R. J. Brown
DATE 89-02-22

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

1. FEE CATEGORY AND AMOUNT: 3P 230

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

3. OTHER _____

SIGNED S. Kimberly
DATE 3/1/89