

NRC FORM 313M (9-81) 10 CFR 35	U.S. NUCLEAR REGULATORY COMMISSION APPLICATION FOR MATERIALS LICENSE – MEDICAL	Approved by OMB 3150-0041 Expires 9-30-86
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INSTRUCTIONS – Complete Items 1 through 26 if this is an initial application or an application for renewal of a license. Use supplemental sheets where necessary. Item 26 must be completed on all applications and signed. Retain one copy. Submit original and one copy of entire application to: Director, Office of Nuclear Materials Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Upon approval of this application, the applicant will receive a Materials License. An NRC Materials License is issued in accordance with the general requirements contained in Title 10, Code of Federal Regulations, Part 30, and the Licensee is subject to Title 10, Code of Federal Regulations, Parts 19, 20 and 35 and the license fee provision of Title 10, Code of Federal Regulations, Part 170. The license fee category should be stated in Item 26 and the appropriate fee enclosed.

1.a. NAME AND MAILING ADDRESS OF APPLICANT (institution, firm, clinic, physician, etc.) INCLUDE ZIP CODE ST. JOSEPH HOSPITAL 297 CENTER STREET BANGOR, MAINE 04401 TELEPHONE NO.: AREA CODE (207) 947 8311	1.b. STREET ADDRESS(ES) AT WHICH RADIOACTIVE MATERIAL WILL BE USED (If different from 1.a.) INCLUDE ZIP CODE SAME <div style="text-align: right; color: gray;"> RECEIVED '86 DEC 10 49:15 </div>
2. PERSON TO CONTACT REGARDING THIS APPLICATION SISTER M. NORBERTA, C.E.O. TELEPHONE NO.: AREA CODE (207) 947 8311	3. THIS IS AN APPLICATION FOR: (Check appropriate item) a. <input type="checkbox"/> NEW LICENSE b. <input type="checkbox"/> AMENDMENT TO LICENSE NO. _____ c. <input checked="" type="checkbox"/> RENEWAL OF LICENSE NO. 18-16979-01
4. INDIVIDUAL USERS (Name individuals who will use or directly supervise use of radioactive material. Complete Supplements A and B for each individual.)	5. RADIATION SAFETY OFFICER (RSO) (Name of person designated as radiation safety officer. If other than individual user, complete resume of training and experience as in Supplement A.) R.P. ANDREWS, M.D.

6.a. RADIOACTIVE MATERIAL FOR MEDICAL USE					
RADIOACTIVE MATERIAL LISTED IN:	ITEMS DESIRED "X"	MAXIMUM POSSESSION LIMITS (In millicuries)	ADDITIONAL ITEMS:	MARK ITEMS DESIRED "X"	MAXIMUM POSSESSION LIMITS (In millicuries)
10 CFR 31.11 FOR IN VITRO STUDIES	X	0.25	IODINE-131 AS IODIDE FOR TREATMENT OF HYPERTHYROIDISM	X	AS NEEDED
10 CFR 35.100, SCHEDULE A, GROUP I	X	AS NEEDED	PHOSPHORUS-32 AS SOLUBLE PHOSPHATE FOR TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA AND BONE METASTASES		N/A
10 CFR 35.100, SCHEDULE A, GROUP II	X	AS NEEDED	PHOSPHORUS-32 AS COLLOIDAL CHROMIC PHOSPHATE FOR INTRACAVITARY TREATMENT OF MALIGNANT EFFUSIONS.		N/A
10 CFR 35.100, SCHEDULE A, GROUP III	X	2,000	GOLD-198 AS COLLOID FOR INTRACAVITARY TREATMENT OF MALIGNANT EFFUSIONS.		N/A
10 CFR 35.100, SCHEDULE A, GROUP IV	X	AS NEEDED	IODINE-131 AS IODIDE FOR TREATMENT OF THYROID CARCINOMA	X	1,000
10 CFR 35.100, SCHEDULE A, GROUP V	X	AS NEEDED	XENON-133 AS GAS OR GAS IN SALINE FOR BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES	X	100
10 CFR 35.100, SCHEDULE A, GROUP VI	X	3,000			

6.b. RADIOACTIVE MATERIAL FOR USES NOT LISTED IN ITEM 6.a. (Sealed sources up to 3 mCi used for calibration and reference standards are authorized under Section 35.14(d), 10 CFR Part 35, and NEED NOT BE LISTED.)			
ELEMENT AND MASS NUMBER	CHEMICAL AND/OR PHYSICAL FORM	MAXIMUM NUMBER OF MILLICURIES OF EACH FORM	DESCRIBE PURPOSE OF USE
Iodine 131	Iodide	1.0	THYROID UPTAKE STUDIES FOR USE IN LUNAR RAD. CORP. MODEL DP3 BONE MINERAL ANALYZER
Gadolinium 153	sealed source	3,000	
	LUNAR RAD. CORP. MODEL GD SERIES		
Iodine 125	#C-324 or IMC P2	600	BONE ANALYZER PERFORM QUARTERLY LINEARITY DOSE CALIBRATOR CHECKS MORE QUICKLY, REDUCING PERSONNEL RADIATION
Dose Calibrator Linearity Test Kit	Model #34-210	0	

8801280569 870831
 REQ1 LIC30
 18-16979-01 PDR

INFORMATION REQUIRED FOR ITEMS 7 THROUGH 23

For Items 7 through 23, check the appropriate box(es) and submit a detailed description of all the requested information. Begin each item on a separate sheet. Identify the item number and the date of the application in the lower right corner of each page. If you indicate that an appendix to the medical licensing guide will be followed, do not submit the pages, but specify the revision number and date of the referenced guide: Regulatory Guide 10.8, Rev. _____ Date: _____

7. MEDICAL ISOTOPES COMMITTEE		15. GENERAL RULES FOR THE SAFE USE OF RADIOACTIVE MATERIAL (Check One)	
<input type="checkbox"/>	Names and Specialties Attached; and	<input checked="" type="checkbox"/>	Appendix G Rules Followed; or
<input checked="" type="checkbox"/>	Duties as in Appendix B; or _____ (Check One)	<input type="checkbox"/>	Equivalent Rules Attached
<input type="checkbox"/>	Equivalent Duties Attached	16. EMERGENCY PROCEDURES (Check One)	
8. TRAINING AND EXPERIENCE		<input checked="" type="checkbox"/>	Appendix H Procedures Followed; or
<input type="checkbox"/>	Supplements A & B Attached for Each Individual User; and	<input type="checkbox"/>	Equivalent Procedures Attached
<input checked="" type="checkbox"/>	Supplement A Attached for RSO.	17. AREA SURVEY PROCEDURES (Check One)	
9. INSTRUMENTATION (Check One)		<input checked="" type="checkbox"/>	Appendix I Procedures Followed; or
<input checked="" type="checkbox"/>	Appendix C Form Attached; or	<input type="checkbox"/>	Equivalent Procedures Attached
<input type="checkbox"/>	List by Name and Model Number	18. WASTE DISPOSAL (Check One)	
10. CALIBRATION OF INSTRUMENTS		<input checked="" type="checkbox"/>	Appendix J Form Attached; or
<input checked="" type="checkbox"/>	Appendix D Procedures Followed for Survey Instruments; or _____ (Check One)	<input type="checkbox"/>	Equivalent Information Attached
<input type="checkbox"/>	Equivalent Procedures Attached; and	19. THERAPEUTIC USE OF RADIOPHARMACEUTICALS (Check One)	
<input type="checkbox"/>	Appendix D Procedures Followed for Dose Calibrator; or _____ (Check One)	<input checked="" type="checkbox"/>	Appendix K Procedures Followed; or
<input type="checkbox"/>	Equivalent Procedures Attached	<input type="checkbox"/>	Equivalent Procedures Attached
11. FACILITIES AND EQUIPMENT		20. THERAPEUTIC USE OF SEALED SOURCES	
<input checked="" type="checkbox"/>	Description and Diagram Attached	<input type="checkbox"/>	Detailed Information Attached; and
12. PERSONNEL TRAINING PROGRAM		<input checked="" type="checkbox"/>	Appendix L Procedures Followed; or _____ (Check One)
<input checked="" type="checkbox"/>	Description of Training Attached	<input type="checkbox"/>	Equivalent Procedures Attached
13. PROCEDURES FOR ORDERING AND RECEIVING RADIOACTIVE MATERIAL		21. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE GASES (e.g., Xenon - 133)	
<input checked="" type="checkbox"/>	Detailed Information Attached	<input checked="" type="checkbox"/>	Detailed Information Attached
14. PROCEDURES FOR SAFELY OPENING PACKAGES CONTAINING RADIOACTIVE MATERIALS (Check One)		22. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE MATERIAL IN ANIMALS	
<input type="checkbox"/>	Appendix F Procedures Followed; or	N/A	Detailed Information Attached
<input type="checkbox"/>	Equivalent Procedures Attached	23. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE MATERIAL SPECIFIED IN ITEM 6.b	
<input checked="" type="checkbox"/>	Appendix F Procedures Followed; or	<input checked="" type="checkbox"/>	Detailed Information Attached
<input type="checkbox"/>	Equivalent Procedures Attached	<input type="checkbox"/>	Detailed Information Attached

24. PERSONNEL MONITORING DEVICES

TYPE <small>(Check appropriate box)</small>		SUPPLIER	EXCHANGE FREQUENCY
a. WHOLE BODY	<input checked="" type="checkbox"/> FILM	SIEMENS GAMMASONICS	MONTHLY
	<input type="checkbox"/> TLD		
	<input type="checkbox"/> OTHER (Specify)		
b. FINGER	<input type="checkbox"/> FILM		
	<input checked="" type="checkbox"/> TLD	SIEMENS GAMMASONICS	MONTHLY
	<input type="checkbox"/> OTHER (Specify)		
c. WRIST	<input type="checkbox"/> FILM		
	<input type="checkbox"/> TLD		
	<input type="checkbox"/> OTHER (Specify)		

d. OTHER (Specify)

ALARA PROGRAM: This institution is committed to the ALARA program set forth in Appendix O.

DOSE CALIBRATOR-CAPINTEC CRC-17
GM-VICTOREEN - MODEL #489
RATEMETER-VICTOREEN-MODEL # 1a
GAMMACAMERA-SIEMENS ZLC-370S

119987

Log	Dec. 12
Remitter	
Check No.	015473 / 015762
Amount	\$ 150.00 / \$430
Fee Category	7C
Type of Fee	Renewal
Date Check Rec'd.	12/13/86 / 13/13/86
Date Completed	3/13/86
By:	S. Kimberly

25. FOR PRIVATE PRACTICE APPLICANTS ONLY

a. HOSPITAL AGREEING TO ACCEPT PATIENTS CONTAINING RADIOACTIVE MATERIAL			
NAME OF HOSPITAL		b. ATTACH A COPY OF THE AGREEMENT LETTER SIGNED BY THE HOSPITAL ADMINISTRATOR.	
MAILING ADDRESS			
CITY	STATE ZIP CODE		
c. WHEN REQUESTING THERAPY PROCEDURES, ATTACH A COPY OF RADIATION SAFETY PRECAUTIONS TO BE TAKEN AND LIST AVAILABLE RADIATION DETECTION INSTRUMENTS.			

26. CERTIFICATE

(This item must be completed by applicant)

The applicant and any official executing this certificate on behalf of the applicant named in Item 1a certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Parts 30 and 35, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

a. LICENSE FEE REQUIRED <i>(See Section 170.31, 10 CFR 170)</i>	b. APPLICANT OR CERTIFYING OFFICIAL (Signature) (1) NAME (Type of Print) SISTER M. NORBERTA
(1) LICENSE FEE CATEGORY: 7B	(2) TITLE CHIEF EXECUTIVE OFFICER
(2) LICENSE FEE ENCLOSED: \$ 150.00	c. DATE

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 313M. 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 30-36 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 used: (a) to provide records to State health departments for their information and use; and (b) to provide information 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 a NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you. A copy of the license issued will routinely be placed in the NRC's Public Document Room, 1717 H Street, N.W., Washington, D.C.
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.
5. **SYSTEM MANAGER(S) AND ADDRESS** Director, Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

**TRAINING AND EXPERIENCE
AUTHORIZED USER OR RADIATION SAFETY OFFICER**

Approved by OMB
3150-0041
Expires 9-30-86

1. NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER R.P. Andrews, M.D.		2. STATE OR TERRITORY IN WHICH LICENSED TO PRACTICE MEDICINE		
3. CERTIFICATION				
SPECIALTY BOARD A	CATEGORY B	MONTH AND YEAR CERTIFIED C		
See previous license and also license #18-01577-01				
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				
b. RADIATION PROTECTION				
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY				
d. RADIATION BIOLOGY				
e. RADIOPHARMACEUTICAL CHEMISTRY				
5. EXPERIENCE WITH RADIATION. (Actual use of Radioisotopes or Equivalent Experience)				
ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE

CALIBRATION OF SURVEY INSTRUMENTS

Check appropriate items.

- X 1. Survey instruments will be calibrated at least annually and following repair.
- X 2. Calibration will be performed at two points on each scale used for radiation protection purposes, i.e., at least up to 1 R/hr.

The two points will be approximately 1/3 and 2/3 of full scale. A survey instrument may be considered properly calibrated when the instrument readings are within ± 10 percent of the calculated or known values for each point checked. Readings within ± 20 percent are considered acceptable if a calibration chart, graph, or response factor is prepared, attached to the instrument, and used to interpret readings to within ± 10 percent. Also, when higher scales are not checked or calibrated, an appropriate precautionary note will be posted on the instrument.

3. Survey instruments will be calibrated

- a. By the manufacturer

- b. At the licensee's facility

- (1) Calibration source

Radionuclide

Manufacturer's name

Model no.

Activity in millicuries

or

Exposure rate at a specified distance

Accuracy

Traceability to primary standard

- (2) The calibration procedures in Section I of Appendix D will be used

95

- (3) The step-by-step procedures, including radiation safety procedures, are attached.

- c. By a consultant or outside firm

- (1) Name Joseph Blinick, PhD.

- (2) Location 22 Bramhall St, Portland, Maine

- ### (3) Procedures and sources

X have been approved by NRC and are on file in License No. 18-00648-01

_____ have been approved by an Agreement State: a copy of the Agreement State license, the procedures, and a description of the sources are attached, and the consultant's report will contain the information on

_____ the attached "Certificate of Instrument Calibration."

_____ the consultant's reporting form as attached.

_____ are described in the attachment, and the consultant's report will contain the information on

_____ the attached "Certificate of Instrument Calibration."

_____ the consultant's reporting form is attached.

CALIBRATION OF DOSE CALIBRATOR

A. Sources Used for Linearity Test

(Check as appropriate)

X First elution from new Mo-99/Tc-99m generator

or

X Other* (specify) If generators are not in use, a source of Tc-99m with activity equivalent to the maximum activity assayed in clinical situations will be used.

B. Sources Used for Instrument Accuracy and Constancy Tests

Radionuclide	Suggested Activity (mCi)	Activity (mCi)	Accuracy
Co-57	3-5	One millicurie or more	within \pm 5%
Ba-133	0.1-0.5	100 microcuries or more	within \pm 5%
Cs-137	0.1-0.2	100 microcuries or more	within \pm 5%
Ra-226	1-2	N/A	N/A
N/A		N/A	N/A

C. X The procedures described in Section 2 of Appendix D will be used for calibration of the dose calibrator

or

Equivalent procedures are attached.

*For licensees who are not authorized for Mo-99/Tc-99m generators, activity must be equivalent to the highest activity used.

AUTHORIZED USER

NRC AUTHORIZATION
FOR USERS IS
LISTED IN NRC LICENSE
18-01577-01

Robert P. Andrews, M.D.

"

Charles T. Lynch, M.D.

"

Douglas F. Cowan, M.D.

"

Donald E. Factor, M.D.

"

John Michael Long, M.D.

"

Hugh J. Caggiano, M.D.

"

Michael S. Pancoe, M.D.

"

Michael D. Halber, M.D.

"

Frank L. D'Amelio, M.D.

"

Frank M. Mroz, M.D.

"

Mary Warner, M.D.

"

David Warner, M.D.

"

Michael T. Silver, M.D.

"

Robert Hoffman, M.D.

"

Robert C. Dewey, M.D.

"

MEMBERSHIP

RADIATION SAFETY COMMITTEE

ST. JOSEPH HOSPITAL

297 CENTER STREET

BANGOR, MAINE 04401

R. P. ANDREWS, M.D.

LARRY VENTURA

DENNIS DODGE, R.T.

FRED WLODARSKI, M.D.

MICHAEL T. SIVLER, M.D.

THOMAS HOPE, M.D.

SUZANNE RAFTERY, R.N.

TIM MC KAY

EMMA THOMAS, N.M.T.

RADIATION SAFETY OFFICER

ASST C.E.O.

ADMINIS. DIRECTOR, RADIOLOGY

PATHOLOGY

CARDIOLOGY

EMERGENCY MEDICINE

WM. ROSEN BREAST DIAGNOSTIC CENTER

ENVIRONMENTAL ENGINEER

NUCLEAR MEDICINE

AIR FLOW CALCULATIONS FOR HOT LAB

DESCRIPTION OF STORAGE AREA: The Xenon 133 gas will be stored in it's 1/8 inch thick lead shipping container within the storage cave until required. A fume hood is over the storage cave. The storage cave and hot lab will be vented on a continual basis.

AIR FLOW: The total volume of the foom is 480 cu. ft. (8 x 6 x 10). Air can enter the room only beneath the closed door. All the air leaving the room goes through the exhaust vent in the Xenon fume hood. The room will be constantly maintained at a negative pressure. The maximum concentration of Xenon 133 over 40 hours in 7 consecutive days for the restricted area consisting of the Hot Lab has been calculated on the following basis:

- a) Maximum amount of Xenon 133 activity per week is 100mCi.
- b) Estimated Escape Fraction (maximum Xenon 133 activity lost due to leakage and inadvertent release is 0.25.
- c) Air flow volume will be at 425 ft.³/min.

Therefore using the above data and appropriate conversion factors, C can be calculated.

$$\frac{A}{C \times F} = \frac{100 \text{ mCi} (1 \times 10^3 \text{ uCi/mCi}) \times 0.25}{425 \text{ ft.}^3/\text{min.} (6.79 \times 10 \text{ ml in 40 hrs./CFM})} = 8.6 \times 10^{-7} \text{ uCi/ml per 40 hour week.}$$

This verifies that the MPC of 1×10^{-5} uCi/ml as stated in 10 CFR Part 20.103 and schedule B Table 1 of Part 20 will not be exceeded.

PERSONNEL: All persons working in the Nuclear Medicine Department will use both whole body film badges and finger badges. In the event of an accidental release of the Xenon 133 in the Hot Lab the following procedure will be implemented.

All personnel will leave the Hot Lab and close the door. The room will remain unoccupied for 22.6 minutes. Upon reentry the room will be surveyed with a low level survey meter to ensure that radiation levels have returned to normal for the area. The 22.6 minute period will ensure 20 changes of room air based upon the following calculations:

$$\begin{aligned} \text{Room volume} &= \frac{480 \text{ ft.}^3}{425 \text{ ft.}^3/\text{min}} = 1.13 \text{ minutes for 1 change} \\ \text{Air Flow} &= 425 \text{ ft.}^3/\text{min} \end{aligned}$$

Therefore, twenty exchanges of room air would require 22.6 minutes.

The air which is exhausted from the room is released directly into an unrestricted area located on the West side of the hospital. This release point is isolated from all air intakes and adjacent buildings by distances exceeding 50 feet.

PROPOSED 1987 NUCLEAR MEDICINE EXPANSION PLANS

RADIOLOGY-UNRESTRICTED

ROOM III
TO BE GIVEN BACK TO
RADIOLOGY

RADIOLOGY-UNRESTRICTED

KEY

1. SINKS
2. LUNAR SCAN TABLE
3. IBM COMPUTER
4. IODINE FUME HOOD
6. REFRIDGERATOR
7. SIEMENS COMPUTER
8. GAMMA CAMERA
9. SCAN STRETCHER
10. COLLIMATORS
11. XENON TRAP
12. XENON STORAGE
13. CRC CALIBRATOR, PROCESSOR
14. LEAD CHEST SHIELD
15. generator, tc99m
16. TRASH, NON-RADIOACTIVE
17. LEAD LINED TRASH
18. THYROID UPTAKE PROBE

THE PRIMARY PURPOSE FOR MOVING THE COMPUTERIZED CAMERA INTO ROOM IV IS TO ALLOW AMPLE ROOM TO DO SPECT STUDIES. ALL VENTILATION SCANS WILL CONTINUE TO BE PERFORMED IN ROOM I WHERE THE AIR HANDLING IS SUFFICIENT TO HANDLE AIRBORN CONTAMINATION.

CORRIDOR-UNRESTRICTED AREA

EKG-UNRESTRICTED AREA

CLOSET

CLOSET

CLOSET

CORRIDOR

UNRESTRICTED AREA

ROOM I-RESTRICTED AREA 8
SIEMENS ZLC CAMERA
TO BE INSTALLED.
REPLACING COMPUTERIZED
CAMERA.

HOT LAB
ROOM II-RESTRICTED
UNCHANGED FROM PAST

RADIOLOGY-CHEST ROOM-UNRESTRICTED

CLOSET

W.C.

ROOM IV- EQUIPMENT FROM ROOM I TO BE MOVED INTO THIS ROOM AND ROOM UPGRADED FOR SPECT AND COMPUTER WORK ONLY. DIMENSIONS OF ROOM-15'x28' NO VENTILATION SCANS TO BE PERFORMED IN THIS ROOM AT ALL. LUNAR UNIT TO BE PLACED IN THIS ROOM ALSO.

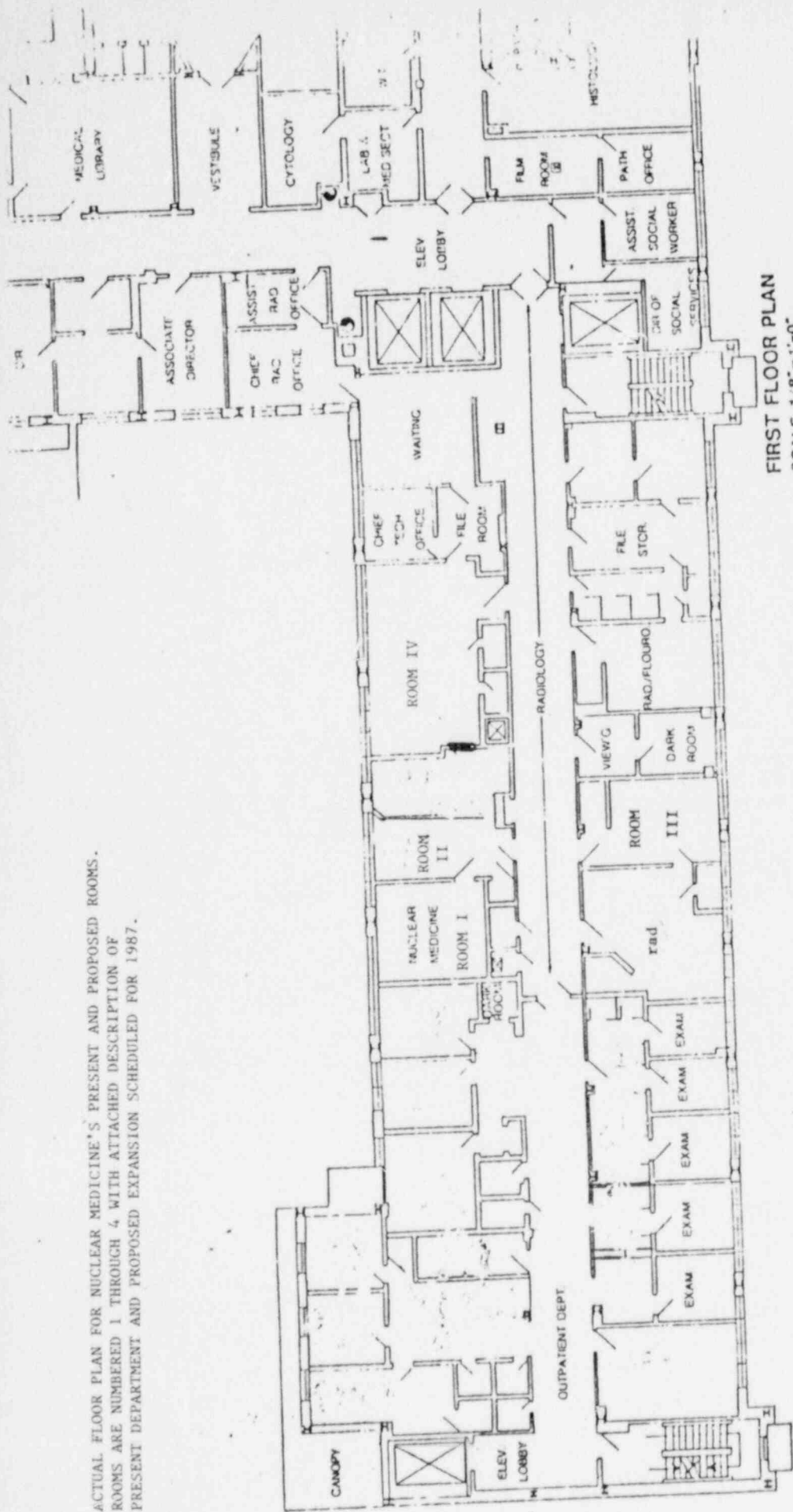
9

8

7

7

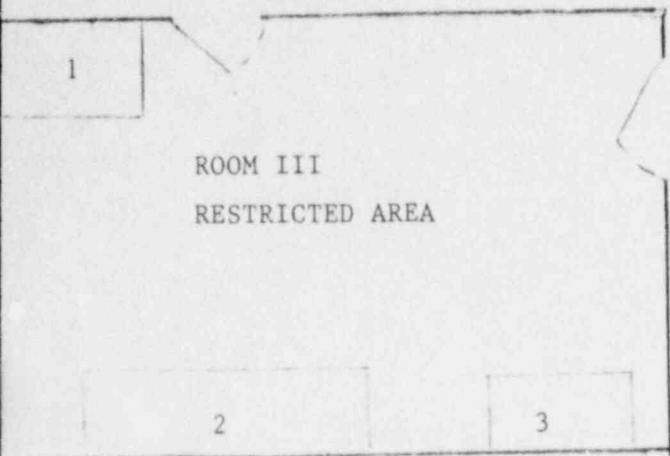
ACTUAL FLOOR PLAN FOR NUCLEAR MEDICINE'S PRESENT AND PROPOSED ROOMS.
 ROOMS ARE NUMBERED 1 THROUGH 4 WITH ATTACHED DESCRIPTION OF
 PRESENT DEPARTMENT AND PROPOSED EXPANSION SCHEDULED FOR 1987.



FIRST FLOOR PLAN
 SCALE 1/8" = 1'-0"

PRESENT NUCLEAR MEDICINE FACILITIES
SAME AS QUOTED IN LAST AMENDMENT

RADIOLOGY-UNRESTRICTED AREA



RADIOLOGY-UNRESTRICTED

KEY

1. SINKS
2. LUNAR SCAN TABLE
3. IBM COMPUTER
4. IODINE FUME HOOD
6. REFRIDGERATOR
7. SIEMENS COMPUTER
8. GAMMA CAMERA
9. SCAN STRETCHER
10. COLLIMATORS
11. XENON TRAP
12. XENON STORAGE
13. CRC CALIBRATOR, PROCESSOR
14. LEAD CHEST SHIELD
15. GENERATOR, Tc99m
16. TRASH, NON-RADIOACTIVE
17. LEAD LINED TRASH

CORRIDOR - UNRESTRICTED AREA

CORRIDOR - UNRESTRICTED AREA

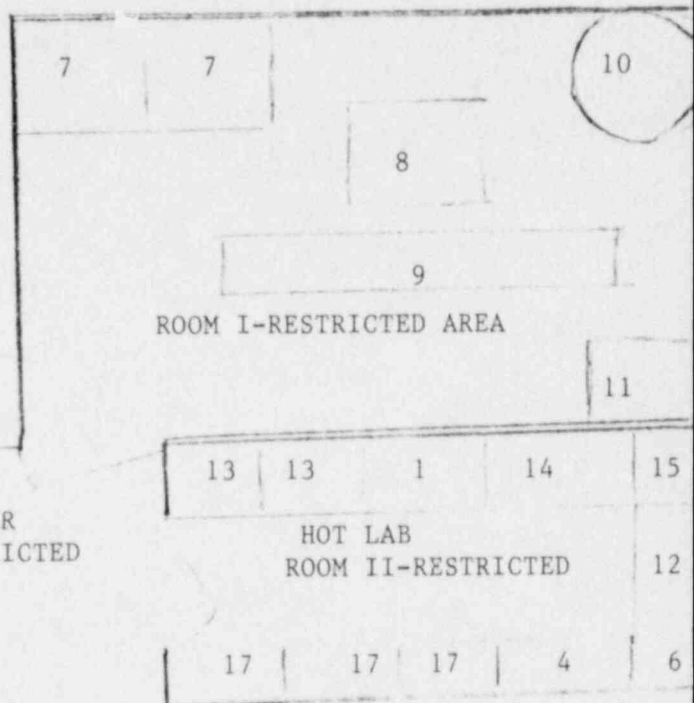
CLOSET

CLOSET

CLOSET

CORRIDOR
UNRESTRICTED
AREA

EKG-UNRESTRICTED AREA



HOT LAB
ROOM II-RESTRICTED

RADIOLOGY-CHEST ROOM-UNRESTRICTED

ROOM IV-PRESENTLY RADIOLOGY
UNRESTRICTED AREA



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

12/8/86

03012006

02120

1/87

BETWEEN: William O. Miller, Chief
License Fee Management Branch
Office of Administration

Regional License Section
Material Licensing Branch
FCMS, Office of Nuclear Material
Safety & Safeguards

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED

Applicant/Licensee:

St. Joseph Hospital

Application Dated:

12/2/86

Control No.:

119987

License No.:

18-16979-01

2. FEE ATTACHED

Amount:

\$150.00

Check No.:

015473

3. COMMENTS

Signed _____

Date _____

B. LICENSE FEE MANAGEMENT BRANCH

1. Fee Category and Amount:

7C

\$580

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

Amendment _____

Renewal ☒ _____

License _____

Signed

S. Kimberly

Date

3/13/87

"OFFICIAL RECORD COPY"