NRC FORM 313M (9-81) 10 CFR 35

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR MATERIALS LICENSE – MEDICAL

Approved by OMB 3150-0041

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

Metro Health Center
252 W. 11th Street
Erie, Pennsylvania 16501

TELEPHONE NO.: AREA CODE (814) 455 - 3961

1.b. STREET ADDRESS(ES) AT WHICH RADIOACTIVE MATERIAL WILL BE USED *(If different from 1.a.)* INCLUDE ZIP CODE

Same

2. PERSON TO CONTACT REGARDING THIS APPLICATION

W. Christopher Wagner, Consultant
Nuclear Medicine Associates

TELEPHONE NO.: AREA CODE (216) 641 - 5799

3. THIS IS AN APPLICATION FOR: *(Check appropriate item)*

a. ☐ NEW LICENSE
b. ☒ AMENDMENT TO LICENSE NO. 37-11258-01
c. ☐ RENEWAL OF LICENSE NO. _____

4. INDIVIDUAL USERS *(Name individuals who will use or directly supervise use of radioactive material. Complete Supplements A and B for each individual.)*

Refer to attached Item #8

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.)*

Amend to read: Jim Campbell, B.S., R.T.(N) with consultation from Nuclear Medicine Associates, Cleveland, Ohio 44125

6.a. RADIOACTIVE MATERIAL FOR MEDICAL USE

RADIOACTIVE MATERIAL LISTED IN:	ITEMS DESIRED "X"	MAXIMUM POSSESSION LIMITS *(In millicuries)*
10 CFR 31.11 FOR IN VITRO STUDIES		
10 CFR 35.100, SCHEDULE A, GROUP I		AS NEEDED
10 CFR 35.100, SCHEDULE A, GROUP II		AS NEEDED
10 CFR 35.100, SCHEDULE A, GROUP III		
10 CFR 35.100, SCHEDULE A, GROUP IV		AS NEEDED
10 CFR 35.100, SCHEDULE A, GROUP V		AS NEEDED
10 CFR 35.100, SCHEDULE A, GROUP VI		

ADDITIONAL ITEMS:	MARK ITEMS DESIRED "X"	MAXIMUM POSSESSION LIMITS *(In millicuries)*
IODINE-131 AS IODIDE FOR TREATMENT OF HYPERTHYROIDISM		
PHOSPHORUS-32 AS SOLUBLE PHOSPHATE FOR TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA AND BONE METASTASES		
PHOSPHORUS-32 AS COLLOIDAL CHROMIC PHOSPHATE FOR INTRACAVITARY TREATMENT OF MALIGNANT EFFUSIONS.		
GOLD-198 AS COLLOID FOR INTRACAVITARY TREATMENT OF MALIGNANT EFFUSIONS.		
IODINE-131 AS IODIDE FOR TREATMENT OF THYROID CARCINOMA		
XENON-133 AS GAS OR GAS IN SALINE FOR BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES.		

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
The purpose of this amendment application is to: 1. Amend RSO to read Jim Campbell, B.S., R.T.(N) 2. Amend to add John Cox, D.O. as an authorized user 3. Reflect equipment change 4. Addition of remote stress lab 5. Amend Items 13, 17, 18 in their entirety			

NRC FORM 313M (9-81)

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. 1 Date: Oct., 1980

7. MEDICAL ISOTOPES COMMITTEE	
	Names and Specialties Attached; and
	Duties in Appendix B; or *(Check One)*
	Equivalent Duties Attached
8. TRAINING AND EXPERIENCE	
X	Supplements A & B Attached for John Cox, D.O. and
X	Supplement A Attached for RSO.
9. INSTRUMENTATION *(Check One)*	
X	Appendix C Form Attached; or
	List by Name and Model Number
10. CALIBRATION OF INSTRUMENTS	
	Appendix D Procedures Followed for Survey Instruments; or *(Check One)*
	Equivalent Procedures Attached; and
	Appendix D Procedures Followed for Dose Calibrator; or *(Check One)*
	Equivalent Procedures Attached
11. FACILITIES AND EQUIPMENT	
X	Description and Diagram Attached
12. PERSONNEL TRAINING PROGRAM	
	Description of Training Attached
13. PROCEDURES FOR ORDERING AND RECEIVING RADIOACTIVE MATERIAL	
X	Detailed Information Attached
14. PROCEDURES FOR SAFELY OPENING PACKAGES CONTAINING RADIOACTIVE MATERIALS *(Check One)*	
	Appendix F Procedures Followed; or
	Equivalent Procedures Attached

15. GENERAL RULES FOR THE SAFE USE OF RADIOACTIVE MATERIAL *(Check One)*	
	Appendix G Rules Followed; or
	Equivalent Rules Attached
16. EMERGENCY PROCEDURES *(Check One)*	
	Appendix H Procedures Followed; or
	Equivalent Procedures Attached
17. AREA SURVEY PROCEDURES *(Check One)*	
	Appendix I Procedures Followed; or
X	Equivalent Procedures Attached
18. WASTE DISPOSAL *(Check One)*	
X	Appendix J Form Attached; or
	Equivalent Information Attached
19. THERAPEUTIC USE OF RADIOPHARMACEUTICALS *(Check One)*	
	Appendix K Procedures Followed; or
	Equivalent Procedures Attached
20. THERAPEUTIC USE OF SEALED SOURCES	
	Detailed Information Attached; and
	Appendix L Procedures Followed; or *(Check One)*
	Equivalent Procedures Attached
21. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE GASES (e.g., Xenon – 133)	
	Detailed Information Attached
22. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE MATERIAL IN ANIMALS	
	Detailed Information Attached
23. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE MATERIAL SPECIFIED IN ITEM 6.b	
	Detailed Information Attached

24. PERSONNEL MONITORING DEVICES

TYPE (Check appropriate box)			SUPPLIER	EXCHANGE FREQUENCY
a. WHOLE BODY		FILM		
		TLD		
		OTHER (Specify)		
b. FINGER		FILM		
		TLD		
		OTHER (Specify)		
c. WRIST		FILM		
		TLD		
		OTHER (Specify)		

d. OTHER (Specify)

25. FOR PRIVATE PRACTICE APPLICANTS ONLY

a. HOSPITAL AGREEING TO ACCEPT PATIENTS CONTAINING RADIOACTIVE MATERIAL

NAME OF HOSPITAL

MAILING ADDRESS

CITY | STATE | ZIP CODE

b. ATTACH A COPY OF THE AGREEMENT LETTER SIGNED BY THE HOSPITAL ADMINISTRATOR

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
(See Section 170.31, 10 CFR 170)

(1) LICENSE FEE CATEGORY
7C

(2) LICENSE FEE ENCLOSED $ _____

b. APPLICANT OR CERTIFYING OFFICIAL (Signature)
X Luis D. Hernandez

(1) NAME (Type or Print)
X Luis A. Hernandez

(2) TITLE
X Administrator

c. DATE
X September 5, 1985

NRC FORM 313M (9-81)

NRC FORM 313M SUPPLEMENT A
(9-81)

U.S. NUCLEAR REGULATORY COMMISSION

TRAINING AND EXPERIENCE
AUTHORIZED USER OR RADIATION SAFETY OFFICER

1. NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER	2. STATE OR TERRITORY IN WHICH LICENSED TO PRACTICE MEDICINE
JAMES H. CAMPBELL, B.S. RT(N)	

3. CERTIFICATION

SPECIALTY BOARD A	CATEGORY B	MONTH AND YEAR CERTIFIED C
American Registry Radiologic Technologist 183778	Nuclear	October, 1982

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	Nuclear Medicine Institute of Hillcrest Hospital 8-31-81-12-18-81	46 hrs Physics 55 hrs Instrumentation	20 hours
b. RADIATION PROTECTION	Nuclear Medicine Institute of Hillcrest Hospital 8-31-81 - 12-18-81	21 hrs.	6 hrs.
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	Nuclear Medicine Institute of Hillcrest Hospital 8-31-81 - 12-18-81	46 hrs.	0 hrs.
d. RADIATION BIOLOGY	Nuclear Medicine Institute of Hillcrest Hospital 8-31-81 - 12-18-81	25 hrs.	3 hrs.
e. RADIOPHARMACEUTICAL CHEMISTRY	Nuclear Medicine Institute of Hillcrest Hospital 8-31-81 - 12-18-81	75 hrs.	12 hrs.

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

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
$Tc^{99m}O_4$	30 mCi	Hamot Med. Center/MetroHealth Ctr.	4 years	Diagnostic
Xe 133	20 mCi	Hamot Med. Center/MetroHealth	4 years	Diagnostic
I 131	100 mCi	Hamot Med. Center/MetroHealth	4 years	Diagnos/Therapeutic
In 111	2.0 mCi	Metro Health Center	6 months	Diagnostic
Tl 201	3.0 mCi	Hamot/Metro Health Center	3 years	Diagnostic
Ga 67	6.6 mCi	Hamot/Metro Health Center	4 years	Diagnostic
I 125	250 μCi	Hamot Medical Center	1 year	Diagnostic

NAME OF AUTHORIZED USER	AUTHORIZATION
John Cox, D.O.	Groups I, II, III Xenon-133 In Vitro studies Iodine-131 as iodide for treatment of hyperthyroidism cardiac dysfunction and thyroid carcinoma

Please refer to attached Supplements A and B for physician training and experience.

Item #8
1 of 1 page
Prepared: 9/3/85
Lic. #37-11258-01

NRC FORM 313M SUPPLEMENT A (9-81) — U.S. NUCLEAR REGULATORY COMMISSION

TRAINING AND EXPERIENCE
AUTHORIZED USER OR RADIATION SAFETY OFFICER

1 NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER	2 STATE OR TERRITORY IN WHICH LICENSED TO PRACTICE MEDICINE
JOHN P. COX, D.O.	Pennsylvania/Ohio

3 CERTIFICATION

SPECIALTY BOARD A	CATEGORY B	MONTH AND YEAR CERTIFIED C
American Board of Radiology	Diagnostic Radiology	June, 1983

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	TYPE AND LENGTH OF TRAINING: SUPERVISED LABORATORY EXPERIENCE (Hours) D
a. RADIATION PHYSICS AND INSTRUMENTATION	Akron City Hospital 1978-1983 Akron, Ohio	100 hrs.	0 hrs.
b. RADIATION PROTECTION	Akron City Hospital 1978-1983 Akron, Ohio	30 hrs.	0 hrs.
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	Akron City Hospital 1978-1983 Akron, Ohio	20 hrs.	0 hrs.
d. RADIATION BIOLOGY	Akron City Hospital 1978-1983 Akron, Ohio	36 hrs.	0 hrs.
e. RADIOPHARMACEUTICAL CHEMISTRY	Akron City Hospital 1978-1983 Akron, Ohio	30 hrs.	12 hrs.

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

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
$Tc^{99}mO_4$	30 mCi	Akron City Hosp, Akron, OH	October 1, 1980 to November 14, 1980 and April, May and June, 1982 (Total 760 hrs.)	Diagnostic Nuclear Medicine and Thyroid Therapy for hyperthyroidism and thyroid carcinoma
Xe 133	20 mCi	Akron City Hosp., Akron, OH		
I 131	150 mCi	Akron City Hosp., Akron, OH		
In 111	2.0 mCi	Akron City Hosp., Akron, OH		
Yb 169	4.0 mCi	Akron City Hosp., Akron, OH		
Tl 201	3.0 mCi	Akron City Hosp., Akron, OH		
Ga 67	7.0 mCi	Akron City Hosp., Akron, OH		

NRC FORM 313M SUPPLEMENT B
(9-81)

U. S. NUCLEAR REGULATORY COMMISSION

PRECEPTOR STATEMENT

Supplement B must be completed by the applicant physician's preceptor. If more than one preceptor is necessary to document experience, obtain a separate statement from each.

1. APPLICANT PHYSICIAN'S NAME AND ADDRESS

FULL NAME

JOHN P. COX, D.O.

STREET ADDRESS

5602 Bonaventure Drive

CITY	STATE	ZIP CODE
Erie	PA.	16505

KEY TO COLUMN C

PERSONAL PARTICIPATION SHOULD CONSIST OF:

1-Supervised examination of patients to determine the suitability for radioisotope diagnosis and/or treatment and recommendation for prescribed dosage.

2-Collaboration in dose calibration and actual administration of dose to the patient including calculation of the radiation dose, related measurements and plotting of data.

3-Adequate period of training to enable physician to manage radioactive patients and follow patients through diagnosis and/or course of treatment.

2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN

ISOTOPE A	CONDITIONS DIAGNOSED OR TREATED B	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION C	COMMENTS *(Additional information or comments may be submitted in duplicate on separate sheets.)* D
I-131 or I-125	DIAGNOSIS OF THYROID FUNCTION	99	
	DETERMINATION OF BLOOD AND BLOOD PLASMA VOLUME	0	
	LIVER FUNCTION STUDIES	0	
	FAT ABSORPTION STUDIES	0	
	KIDNEY FUNCTION STUDIES	26	
	IN VITRO STUDIES	0	
OTHER			
I-125	DETECTION OF THROMBOSIS	0	
I-131	THYROID IMAGING	119	
P-32	EYE TUMOR LOCALIZATION	0	
Se-75	PANCREAS IMAGING	0	
Yb-169	CISTERNOGRAPHY	2	
Xe-133	BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES	121	
OTHER			
Tc 99m	BRAIN IMAGING	47	
	CARDIAC IMAGING	31	
	THYROID IMAGING	47	
	SALIVARY GLAND IMAGING	0	
	BLOOD POOL IMAGING	41	
	PLACENTA LOCALIZATION	0	
	LIVER AND SPLEEN IMAGING	491	
	LUNG IMAGING	133	
	BONE IMAGING	708	
OTHER			

PRECEPTOR STATEMENT *(Continued)*

2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN *(Continued)*

ISOTOPE A	CONDITIONS DIAGNOSED OR TREATED B	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION C	COMMENTS *(Additional information or comments may be submitted in duplicate on separate sheets.)* D
P-32 *(Soluble)*	TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA, AND BONE METASTASES	0	
P-32 *(Colloidal)*	INTRACAVITARY TREATMENT	0	
I-131	TREATMENT OF THYROID CARCINOMA	3	
	TREATMENT OF HYPERTHYROIDISM	24	
Au-198	INTRACAVITARY TREATMENT	0	
Co-60 or Cs-137	INTERSTITIAL TREATMENT	0	
	INTRACAVITARY TREATMENT	0	
I-125 or Ir-19	INTERSTITIAL TREATMENT	0	
Co-60 or Cs-137	TELETHERAPY TREATMENT	0	
Sr-90	TREATMENT OF EYE DISEASE	0	
	RADIOPHARMACEUTICAL PREPARATION	0	
Mo-99/ Tc-99m	GENERATOR	0	
Sn-113/ In-113m	GENERATOR	0	
Tc-99m	REAGENT KITS	0	
Other			

3. DATES AND TOTAL NUMBER OF HOURS RECEIVED IN CLINICAL RADIOISOTOPE TRAINING

October 1, 1980 to November 14, 1980
April May & June, 1982 (Total 760 hrs)

4. THE TRAINING AND EXPERIENCE INDICATED ABOVE WAS OBTAINED UNDER THE SUPERVISION OF:

a. NAME OF SUPERVISOR
Joseph A. Crawford, M.D.

b. NAME OF INSTITUTION
Akron City Hospital

c. MAILING ADDRESS
525 East Market Street

d. CITY
Akron, Ohio 44309

5. MATERIALS LICENSE NUMBER(S)
34-01932-01

6. PRECEPTOR'S SIGNATURE
Joseph A Crawford

7. PRECEPTOR'S NAME *(Please type or print)*
JOSEPH A. CRAWFORD, M.D.

8. DATE
August 14, 1985

NRC FORM 313M SUPPLEMENT B
(9-81)

METRO HEALTH CENTER
252 WEST 11th STREET • ERIE, PENNSYLVANIA 16501 • 814/455-3961

September 5, 1985

This is intended to document the actual generator elutions and radio-pharmaceutical kit preparations required for preceptor forms for John P. Cox, D.O. showing complete training necessary for licensed users of radio-isotopes. The following dates have been duly recorded and procedures properly followed to qualify Dr. Cox for these two procedures:

Elution dates with proper assay and Mo^{99} assay-	Tuesday, August 27, 1985 Wednesday, August 28, 1985 Thursday, August 29, 1985 Friday, August 30, 1985 Tuesday, September 3, 1985
Date and kits prepared with assay and proper labeling-	August 27, 1985 - MAA August 29, 1985 - HDP, Sulfur Colloid September 3, 1985 - Hepatolite, HDP

A. B. Calabrese, Ph.D., D.O., M.D.
Chairman Nuclear Medicine Department

James H. Campbell, B.S., RNMT

John P. Cox, D.O.

ABC:df

APPENDIX C

INSTRUMENTATION

1. Survey meters Amend to add:

   a. Manufacturer's name: Eberline

      Manufacturer's model number: E-520

      Number of instruments available:

      Minimum range: 0 mR/hr to 0.2 mR/hr

      Maximum range: 0 mR/hr to 2000 mR/hr

   b. Manufacturer's name:

      Manufacturer's model number:

      Number of instruments available:

      Minimum range: mR/hr to mR/hr

      Maximum range: mR/hr to mR/hr

2. Dose Calibrator(s) Amend to add:

   Manufacturer's name: Capintec

   Manufacturer's model number: CRC-12

   Number of instruments available: 1

3. Instruments used for diagnostic procedures

Type of Instrument	Manufacturer's Name	Model No.

4. Other (e.g., liquid scintillation counter, area monitor, velometer)

Item #9
1 of 1 page
Prepared: 9/3/85
Lic. #37-11258-01

Facilities and Equipment

Diagram

Air Supply

Air Exhaust

___ Scanner

___ Uptake/Well

1 Camera

2 Lockable Door

___ Receipt Area

___ Generator

___ Kit Preparation

___ Isotope Storage

___ Dose Preparation

___ Waste Storage

___ Dose Calibrator

___ Refrigerator

Sink

Lead Castle

Adjacent Areas

___ _____

___ _____

___ _____

___ _____

___ _____

___ _____

___ _____

___ _____

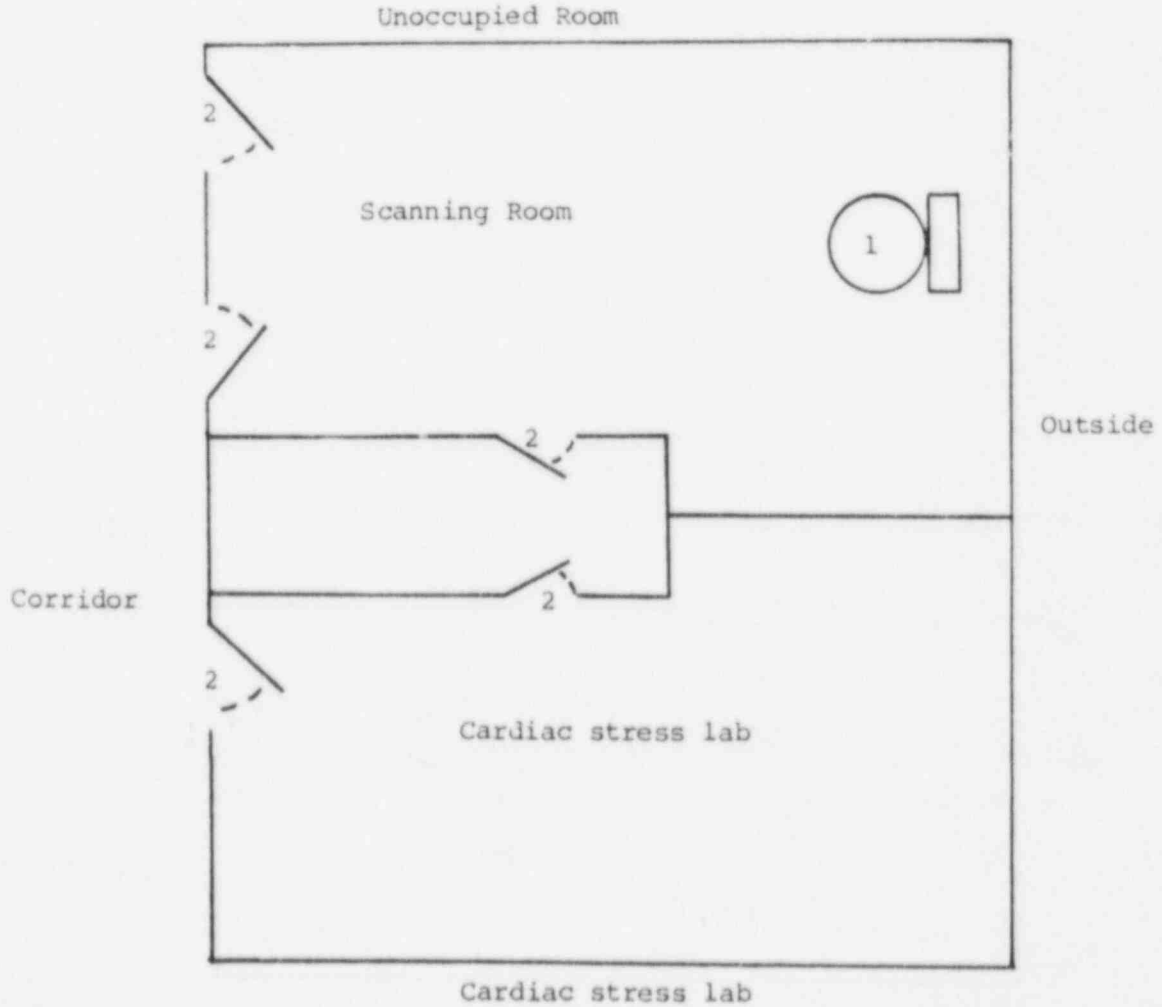
Lead Shielding

___ ___L x ___W x ___H x ___T

___ ___L x ___W x ___H x ___T

___ ___L x ___W x ___H x ___T

___ ___L x ___W x ___H x ___T



Item #11
1 of 1 pages
Prepared 9/3/85
Lic. #37-11258-01

PROCEDURES FOR ORDERING AND RECEIVING RADIOACTIVE MATERIAL

1. The chief nuclear medicine technologist or his/her designee will place all orders for radioactive material and will ensure that the requested materials and quantities are authorized by the license, and that possession limits are not exceeded. The receipt area identified in the Item #11 diagram is designed such that radiation levels in unrestricted areas do not exceed the limits specified in 10 CFR 20.105.

2. During normal working hours, carriers will be instructed to deliver radioactive packages directly to nuclear medicine. If this is not practical, responsible personnel (indicated in the memorandum below) will sign for packages containing radioactive materials and immediately take them to this location. Alternatively, trained nuclear medicine personnel will sign for and transport packages to the appropriate department.

3. During off-duty hours, supervisory personnel will arrange to have delivery of radioactive packages in accordance with the procedures outlined in the following directive:

TO: Managerial Personnel of: Security, E.R.

FROM: RSO

SUBJECT: Delivery of packages containing radioactive materials

If couriers or common carriers attempt delivery of packages containing radioactive materials, the supervisor on duty will be contacted. He/she will have the carrier escorted to nuclear medicine by personnel who have been assigned this duty. Alternatively, hospital personnel will deliver the package to the receipt area. Under these conditions, people transporting the packages will receive special training for this purpose. Personnel not trained in the proper handling of radioactive materials are not to personally accept packages containing radioactive materials. The packages will be secured against unauthorized removal. When delivered packages are wet or appear to be damaged, the RSO is to be immediately contacted.* The carrier should be requested to remain until it can be determined that neither he nor the delivery vehicle is contaminated.

*Radiation Safety Officer: Jim Campbell, B.S., R.T. (N) Ext. 1050
(Home) Contact hospital operator

Item #13
1 of 1 page
Prepared: 9/3/85
Lic. # 37-11258-01

SURVEY PROCEDURES

A. Routine elution, preparation and designated injection areas will be surveyed daily with a G-M survey meter and decontaminated, if necessary.

B. Laboratory areas where only small quantities of radioactive material are used (less than 200 uCi) will be surveyed monthly.

C. All other laboratory areas will be surveyed weekly.

D. The weekly and monthly survey will consist of:

1. A measurement of radiation levels with a survey meter sufficiently sensitive to detect 0.1 mR/hr.

2. A series of wipe tests to measure contamination levels. Analysis of wipe tests will be performed using a low level G-M survey meter.

The procedure will be as follows:

a. Perform wipe tests.
b. Place smear(s) in a "baggy" or disposable glove.
c. Adjust response time to the longest time constant, if applicable.
d. Select most sensitive range.
e. Turn beta shield on probe to open position.
f. Wait until reading stabilizes.
g. Read and record background.
h. Place smear in contact with open position of probe.
i. Wait until the reading stabilizes.
j. Read and record wipe results.

Action levels for smear analysis using the G-M survey meter will be set at any response above background. If action levels of removable contamination are found, decontamination efforts will be initiated to provide for clean-up or to prevent spread. In order to avoid unnecessary personnel exposure, contamination strongly suspected as being caused by Tc-99m may be shielded and/or covered to prevent spread and be allowed to decay.

Item #17
1 **of** 2 **pages**
Prepared: 9/3/85
Lic. # 37-11258-01

E. A permanent record will be kept of the weekly or monthly survey results, including negative results. The record will include:

1. Location, date and type of equipment used.

2. Name of person conducting the survey.

3. Drawing of area surveyed, identifying relevant features such as active storage areas, active waste areas, etc.

4. Measured exposure rates, keyed to location on drawing (point out rates that require corrective action).

5. Detected contamination levels, keyed to locations on drawing.

6. Corrective action taken in the case of contamination or excessive exposure rates, reduced contamination levels or exposure rates after corrective action, and any appropriate comments.

APPENDIX J

WASTE DISPOSAL

1. Liquid waste will be disposed of:

__X__ A. In the sanitary sewer system in accordance with 20.303 of 10 CFR, Part 20.

__X__ B. Held for decay until radiation levels, as measured in a low background area with a low-level survey meter and with all shielding removed, have reached background levels. All radiation labels will be removed or obliterated, and the generators will be disposed of as normal trash.

__X__ C. Other (specify): Return to radiopharmacy.

2. Mo-99/Tc-99m generators will be:

__X__ A. Returned to manufacturer for disposal.

__X__ B. Held for decay until radiation levels, as measured in a low background area with a low-level survey meter and with all shielding removed, have reached background levels. All radiation labels will be removed or obliterated, and the generators will be disposed of as normal trash.

___ C. Disposed of by commercial waste disposal service.

_____

___ D. Other (specify): Return to radiopharmacy.

3. Other solid waste will be:

__X__ A. Held for decay until radiation levels, as measured in a low background area with a low-level survey meter and with all shielding removed, have reached background levels. All radiation labels will be removed or obliterated, and the waste will be disposed of in normal trash.

___ B. Disposed of by commercial waste disposal service.

_____

__X__ C. Other (specify): Return to radiopharmacy.

Item #18
1 of 1 page
Prepared: 9/3/85
Lic. #37-11258-01

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

Name Change

John E. Glenn, Chief
Nuclear Materials Section B
Division of Engineering and
Technical Programs

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED

Applicant/Licensee: Metro Health Center

Application Dated: 8/16/85

Control No.: 04286

License No.: 37-11258-01

2. FEE ATTACHED

Amount: $120.00

Check No.: 023804

3. COMMENTS

02120
12/87

LMS 03

Signed Brenda Pilatchek

Date 8/22/85

B. LICENSE FEE MANAGEMENT BRANCH

1. Fee Category and Amount: 7C - $120

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

Amendment ✓

Renewal _____

License _____

Signed G Jackson

Date 9/18/85

REGION I FORM 213
(MARCH 1983)

"SECTION COPY"

OR'S OSTEOPATHIC HOSPITAL
ERIE, PA.

VENDOR	INVOICE NUMBER	AMOUNT	DISCOUNT	NET AMOUNT
	Application to amend NRC license	120.00		

HECK NO.
3804

60-75
433

doctors d|h hospital

OSTEOPATHIC
ERIE, PENNSYLVANIA

023804

CHECK NO.	MO.	DATE DY.	YR.
23804	08	16	85

PAY DOLLARS CENTS

DOLLARS	CENTS
120	00

U.S. Nuclear Regulatory Commission
Regional Licensing Section
631 Park Avenue
King of Prussia, PA 19406

TY-PEOPLES
COMPANY
NNA.

"023804" :043300754: 00 104 002 2"