

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 HAMPSHIRE, 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
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, NEV., 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):

William LaPenna, MD
1900 Wealthy Street, S.E.
Grand Rapids, MI. 48506

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

1900 Wealthy Street S.E.
Grand Rapids, MI 48506

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION:

William LaPenna, MD

TELEPHONE NUMBER

616-676-1493

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

8805160209 880330
REG3 LIC30
21-25865-01 PDR

10. RADIATION SAFETY PROGRAM:

11. WASTE MANAGEMENT:

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

AMOUNT
ENCLOSED \$ 580.00

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

William LaPenna MD

William LaPenna, MD

Applicant

12-15-87

14. ANNUAL FEES (PPE)

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

15. NUMBER OF EMPLOYEES (Total for entire facility excluding outsides contractors):

1

16. NUMBER OF BEDS:

NA

17. WOULD YOU BE WILLING TO FURNISH COST INFORMATION (Labor and/or staff hours) ON THE ECONOMIC IMPACT OF CURRENT NRC REGULATIONS OR ANY FUTURE PROPOSED NRC REGULATIONS THAT MAY AFFECT YOUR NRC REGULATIONS PERMIT? (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

APPROVED BY:

App Dec 27-TH

7C

See applic's
Control No. 85100

DEC 23 1987

REGION III

Th. Therman

DATE
12/29/87

AMOUNT RECEIVED
\$580

CHECK NUMBER
6722

CONTROL NO 8463.1

DEC 23 1987

SEALED SOURCES

Sealed Sources: From Atomic Products Corporation P.O. Box R,
Shirley, N.Y. 11967

Element and Mass Number	Form	Max.mCi	Cat. Number
Ba 133	sealed	0.250	063-562
Cs 137	sealed	0.200	101-356
Co 57	sealed	5.00	063-261

Note: the use of the above is for QC on the dose calibrator and in addition the Co 57 will be used for QC on the gamma camera as described below:

Co 57	sealed	5.00	062-295
-------	--------	------	---------

Isotope Calibrator Reference Sources

- For checking calibrator accuracy, performance and consistency.

Good practice dictates, and regulatory agencies recommend, that isotope calibrators used for measuring diagnostic and therapeutic doses of radio-pharmaceuticals be checked regularly over the calibrator's range of measurements. Calibrator performance is easily monitored by using the following calibrated standards to verify the accuracy of its assays:

- (a) A long-lived source, such as ^{137}Cs ($T_{1/2} = 30$ yrs.), to avoid the tedium of constant decay corrections.
(b) A ^{57}Co source ($T_{1/2} = 270$ days) that simulates $^{99\text{m}}\text{Tc}$, the most common radioisotope in nuclear medicine.

By keeping a daily log of the values obtained on selected ranges with both standards, the user develops a performance record that detects calibrator error or failure before a mistake is made in a patient's dose.

Both sources are supplied in 20ml epoxy in a 27ml plastic vial, 85 mm H x 30 mm D. Calibrated to $\pm 5\%$.

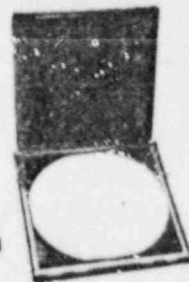
- 063-562 Calibrated Barium 133 Source,
250uCi
101-356 Calibrated ^{137}Cs Source
200uCi
063-261 Calibrated Simulated 9m-Tc Source
(Cobalt-57), 5mCi*



Cobalt-57 Flood Sources

Intended Uses:

- Daily intrinsic uniformity checks
- Extrinsic collimator checks
- Linearity and resolution checks with bar phantom
- As transmission sources
- Quality control for accreditation and regulatory requirements



The Sources contain Cobalt-57, uniformly dispersed in a plastic disc, which is completely encased in an attractive aluminum cover. Each source is supplied in a lead-shielded wooden carrying case. The shielding reduces the exposure rate at the front surface to approximately 1.4mR/hr.

Emission non-uniformity (distribution) less than 1%.
Available in three sizes.

Flood Source:

062-295 14" diameter, 5mCi

The physician responsible for Radiation Safety and Human Use of materials under the license application is:

William F. LaPenna, MD

In support of this applicant, his training and experience is documented in the following documents:

- | | |
|--|---------|
| a) Substitute NRC 313 M, Supplement A | 7.1 a |
| b) Description of Training Program | 7.1 b-i |
| c) Substitute Preceptor Statement from Henry Ford Hospital | 7.1 j-k |

**SUBSTITUTE NRC 313 M
SUPPLEMENT A**

**TRAINING OF
AUTHORIZED USER OR RADIATION SAFETY OFFICER**

1. NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER

William F. La Penna, MD

2. STATE OR TERRITORY IN
WHICH LICENSED TO
PRACTICE MEDICINE

MICHIGAN

ADDRESS

1900 Wealthy Street South East
Grand Rapids, Michigan 48506

3. CERTIFICATION

SPECIALTY BOARD
A

CATEGORY
B

MONTH AND YEAR CERTIFIED
C

4. TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES

FIELD OF TRAINING A	LOCATION AND DATE(S) OF TRAINING B	TYPE AND LENGTH OF TRAINING	
		LECTURE LABORATORY COURSES (Hours) C	SUPERVISED LABORATORY EXPERIENCE (Hours) D
a. RADIATION PHYSICS AND INSTRUMENTATION	Dr La Penna, MD completed his training between June 21, 1984 and March 26, 1985	100+	
b. RADIATION PROTECTION		30+	
c. MATHEMATICS PERTAINING TO THE USE AND MANAGEMENT OF RADIOACTIVITY		20+	
d. RADIATION BIOLOGY		20+	
e. RADIOPHARMACEUTICAL CHEMISTRY		30+	
Total Hours		200	=

5. EXPERIENCE WITH RADIATION. (Actual use of Radioisotopes or Equivalent Experience)

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
99m Tc	80mCi	H. Ford Hospital	see attached statement	Human
201Tl	40mCi	H. Ford Hospital		Human
57 Co	5mCi	" " "		QC & QA

6. TRAINING WAS COMPLETED UNDER THE DIRECT SUPERVISION OF:

NAME Charles H. Rose, MA, MSPH, D (ABS)

ADDRESS 3011 Broadway

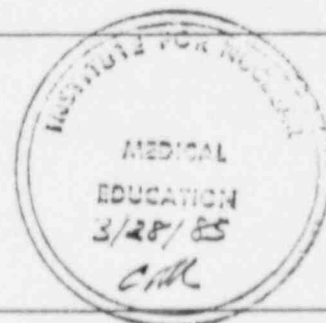
CITY Boulder

STATE Co

ZIP 80302

TELEPHONE 303-444-1943

Authorized Signature





2799 West Grand Boulevard
Detroit, Michigan 48202
(313) 876-2737

CO DIRECTORS

Sidney Goldstein, M.D.

Donald J. Magilligan, M.D.

April 23, 1987

William LaPenna, M.D.
1900 Wealthy Street S.E.
Grand Rapids, Michigan 48506

Dear Bill:

This letter will affirm that you served a fellowship in the Division of Cardiovascular Medicine from July 1983 through June 1985. During that time you had a major assignment to Nuclear Cardiology during the months of November 1983 and March 1984. During these months, you personally screened, supervised and interpreted 33 graded exercise tests with Thallium-201 myocardial perfusion imaging studies and 15 stress MUGA studies, a total of 46 Nuclear cardiologic investigation patient studies. These studies were conducted under my supervision and that of physicians in the Nuclear Medicine Division of the Department of Radiology of the Henry Ford Hospital. You were assigned to these responsibilities 20 hours per week for 8 weeks giving you an experience of 160 hours in Nuclear Cardiology doing patient testing as a regular assignment.

During your fellowship you did show a special interest in nuclear cardiologic studies and I am aware that you did approximately 60 studies while cross-covering for other fellows.

I am also aware that you sought experience in the handling of nuclear material in the Nuclear Medicine Department.

I felt that you had achieved superior knowledge and an in-depth experience in Nuclear Cardiology by the time you completed your fellowship and am pleased to provide this summary of your activity in this area.

Best personal regards,

Sincerely yours,

SOL D. PICKARD, M.D.
Senior Staff Cardiologist
Division of Cardiovascular Medicine

SDP:cjd

CC: Dr. Goldstein

7. 1 j

January 22, 1986

Gentlemen:

The purpose of this letter is to officially verify that William F. LaPenna, M.D., is a member in good standing of the active medical staff of the Blodgett Memorial Medical Center, Department of Internal Medicine, Section of Cardiology. Dr. LaPenna has full unrestricted privileges in both Internal Medicine and Cardiology. In particular, these privileges allow him to admit patients who have been injected with diagnostic amounts of radioisotopes. It is our understanding that such privileges are a necessary component of his application for licensure to administer such radioactive agents.

Respectfully submitted,



Robert L. Tupper, M.D.
Director of Medical Education

RLT/mhd

7. 1 k