

APPLICATION FOR MATERIAL LICENSE

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.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY
 OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
 U.S. NUCLEAR REGULATORY COMMISSION
 WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, MISSISSIPPI, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM
 DIVISION OF NUCLEAR MATERIALS SAFETY
 U.S. NUCLEAR REGULATORY COMMISSION, REGION I
 475 ALLENDALE ROAD
 KING OF PRUSSIA, PA 19406-1415

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING BRANCH
 U.S. NUCLEAR REGULATORY COMMISSION, REGION III
 2443 WARRENVILLE ROAD, SUITE 210
 LISLE, IL 60532-4352

MM83

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING BRANCH
 U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
 611 RYAN PLAZA DRIVE, SUITE 400
 ARLINGTON, TX 76011-4005

LL 31234

030 37440

03121

(45-31234 - 01)

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 JURISDICTIONS.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

A. NEW LICENSE

B. AMENDMENT TO LICENSE NUMBER _____

C. RENEWAL OF LICENSE NUMBER _____

2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)

Gerald M. Moore & Son, Inc.
 P.O. Box 1137
 Exmore, Virginia 23350

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

15442 Merry Cat Lane
 Exmore, Virginia 23350

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

William M. Moore, Jr.

TELEPHONE NUMBER

(757) 709-9448

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 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 EXPERIENCE.

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

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY | AMOUNT ENCLOSED \$

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, 36, 39, 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.

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

William M. Moore, Jr. Vice President, RSO

SIGNATURE

William M. Moore Jr

DATE

03/28/2007

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	

REC'D IN LAT MAR 30 2007

140327
 NMSS/RGN1 MATERIALS-002

GERALD M. MOORE & SON, INC.

15442 MERRY CAT LANE
P.O. BOX 1137
EXMORE, VIRGINIA 23350

757-442-2734
FAX 442-2383

March 28, 2007

NRC Material License Application (Items 5-11)

5. Radioactive Material

a. Element and mass number	b. Chemical and/or physical form	c. Max. amount to be possessed
A. Cesium – 137	Sealed source Troxler Dwg. 102112	No single source to exceed 9 mCi
B. Americium- 241	Sealed source Troxler Dwg. 102451	No single source to exceed 44 mCi

6. Purpose for Which Licensed Material Will Be Used:

- A. To be used in Troxler model 3400 series gauges for measurement of physical properties of materials.
- B. To be used in Troxler model 4640 series gauge for measurement of Physical properties of materials.

7. Individual Responsible for Radiation Safety Program and Their Training Experience: RSO: William M. Moore, Jr.

Our current RSO and any future individuals designated so will have successfully completed Troxler's Nuclear Gauge Safety Training Class or Troxler's Radiation Safety Officer Training Class.

8. Training for Individuals Working in or Frequenting Restricted Areas:

Before using licensed materials, all gauges users will have successfully completed the Troxler Nuclear Gauge Safety Training Class.

Nuclear Gauge Users have:

- Successfully completed the Troxler training course,
- Received copies of, and been trained in, the applicant's gauge operating and emergency procedures
- Been designated as an authorized user by the RSO.

9. Facilities and Equipment

10. Radiation Safety Program

10.1 All personnel will wear a monitoring device, such as a TLD badge, to measure radiation exposure when using or transporting gauges. The badges shall be exchanged at intervals not to exceed 3 months. Dosimetry badges shall be provided by a vendor accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), such as Troxler Electronic Laboratories, Inc.

NVLAP Accredited Dosimetry Badge Service Provider:

Troxler Radiation Monitoring Services
3008 Cornwallis Road
Research Triangle Park, NC 27709

10.2 Radiation Detection Instruments:

We will maintain a survey meter for use in the event of an incident involving the gauge. The survey meter will be calibrated annually by the manufacturer and checked for functionality before use.

Survey Meter Information:

Manufacturer:	Troxler Electronic Laboratories, Inc.
Model:	TroxAlert
Type:	G-M Survey Meter
Radiation detected:	alpha, beta, gamma, and x-ray
Sensitivity range:	0-100 mrem/hr
Window thickness:	1.4 mg/cm ²

Calibrating Firm:
Troxler Electronic Laboratories, Inc.
3008 Cornwallis Road
Research Triangle Park, NC 27709

North Carolina License No. 032-0182-1

10.3 Sealed source Leak Testing

Leak tests will be performed at intervals not to exceed 6 months or other interval specified in the license using an approved kit, such as Troxler Leak Test Kit 3880, in accordance with the kit supplier's instructions. Leak test samples will be analyzed by an NRC authorized organization, such as Troxler Electronic Laboratories, Inc. (NC License no. 031-0182-1)

10.4 Material Receipt And Accountability:

- Records of receipt, transfer, and disposal of gauges will be maintained at least 3 years.
- Physical inventories of sealed sources will be conducted at intervals not to exceed 6 months.
- Gauge utilization logs and physical inventory logs will be maintained.

10.5 Public Dose

- All gauges will be used, transported, and stored in such a way that no member of the public receives a dose of more than 100 mrem in one year.
- Unrestricted areas will not exceed 2 mrem in any one hour.
- All gauges not in storage will receive constant surveillance and be secure from unauthorized use or removal.

10.6 Operating and Emergency Procedures:

Each gauge operator will be provided a copy of our procedures before initial use of any gauge. These procedures will be maintained at each jobsite and each operator will sign that he or she understands and agrees to abide, and enforce each policy and procedure. A copy of the Operating and Emergency Procedure is attached to this application.

10.7 Maintenance

We will implement and maintain procedures for routine maintenance (cleaning and lubrication) of our gauges according to the manufacturer's recommendations and instructions.

AND

We will send the gage to the manufacturer to perform non-routine maintenance or repair operations that require removal of the source or source rod from the gauge.

10.8 Transportation

We will be in compliance with DOT regulations at all times when transportation gauges from storage to jobsites and back to storage.

10.9 Audit Program

We will perform an annual audit of our radiation safety program. Records of audits will be maintained for at least 3 years. Corrective actions will be taken promptly to prevent the recurrence of deficiencies.

11. Waste Management

Disposal of our source material will be accomplished by transferring the source to an authorized agent such as Troxler Laboratories. Records of any such transfer will be maintained as required by federal law.

GERALD M. MOORE & SON, INC.

15442 MERRY CAT LANE
P.O. BOX 1137
EXMORE, VIRGINIA 23350

757-442-2734
FAX 442-2383

Operating And Emergency Procedures For Nuclear Density Gauges

Operating Procedures

1. Always wear assigned dosimetry devices when using or transportation the gauge.
2. Never wear another person's dosimeter.

Never store a dosimeter near the gauge or another source of radiation.
4. Before removing the gauge from its place of storage, ensure that in gauges with moveable source rods, the rod is locked in the shielded position, and the transport case is locked.
5. Sign out the gauge in a logbook, stating the date(s) of use, name(s) of authorized user(s) who will be responsible for the gauge, and the temporary job site(s) where the gauge will be used.
6. Block and brace the gauge to prevent movement during the transport and lock the in or to the vehicle. Follow all DOT regulations when transportation the gauge.
7. Use the gauge according to the gauge manufacturers instructions and recommendations.
8. Do not touch the end of the source rod with your fingers, hands, or any part of your body or place any part of the body in the radiation field of the unshield source.
9. Unless absolutely necessary, do not look under the gauge when the source rod is being lowered into the ground. If you must look under the gauge to align the source rod with the hole, keep all body parts as far from the unshielded source as possible to minimize radiation exposure.
10. After completing each measurement in which the source is unshielded, immediately return the source rod to the shielded position.
11. Always maintain constant supervision and immediate control of the gauge when it is not in storage or secured in the transport vehicle. Never leave the gauge unattended. Protect the gauge and yourself from danger of moving equipment.

12. Always keep unauthorized persons away from the area where the gauge is being used.
13. Perform routine cleaning and maintenance according to the manufacturers instructions and recommendations.
14. When the gauge is not in use on at a temporary jobsite, place the gauge in a secured storage location (car trunk, locked shed).
15. Prior to transporting the gauge, ensure that each source is in the fully shielded position. Ensure that the source rod is locked in the shielded position and that the gauge is placed into the case and lock the case. Block and brace the gauge to prevent movement during transportation. Lock case in or to the vehicle.
16. Return the gauge to its proper storage location at the end of the work shift.
17. Log the gauge into the daily use log when it is returned to storage.
18. If gauges are used for measurements with the unshielded source extended more than 3 feet below the surface, use piping, tubing, or other material to line the hole from the lowest depth to 12 inches above the surface. If the piping, tubing or casing cannot extend 12 inches above the surface, cap the hole liner or take other steps to ensure that the hole is free of debris (and it is unlikely that debris will enter the cased hole), so that the unshielded source can move freely (e.g., use a dummy probe to verify the hole is free of obstructions).
19. After making changes affecting the gauge storage area (e.g., changing the location of gauges within the area, removing shielding, adding gauges, changing the occupancy of adjacent areas, moving the storage area to a new location), reevaluate compliance with public dose limits and ensure proper security of badges.

Emergency Procedures

The following procedures apply when the source fails to return to the shielded position (e.g., as a result of being damaged, source becomes stuck below surface) or if any other emergency or unusual situation arises (e.g., the gauge is struck by a moving vehicle or is in an accident involving a vehicle):

1. Immediately secure the area and keep people at least 15 feet away from the gauge until the situation is assessed and radiation levels are known. However, perform first aid for injured individuals and remove them from the area only when medically safe to do so.
2. If any heavy equipment is involved, detain the equipment and operator until it is determined there is no contamination present.

3. Gauge users and other potentially contaminated individuals should not leave the scene until emergency assistance arrives.
4. Visually inspect the gauge to determine the position of the source rod (exposed or shielded), and the position of the source shutter (open or closed), and the extent of damage, if any, to the source housing and/or shielding.
5. Notify the persons in the order listed below:

William M. Moore, Jr. RSO	H [REDACTED]	W (757) 709-9448
Chris P. Truckner	H [REDACTED]	W (757) 710-2773
Troxler Electronic Labs	(919) 549-8661	
Moore's Corporate Office	(757) 442-2734	

6. Follow directions provided by the contact person above.
7. RSO and Licensee management will:
 - a. Arrange for a radiation survey to be conducted as soon as possible by a knowledgeable person using appropriate radiation detection equipment. This person will be a consultant. The person will be competent in the use of the survey meter.
 - b. Make necessary notifications to local authorities and the NRC.
 - c. Reports to the NRC will be made within the reporting timeframes specified in federal regulations 10 CFR 20.2201-2203 and 10 CFR 30.50.

**PERSONAL INFORMATION WAS REMOVED
BY NRC. NO COPY OF THIS INFORMATION
WAS RETAINED BY THE NRC.**

This is to acknowledge the receipt of your letter/application dated

3/28/2007, and to inform you that the initial processing which includes an administrative review has been performed.

NEW LICENSE APPLICATION (03037440)
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 140327.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

(FOR LFMS USE)
INFORMATION FROM LTS

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

: Program Code: 03121
: Status Code: 3
: Fee Category: _____
: Exp. Date: 0
: Fee Comments: _____
: Decom Fin Assur Req'd: _
:

LICENSE FEE TRANSMITTAL

A. REGION **I**

1. APPLICATION ATTACHED

Applicant/Licensee: GERALD M. MOORE & SON, INC.
Received Date: 20070330
Docket No: 3037440
Control No.: 140327
License No.: **45-31234-01**
Action Type: New Licensee

2. FEE ATTACHED

Amount: **\$1,200.00**
Check No.: **8746**

3. COMMENTS

Signed *Mr. A. Perkins*
Date 4/2/2007

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /___/)

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:

Amendment _____
Renewal _____
License _____

3. OTHER _____

Signed _____
Date _____