

*Dr. Luis M. Cruz Cruz*

OFTALMOLOGO

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Mayagüez, PR 00680  
Tel. 834-6290 / 831-4206

June 15, 1995.

U.S. Nuclear Regulatory Commission

Dear sirs:

I am sending my application for renewal of my radioactive material license which expires 7/30/95. Included are the application form, fee, revised QMP.

Thanks.

  
Luis M. Cruz M.D.

256432

NMSS/RGNI MATERIALS-002

## APPLICATION FOR MATERIAL LICENSE

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 9 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. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-8 F39), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0120), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

**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:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

LICENSING ASSISTANT SECTION  
NUCLEAR MATERIALS SAFETY BRANCH  
U.S. NUCLEAR REGULATORY COMMISSION, REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PA 19406-1415

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION  
U.S. NUCLEAR REGULATORY COMMISSION, REGION II  
101 MARIETTA STREET, NW, SUITE 2900  
ATLANTA, GA 30323-0199

## IF YOU ARE LOCATED IN:

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

MATERIALS LICENSING SECTION  
U.S. NUCLEAR REGULATORY COMMISSION, REGION III  
801 WARRENVILLE RD.  
LISLE, IL 60532-4351

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 SECTION  
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TX 76011-8064

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 52-25102-01

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

Luis M. Cruz, M.D.  
Dr. Basora #55 Norte  
Oficina 1J  
Mayaguez, P.R. 00680

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

Dr. Basora #55 Norte  
Oficina 1J  
Mayaguez, P.R. 00680

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

Luis M. Cruz M.D.

## TELEPHONE NUMBER

809-834-6290

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

FEE CATEGORY 3E

## AMOUNT

ENCLOSED \$ 760.00

## 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, 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

Luis M. Cruz, M.D.

## SIGNATURE

*[Signature]*

## DATE

6-15-95

## FOR NRC USE ONLY

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

256492

June 15.1995

5) Radioactive Material

- a. Strontium 90
- b. Sealed source in an applicator registered pursuant to 10 CFR 32.210
- c. 150 millieries

6) Purpose

Medical treatment of superficial eye condition as identified in 10 CFR 35.400 (e)

7) Radiation Safety Officer

Luis M. Cruz. M.D.

- 8) Training for safely handling the SR-90 will be given to staff number yearly and to new staff members. Eye applicator will not be handled by staff members at any time only by the authorized user. The staff will be able to carry the applicator case but under no circumstance the staff members will open the case.

Only my self will be authorized to use the SR-90 source but safety measures will be taught to all staff members.

- 9) The SR-90 applicator will be kept in his original storage container supplied by the manufacturer. This storage container will be kept in my office room loocked in a steel cabinet. The keys will only be available to me and no other person will have authorization to open it.

10) Radiation Safety Program

Follow instructions in Enclosure (Addendum)

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June 15, 1995

ADDENDUM

**STRONTIUM 90 EYE APPLICATORS - CHECKLIST**

**Storage of eye applicator**

1. Store in manufacturer supplied storage case
2. Do not remove any metal or plastic inserts from the storage case, they are part of the shielding
3. Store on shelf so that source is at the back of the cabinet, away from the door.
4. Dose rates:
  - If stored in an area where personnel do not wear personnel monitoring when present dose rate must not exceed 0.6mR/hr at 12".
  - If stored in an area where personnel wear monitoring devices, or room is not routinely used to examine non treated patients and access is restricted, dose rate must not exceed 2 mR in any one hour.
5. If additional shielding is needed to obtain dose rates of 0.6 or 2 mR/hr, plexiglass shielding may be added to the door or storage case.

**Security**

1. Eye applicator must be secured against unauthorized removal at all times.
2. It must be stored in a locked cabinet  
OR
3. If it is stored in a patient exam room that is used by authorized personnel each day, the room door may be locked instead of the cabinet door when no one is present.
4. When the applicator is in use or out of storage, it must be under constance surveillance.
  - Surveillance may be by you or an employee working under your supervision. **THIS IS ESPECIALLY IMPORTANT WHEN WORKING IN HOSPITAL OPERATING ROOM.**
5. Extra security precautions must be taken if applicator is stored in the operating room of the hospital.

## **Sr-90 Eye Applicator Checklist, (continued)**

### **Posting**

1. **Door of storage area or cabinet must be posted with "Caution - Radioactive Material" Sign**

### **Personnel Monitoring**

1. **TLD finger badge must be worn with TLD facing the palm side of the hand every time the applicator is handled. Whole Body badges should be worn on lab coat when the applicator is being handled.**
2. **Dose received must be within the regulatory levels or ALARA levels as committed to in application. (Regulatory limits are 1.25 rem whole body and 18.75 rem extremity per calendar quarter)**
3. **When applying for license, you may not state that you will follow appendix D of Reg. Guide 10.8, it only applies to photon emitting radionuclides.**
4. **Nurses and assistants not handling the device do not need to wear extremity monitoring. Whole body monitoring does not have to be worn if you calculate that they are unlikely to receive 25% of the quarterly limit of 1.25 rem. May use monitoring for their peace of mind.**

## **Sr-90 Eye Applicator Checklist, (continued)**

### **Rules for Safely Handling eye applicator**

1. **Don't leave it out of storage any longer than necessary**  
Always be aware of security of device  
Be aware of dose rates around device
2. **Don't touch the treatment end of the applicator with your hands or other portion of your body.**
3. **Always hold the applicator by its handle**
4. **Except during patient treatment do not point the treatment end of the applicator toward another person, especially toward the eyes.**
5. **To sterilize the applicator, place a cotton swab, sponge or gauze dampened with a sterilizing agent on a flat surface, then wipe the treatment end across the swab. DO NOT STERILIZE BY HOLDING THE SWAB OR GAUZE IN YOUR HAND.**
6. **During treatment, hold the patient's eye lids open with tape or other device NOT WITH YOUR FINGERS.**

### **Leak Test/Inventories**

1. **Must be leak tested every 6 months, unless it is in storage and has not been used**
2. **Must be inventoried quarterly.**  
Frequently used applicators may be inventoried per use log as long as required information is recorded.  
Very important for infrequently used gauges.