

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.

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 8
631 PARK AVENUE
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)

- ☒ A. NEW LICENSE
☐ B. AMENDMENT TO LICENSE NUMBER _____
☐ C. RENEWAL OF LICENSE NUMBER _____

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

Morley and Associates, Inc.
605 Southeast Seventh Street
Evansville, IN 47713

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 material.

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Lee A. McClellan

TELEPHONE NUMBER

(812) 464-9585

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 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. 8507120590 850604
REG3 LIC30
13-24516-01 PDR

UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE

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

Lee A. McClellan

Lee A. McClellan

Project Engineer

5/07/85

14. VOLUNTARY ECONOMIC DATA

A. ANNUAL RECEIPTS

☒ <\$250K
☐ \$250K—500K
☐ \$500K—750K
☐ \$750K—1M

B. NUMBER OF EMPLOYEES (Total for entire facility excluding outside contractors)

14

C. NUMBER OF BEDS

D. WOULD YOU BE WILLING TO FURNISH COST INFORMATION (Dollar and/or off 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)

☒ YES

☐ NO

FOR NRC USE ONLY

TYPE OF FEE

FEE LOG

FEE CATEGORY

COMMENTS

AMOUNT RECEIVED

CHECK NUMBER

APPROVED BY

DATE

CONTROL NO. 7

9026/3/85

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

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REGION III

APPLICATION FOR MATERIAL LICENSE

- ITEM 5(a) Element and mass number - Gamma Source Cs-137
 Element and mass number - Neutron Source Am-241: Be
- ITEM 5(b) Form: Special Form
- ITEM 5(c) Maximum amount which will be possessed at any one time: Cs -137 not
 to exceed 9mCi per source; Am-241-Be not to exceed 44mCi per source
- ITEM 6 Purpose for which licensed material will be used: To be used in Troxler
 Model 3411B Series Surface Moisture/Density Gauge
- ITEM 7 Individual Responsible for Radiation Safety Program: Lee A. McClellan
 Training: Troxler Electronic Laboratories, Inc. - Nuclear Guage Operators
 and Radiation Safety Officer Course, Lansing, Illinois; May 9, 1985
 A copy of training certificate #9927 attached.
 Experience: Familiar with operation of Troxler 3411 B Equipment
- ITEM 8 Training for individuals working in or frequenting restricted areas:
 Each operator will be trained in the safe operation of the Troxler 3411B
 unit and the written Radiation Safety Program made part of this
 application under Item 9 will be adhered to. A copy of the operator's
 valid training certificate will be kept on file at the address listed in
 Item 2 and at any temporary job sites throughout the United States
 where the U.S. Nuclear Regulatory Commission maintains jurisdiction
 over the use of by-product material.
- ITEM 9 See attached floor plan of building.
- ITEM 10 See attached "Radiation Safety Program"
- ITEM 11 Waste Management:
 Should Morley and Associates, Inc. elect in the future to dispose of the
 Troxler 3411B, it will either be transferred to another authorized licensee,
 or the unit returned to Troxler Electronics Laboratories, Inc. for final
 disposal.
 In the event that the gauge is lost, stolen or physically damaged to
 the extent that the source shielding could be compromised, the Region
 III U.S. Nuclear Regulatory Commission will be immediately notified
 and the instructions dictated by the Radiation Safety Officer shall
 be adhered to.

MORLEY AND ASSOCIATES, INC.
RADIATION SAFETY PROGRAM

1. Radiation Safety Officer

A. Lee A. McClellan 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 in the required timely manner 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 equipment when utilizing the equipment.
4. To maintain the records as required by the license and the regulations. These records shall include:
 - a. Leak test records
 - b. Personnel exposure records
 - c. Inventory, receipt and transfer records
 - d. Source certificate
 - e. Transport package certification
 - f. Bill of lading for transportation
 - g. Notice to employees Form NRC-3
 - h. Valid training certificates of operators
 - i. Other applicable regulations required by USNRC
5. To ensure that the equipment is properly secured against unauthorized use and removal at all times when it is being stored or being transported to a job site.
6. To serve as a point of contact and give assistance in case of emergency such as equipment damaged in the field or theft and to notify the property authorities in case of emergency.
7. To ensure that all users have read and understand the radiation safety operating and emergency procedures.

2. 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 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 TROXLER transportation case. The TROXLER case has been tested and meets the requirements for a "Type A" Package. The case shall be labeled with two "Yellow II" radiation labels and a U.S.D.O.T. 7A "Type A" packaging label.
3. At all times during transport, the operator will have a properly completed Bill of Lading for each gauge.
4. When the gauge is to be shipped by air craft, the gauge shall be shipped in its approved U.S.D.O.T. 7A Type A Case, with a properly completed bill of lading and a "Shipper's Certification for Radioactive Material".

B. Utilization Procedures

1. When the gauge is in the field the authorized user will maintain control over the gauge at all times. The gauge will never be left unattended.
2. 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 is to be used for its intended purpose only. By doing this we will maintain any radiation exposure to as low as reasonable attainable.
3. When using the equipment, the operator will wear the personnel monitoring device that has been assigned to him. When not using the equipment, the operators monitoring device will be stored in the radiation free area that has been designed in the office.

C. Maintenance and Leak Test Procedures

1. Periodic maintenance will include cleaning the gauge. During any maintenance, the personnel will wear his personnel monitoring device.
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 the TROXLER Model 3880 Leak Test Kit. The leak test will be performed using the manufacturer's instructions. Again, the personnel monitoring device will be employed. Gauges will be leak tested at intervals not to exceed six (6) months.

3. Emergency Procedures

- A. In the event of physical damage to a gauge, the following will be performed:
1. Immediately secure an area around the gauge and clear the area of all people. An area radius of 15 feet will be maintained.
 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 time, when the situation is under control, the operator will contact Lee A. McClellan at (812) 464-9585 or (812) 477-3374. The operator will describe the present conditions and follow the instructions of the Radiation Safety Officer.
- B. In the event the gauge is lost or stolen, immediately notify the Radiation Safety Officer as listed above. The U.S.N.R.C. Region III will be immediately notified by the company's Radiation Safety Officer.

TROXLER ELECTRONIC LABORATORIES, INC.

HEREBY CERTIFIES THAT

LEE A. MCCLELLAN

of

MORLEY AND ASSOCIATES, INC.

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. | 5. Radioactivity measurement standardization and monitoring techniques and instruments. |
| 2. Leak testing procedures. | 6. Accident and incident procedures. |
| 3. Mathematics and calculations basic to the use and measurement of radioactivity. | 7. Procedures for nuclear gauge storage and transportation. |
| 4. Biological effects of radiation. | 8. General safety precautions. |

Gauge Operation

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

James A. Wanchell
INSTRUCTOR

5/09/85

DATE

W.F. TROXLER

PRESIDENT

Nº 9927

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ANO. 8507120590

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