

Michael W. Lairmore, M.S.
P.O. Box 296
77 Rea Avenue
Midland Park, New Jersey 07432
(201) 693-2277

P-3
MS-16

December 10, 2010

Kathy Modes
License Reviewer
Nuclear Regulatory Commission, Region I
475 Allendale Road
King of Prussia, PA 19406-1415

RE: Michael W. Lairmore Associates
Revised Renewal Application
License Number: 29-30227
Control Number: 573657

03033875

RECEIVED
REGION I
2010 DEC 13 AM 10:42

Dear Ms. Modes:

Pursuant to your correspondence dated November 24, 2010, a revised renewal application has been attached for review. If you require additional information, please contact me.

I thank you in advance for your assistance with this pending licensing action.

Sincerely,

Michael W. Lairmore, M.S.
Michael W. Lairmore, M.S.
President

573657
NMSS/RGN1 MATERIALS-002

NRC FORM 313
(3-2009)
10 CFR 30, 32, 33,
34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120

EXPIRES: 3/31/2012

APPLICATION FOR MATERIALS LICENSE

Estimated burden per response to comply with this mandatory collection request: 4.3 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

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:

OFFICE OF FEDERAL & STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS
DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS
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, 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

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, 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
612 E. LAMAR BOULEVARD, SUITE 400
ARLINGTON, TX 76011-4125

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 **29-30227-01**

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

Michael W. Lairmore Associates
P.O. Box 296
Midland Park, New Jersey 07432

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

77 Rea Avenue
Midland Park, New Jersey 07432
Temporary Job Sites

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Michael W. Lairmore, M.S.

TELEPHONE NUMBER
(201) 693-2277

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.

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

9. FACILITIES AND EQUIPMENT.

11. WASTE MANAGEMENT.

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

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

10. RADIATION SAFETY PROGRAM.

12. LICENSE FEES (See 10 CFR 170 and Section 170.31)
FEE CATEGORY **3P** AMOUNT ENCLOSED **\$ n/a**

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: **Michael W. Lairmore, M.S.**

SIGNATURE: *Michael W. Lairmore, M.S.*

DATE: **12/10/2010**

FOR NRC USE ONLY

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

ITEM #8

ITEM #8

<u>BYPRODUCT MATERIAL</u>	<u>Chemical and/or physical form</u>	<u>Possession Limit</u>
A. Any byproduct and/or accelerator produced materials with atomic numbers 3 through 83, and 88 and 95.	Analytical Samples	10 microcuries per radionuclide and 1 mCi total
B. Any byproduct and/or accelerator produced material with atomic numbers 3 through 83. And 88 and 95.	Sealed Sources	No single source to exceed 0.1 millicuries. Total possession limit = 1.0 millicurie.
C. Cesium-137	Sealed Sources (Any E-Vial; Rod Source; Button Source); Manufacturer(s): NEN Model NES-356 or NES-360 or NES-367) (Eckert & Ziegler Model MED3550)(IPL Model GF-008)	No single source to exceed 250 microcuries. Total Possession Limit = 2.0 millicuries
D. Barium-133	Sealed Sources (Any E-Vial; Rod Source; Button Source); Manufacturer(s): NEN Model NES-358 or NES-367) (Eckert & Ziegler Model MED3550)(IPL Model GF-133) (IPL Model RV-133-250U)	No single source to exceed 300 microcuries. Total Possession Limit = 2.0 millicuries
E. Cobalt-57	Sealed Sources (Any E-Vial; Rod Source; Button Source); Manufacturer(s): (Eckert & Ziegler Model MED3550; MED3400; GF-0210)(BenchMark/RadQual Model BM06E)	No single source to exceed 7.0 millicuries. Total Possession Limit = 30 millicuries
F. Ge-68	Eckert & Ziegler (Rod Source): Model Number: GF-068	1.0 mCi
G. Eu-52	Eckert & Ziegler (Rod Source): Model Number: GF-052	1.0 mCi
F. Tc-99m	Any Form	500 mCi

Authorized Use

- A. Taking of, and analysis of wipe samples, as a service for client facilities.
- B - G Calibration and testing of analytical instruments as a service for client facilities.
- F. Calibration of analytical instruments and shielding evaluations as a service for client facilities.

INDIVIDUALS RESPONSIBLE FOR RADIATION SAFETY PROGRAM - THEIR TRAINING & EXPERIENCE

Item 8.7.2

AUTHORIZED USERS FOR MEDICAL USE

AUTHORIZED USER

Michael W. Lairmore, M.S.

All materials requested on application

Item 8.7.1

RADIATION SAFETY OFFICER

Michael W. Lairmore, M.S.

Michael W. Lairmore is currently listed as the authorized user and radiation safety officer on NRC License Number: 29-30227. Please refer to this license for confirmation of authorized user and radiation safety officer status.

Item 8.8

TRAINING PROGRAM:

1. Before using licensed material, authorized users will receive the training described in Appendix H in NUREG-1556, Volume 18, "Consolidated Guidance About Medical Licenses; Program-Specific Guidance About Service Provider Licenses," dated November 2000.

At the present time, Michael W. Lairmore is the only individual working under the current license.

2. Before using licensed materials, ancillary personnel will have successfully completed the Classroom Training portion of the training course described in Appendix H in NUREG-1556, Volume 18, "Consolidated Guidance About Medical Licenses; Program-Specific Guidance About Service Provider Licenses," dated November 2000.

Item 8.9

FACILITIES AND EQUIPMENT DIAGRAM

When not being used at client facilities, sealed sources used by this licensee are stored in a locked safe, at 77 Rea Avenue, Midland Park, New Jersey or in the trunk of the vehicle used for the transporting sealed sources. Licensed activities regarding transport and storage are conducted under New Jersey License Number: RAD090001-454533), Alternate PI ID: NJSL-20517/01.

Refer to Attachment Section of the original renewal submission for a diagram of the storage area.

Item 8.10.2 - RADIATION MONITORING INSTRUMENTS

Equipment List

- A. Ludlum 14C, Survey Meter
- B. Ludlum 1000 Rate Meter & Well Counter Attachment
- C. Ludlum 261 Single Channel Analyzer & Well Counter Attachment
- D. Ludlum 2200 Single Channel Analyzer & Well Counter Attachment

The single channel analyzer system will be calibrated with a long lived radionuclide such as Cesium-137, each day of use.

Survey instruments will be calibrated after servicing and at least annually by the manufacturer or by a commercial service specifically licensed by the Nuclear Regulatory Commission and/or an Agreement State.

Records of survey meter calibrations will be maintained and recommendations for repair will be followed. A survey meter will not be used beyond the anniversary of its last successful calibration.

Survey meter calibrations will be performed by MPM Products or an equivalent service vendor. MPM Products operates under, Texas Radioactive Material License Number: LOO967.

“I will use instruments that meet the radiation monitoring instrument specifications published in Appendix J to NUREG-1556, Volume 18, ‘Consolidated Guidance about Material Licenses: Program-Specific Guidance about Service Provider Licenses,’ dated November 2000.’ I reserve the right to upgrade our survey instruments as necessary. “

Item 8.10.3 - MATERIAL RECEIPT AND ACCOUNTABILITY

Ordering licensed material and package receipt and opening will follow the model procedures in NUREG-1556, Volume 18, Appendix K.

Item 8.10.4 - OCCUPATIONAL DOSE

I will monitor individuals in accordance with the criteria in the section entitled; ‘Occupational Dose’ in NUREG-1556, Volume 18, ‘Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Service about Service Provider Licenses,’ dated November 2000.

“NVLAP - accredited dosimetry (film badge, TLD, OSL, etc.) will be processed by a NVLAP-accredited entity. NVLAP-accredited dosimetry will be exchanged at the frequency specified in Section 8.10.4 of NUREG-1556, Volume 18.”.

Item 8.10.6 - SAFE USE OF RADIONUCLIDES AND EMERGENCY PROCEDURES

1. Wear laboratory coats or other protective clothing at all times in areas where radioactive materials are used.
2. Wear disposal gloves at all times when handling radioactive materials.
3. Monitor hands and clothing for contamination after each procedure or before leaving the restricted area.
4. Use syringe shields for preparation of radioactive materials.
5. Do not eat, drink, smoke or apply cosmetic in any area where radioactive materials are stored or used.
6. Do not store food, drink, or personal effects in areas where radioactive materials are stored or used.
7. Wear personnel monitoring devices (whole body or extremity dosimeter) at all times while in areas where radioactive materials are stored or used. These devices should be worn as prescribed by the Radiation Safety Officer.
8. Wear a finger exposure monitor during the handling of radioactive materials.
9. Dispose of radioactive waste only in designated labeled and properly shielded receptacles.
10. Wipe test the storage, preparation and administration areas monthly for removable contamination. If necessary, decontaminate or secure the area for decay.
11. With a low range G-M survey meter, survey the storage and areas after use. If necessary, decontaminate or secure the area for decay.

12. Always store and transport radioactive materials in shielded containers.

EMERGENCY PROCEDURES
MINOR SPILLS

1. **NOTIFY:** Notify persons in the area that a spill has occurred.
2. **PREVENT THE SPREAD:** Cover the spill with absorbent paper.
3. **CLEAN UP:** Use disposal gloves and remote handling tongs. Carefully fold the absorbent paper and pad with clean side out and insert into a plastic bag for disposal in the radioactive waste container. Also put contaminated gloves and any other disposable material into the plastic bag.
4. **SURVEY:** With a low range G-M survey meter, check the area around the spill, hands, clothing and shoes for contamination.
5. **REPORT:** Report the incident to the Radiation Safety Officer

MAJOR SPILLS

1. **CLEAR THE AREA:** Notify all persons not involved in the spill to vacate the room.
2. **PREVENT THE SPREAD:** Cover the spill with absorbent pads, but do not attempt to clean it up. Confine the movement of all personnel potentially contaminated to prevent the spill.
3. **SHIELD THE SOURCE:** If possible, the spill should be shielded, but only if it can be done without further contamination or without significantly increasing your radiation exposure.
4. **CLOSE THE AREA:** Leave the room and lock the door(s), secure the area to prevent entry.
5. **CALL FOR HELP:** Notify the Radiation Safety Officer immediately.
6. **PERSONNEL DECONTAMINATION:** Contaminated clothing should be removed and stored for further evaluation by the Radiation Safety Officer. If the spill is on the skin, flush thoroughly and the wash with mild soap and lukewarm water. If contamination remains, induce perspiration by covering the area with plastic e.g. saran wrap. Then wash the affected area again to remove any contamination that was released by perspiration.

RADIATION SAFETY OFFICER: Michael W. Lairmore, M.S.

CONTACT PHONE NUMBER: (201) 693-2277

Item 8.10.7 - SURVEYS

“I will survey area of use and storage areas and maintain contamination levels in accordance with the survey frequencies and contamination levels published in NUREG-1556, Volume 18, “Program-Specific Guidance About Service Provider Licenses, dated November 2000.”

Item 8.10.8 - LEAK TEST

Every six months, sealed sources will be evaluated for removable contamination. At the time of testing, a wipe smear will be used to analyze each sealed source with an activity in excess of 100 uCi. The leak sample will be taken to my office in New Jersey and analyzed under to conditions of my New Jersey State License (License Number: RAD090001-454533 (Alternate PI ID: NJSL-20517/01).

“Leak testing will be completed in accordance with the model procedure outlined in Appendix O published in NUREG-1556, Volume 18, “Program-Specific Guidance About Service Provider Licenses, dated November 2000.”

Item 8.10.9 - MAINTENANCE

I will implement and maintain procedures for routine maintenance of my devices according to the manufacturer’s written recommendations and instructions.

Item 8.11 - WASTE MANAGEMENT

We will use the model waste procedures published in Appendix N of NUREG-1556, Volume 18, ‘Consolidated Guidance About Materials Licenses; Program-Specific Guidance About Service Providers Licenses,’ dated November 2000. “.

PHYSICAL INVENTORY & LEAK TESTING OF SEALED SOURCES:

Physical Inventories and Leak Testing of Sealed Sources will be conducted at intervals not to exceed six months, to account for all sealed sources and devices received and possessed by the license.