030-08713

NRC FORM 313
(7-87)
10 CFR 30, 32, 33, 34, 35 and 40

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED BY OMB
3150-0120
Expires: 6-30-90

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.

APPLICATIONS FOR DISTRIBUTION OF EXEMPT PRODUCTS 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 MATERIALS SAFETY 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
NUCEAR MATERIALS SAFETY 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, NEVADA, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION V
NUCLEAR MATERIALS SAFETY 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 _____
- [X] C. RENEWAL OF LICENSE NUMBER 18-15190-01

2. NAME AND MAILING ADDRESS OF APPLICANT *(Include Zip Code)*

Redington Fairview General Hospital
Fairview Ave., Box 465
Skowhegan, ME 04976

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

Same as Item #2

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION | TELEPHONE NUMBER

Chet Bradbury, Radiation Safety Spec., Physics Consultants | (207) 795-2459

SUBMIT ITEMS 5 THROUGH 11 ON 8½ 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 EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSEE FEES *(See 10 CFR 170 and Section 170.31)*
FEE CATEGORY 7C | AMOUNT ENCLOSED $ 580

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
B.W. MacArthur	Benjamin MacArthur	CEO	3/29/88

9001170112 880929
REG1 LIC30
18-15190-01 PDR

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	COMMENTS	APPROVED BY
REN	Apr. 8 I	7C	Code 23	J. Kemberling
AMOUNT RECEIVED	CHECK NUMBER			DATE
$580	36541			4/13/88

"OFFICIAL RECORD COPY" ML1

1+8668

ITEM 5 - Radioactive Material and **ITEM 6 - Purpose**

Byproduct Material	Amount	Purpose
5.a. Material in 35.100	As Needed	6.a. medical use
5.b. Material in 35.200	2 Curies	6.b. medical use
5.c. Material in 35.300	As Needed	6.c. medical use
5.d. Material in 31.11	3 millicuries	6.d. in vitro use

ITEM 7

Please delete John H. Steeves, M.D. and continue Robert Steinhacker, M.D. as Authorized User and Radiation Safety Officer.

ITEM 8

We will establish and implement the model training program that was published in Appendix A to Regulatory Guide 10.8, Revision 2, and have appended a table ATT 8.1 that indentifies the groups of workers who will receive training and the method of training.

ITEM 9

Enclosed are attachments ATT 9.1.a - Drawing.

ITEM 9.2

Our survey meter will be calibrated at Central Maine Medical Center, License No. 18-03278-02 by or under the supervision of Terry D. Zipper, M.S., D.A.B.R. A 100mCi Cs-137 source contained in a J.L. Sheperd and Associates Model 28-5A calibrator is used for calibration. The model procedure for calibrating survey instruments that was published in Appendix B to Regulatory Guide 10.8, Revision 2 will be followed.

A Ludlum Model 14C Survey Meter with Probe Model 44-7 will be used to meet the requirements for both the high and low level survey instruments.

Enclosed are ATT 9.2a and 9.2b.

ITEM 9.3

We have developed a dose calibrator calibration procedure for your review that is appended as ATT 9.3.

ITEM 9.4

We will establish and implement the model personnel external exposure monitoring program published in Appendix D to Regulatory Guide 10.8, Revision 2.

ITEM 9.5

N/A

ITEM 9.6

N/A

ITEM 10.1

We will establish and implement the model procedures for establishing and operating a Radiation Safety Committee that was published in Appendix F to Regulatory Guide 10.8, Revision 2.

ITEM 10.2

We will establish and implement the model ALARA program that was published in Appendix G to Regulatory Guide 10.8, Revision 2.

ITEM 10.3

We will establish and implement the model procedure for leak-testing sealed sources that was published in Appendix H to Regulatory Guide 10.8, Revision 2.

ITEM 10.4

We will establish and implement the model safety rules published in Appendix I to Regulatory Guide 10.8, Revision 2.

ITEM 10.5

We will establish and implement the model spill procedure published in Appendix J to Regulatory Guide 10.8, Revision 2.

ITEM 10.6

We will establish and implement the model guidance for ordering and receiving radioactive material that was published in Appendix K to Regulatory Guide 10.8, Revision 2.

ITEM 10.7

We will establish and implement the model procedure for opening packages that was published in Appendix L to Regulatory Guide 10.8, Revision 2.

ITEM 10.8 and **ITEM 10.9**

We have developed a procedure for patient dose records which includes all the information required by 10CFR 35.53. It is appended as ATT 10.8-9 for your review.

ITEM 10.10

We will establish and implement the model procedure for measuring and recording molybdenum concentrations that was published in Appendix M.3 to Regulatory Guide 10.8, Revision 2.

ITEM 10.11

N/A

ITEM 10.12

We will establish and implement the model procedure for area surveys that was published in Appendix N to Regulatory Guide 10.8, Revision 2.

ITEM 10.13.1

N/A No noble gases are used.

ITEM 10.13.2

We will collect spent aerosol in a shielded trap and, for re-usable traps, monitor the trap effluent with an air contamination monitor that we will check regularly according to the manufacturer's instructions. Currently we only use single-use devices.

ITEM 10.13.3

N/A No noble gases are used.

ITEM 10.14

We will establish and implement the model procedure for radiation safety during radiopharmaceutical therapy that was published in Appendix P to Regulatory Guide 10.8, Revision 2.

ITEM 10.15

N/A

ITEM 10.16

Same as Item 8.

ITEM 11.1

We will establish and impiement the general guidance and model procedures for waste disposal that were published in Appendix R to Regulatory Guide 10.8, Revision 2.

ITEM 11.2

Same as Item 11.1.

ATT 8.1

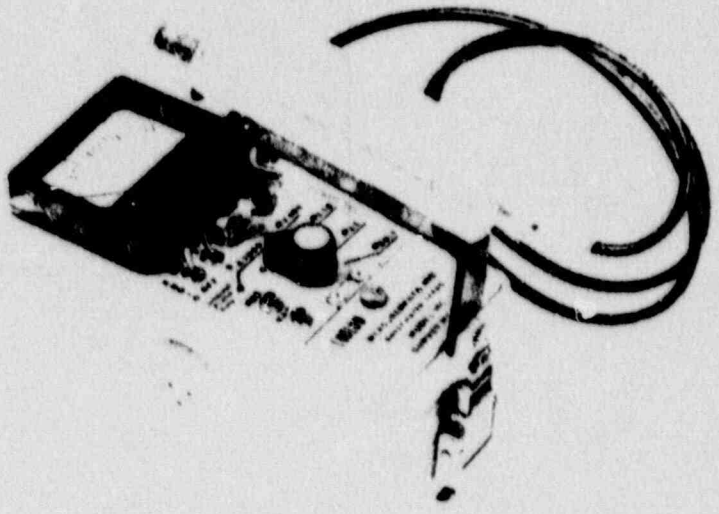
All new employees will receive radiation safety instruction before assuming duties with or in the vicinity of radioactive materials by using a slide and tape presentation.

Ancillary personnel such as nursing, houskeeping, security, and maintenance will be given yearly instruction through a lecture presentation.

MODEL 14C

ALPHA, BETA, GAMMA SURVEY METER
ONE INTERNAL RANGE, 0-2000 mR/hr
FOUR EXTERNAL RANGES, 0-200 mR/hr

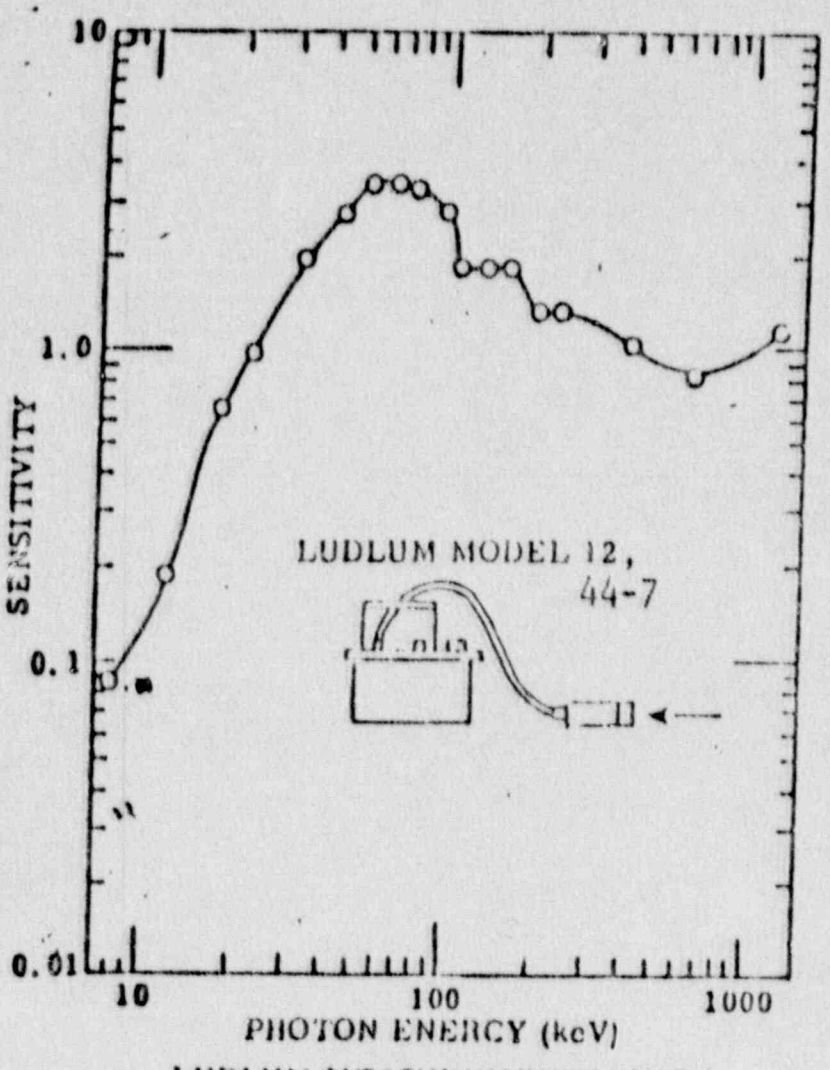
DIO: Built in unimorph speaker with an ON/OFF switch
SPONSE: Toggle switch for FAST(3 seconds), or SLOW(11 seconds) for 67% of final reading.
SET: Push button to zero meter after over range exposure
TER: 0-2 mR/hr linear, 0-2 mR/hr non linear for 200 mR/hr scale, and BAT. OK
LTIPLIER RANGES: X0.1, X1, X10, X100 for external detector, X1000 for internal detector
TTERIES: 2 each, "D" cell with 200 hours typical life
TECTORS
Internal: for high range Gamma detection only, 200 mR/hr
External: (see specifications in detector section of catalog)
NSTRUCTION: Cast and drawn aluminum with a beige polyurethane paint finish
E: 8.6(3.4")W by 15.5(6")H by 18(7")L
IGHT: 1.6(3.6 pounds)
TE: Detector shown with instrument is not included in the price
TERNAL: Not included (see specifications in detector section of catalog.)



MODEL 44-7

MICA END WINDOW G-M DETECTOR

INDICATED USE: Alpha, Beta-Gamma survey
WINDOW: 1.7 ± 0.3 mg/cm² mica
PROTECTIVE SCREEN: 74% open (can be removed)
WINDOW AREA: Active area approximately 6.4 cm²
EFFICIENCY: 10% for C-14, 45% for Sr-90, Alpha 30%, Gamma 1700 CPM/mR/hr for Cs-137
MOUNTING: Aluminum holder
SIZE: 12.7 (5")L by 3.8 (1.5") diameter
WEIGHT: 0.5 (1 pound)
FINISH: Anodized



LUDLUM MEASUREMENTS, INC.
COUNT RATE METER MODEL 12 SERIAL NO. 667

Taken from Report LA 4052, 1969

Figure 2. Energy Response for Geiger Counters.

HOSPITAL: REDINGTON FAIRVIEW GENERAL DATE: 3/23/88

PROCEDURE FOR CALIBRATING DOSE CALIBRATOR

The following procedures will be used to calibrate the dose calibrator.

1. Test for the following at the indicated frequency. Consider repair, replacement, or arithmetic correction if the dose calibrator falls outside the suggested tolerances:

   a. Constancy at least once each day prior to assay of patient dosages (+/-5 percent). THIS IS DONE USING a 2.5mC Co-57 source and a 100nC Cs-137 source.

   b. Linearity at installation and at least quarterly thereafter (+/-5 percent).

   c. Geometry dependence at installation (+/-5 percent).

   d. Accuracy at installation and at least annually thereafter (+/-5 percent).

2. After repair, adjustment, or relocation of the dose calibrator, repeat the above tests as appropriate.

3. Constancy means reproducibility in measuring a constant source over a long period of time. Assay Cs-137 using a reproducible geometry each day before using the calibrator. Use the following procedure:

   a. Assay each reference source using the appropriate dose calibrator setting (i.e., use the Cs-137 setting to assay Cs-137).

   b. Measure background to confirm the proper operation of the automatic background subtract circuit if it is used.

   c. For each reading, log the net activity of each constancy source.

d. Repeat the above procedure for all commonly used radioisotope settings. Log the results.

e. An action level of +/-5% tolerance has been established for each recorded measurement. These action levels are on the Cs-137 decay "Print-Outs". The regulation requires repair or replacement if the error exceeds 10 percent.

4. Inspect the instrument on a quarterly basis to ascertain that the measurement chamber liner is in place and that the instrument is zeroed according to the manufacturer's instructions.

5. Linearity Test

Linearity means that the calibrator is able to indicate the correct activity over the range of use of that calibrator. This test is done using a vial or syring of Tc-99m whose activity is at least as large as the maximum activity used per kit.

Decay Method

a. Assay the Tc-99m syringe or vial in the dose calibrator, and subtract background to obtain the net activity in millicuries. Record the date, time to the nearest minute, and net activity on the Linearity Record Sheet (see Exhibit 1.5a). This first assay should be done at approximately 8 a.m.

b. Repeat the assay again at about 2 p.m. Continue on subsequent days until the assayed activity is less than 10 microcuries. Use the lowest range possible for each of the measurements to insure the greatest amount of accuracy.

c. Pick a data point which falls near the value you frequently use for patient dosages (5-15 mCi). Assume this to be the correct activity and calculate the activity for all other data points correcting for time.

d. Calculate the percent error for each data point as follows:

$$100 \times \frac{\text{Measured Activity (mCi)} - \text{Calculated Activity (mCi)}}{\text{Calculated Activity (mCi)}}$$

Record the Measured Activity, Calculated Activity and percent error. (See Exhibit 1.5.b)

e. Place a sticker on the dose calibrator that indicates when the next linearity test is due.

The record will contain:

a) model and serial number of dose calibrator
b) calculated activities
c) measured activities
d) results of test (% Error)
e) date of test
f) signature of P.S.O.

SHIELD METHOD

1. Remove any syringe hanger or chamber liner, if necessary from dose calibrator.

2. Set dose calibrator to measure Tc-99m.

3. Adjust zero, background, etc., if applicable. Check zero on each range. If background is not "zero" on all ranges, zero on one range and record values on all other ranges to add or subtract from final results when those ranges are used.

4. The source activity shall be approximately equal to the maximum kit activity in a volume of 10 - 15ml. Place source to be used for the activity linearity procedure into the black tube and insert tube into the dose calibrator CAREFULLY with the open end in the upward position.

5. Record "displayed activity" on "Black Only" on Data Sheet 1.5e (Dose Calibrator Activity Linearity Check).

Carefully ensure that, in the following steps, each tube is seated against the lead at the base of the black tube.

6. Place red tube in the dose calibrator over the black tube. Record "displayed activity" on Black & Red blank on Data Sheet 1.5e.

7. Replace red tube with orange tube. Record on "Black & Orange blank.

8. Replace orange tube with yellow tube. Record on "Black & Yellow" blank.

9. Replace yellow tube with green tube. Record on "Black & Green" blank.

10. Replace green tube with blue tube. Record on "Black & Blue" blank.

11. Replace blue tube with purple tube. Record on "Black & Purple" blank.

12. Repeat the same procedure as above using approximately 3.5 mCi in a volume of 10-15 ml.

13. Remove Calicheck assembly and place source in shielded container.

14. Calculate the acceptable range for calibration activity by:

    a) multiplying the measured activity by the appropriate tube calibration factor;
    b) averaging all the calibration activities to obtain the average calibration activity;
    c) multiplying the average calibration activity by 0.95 and 1.05.

15. The report will contain: (Exhibit 1.5.f)

    a) model and serial number of dose calibrator
    b) measured activity
    c) calibration activity
    d) acceptable calibration activity range
    e) date of test
    f) signature of R.S.O.

16. If any one of the calibration activities are outside the acceptable range repeat the procedure to confirm the results. If the results are confirmed contact the R.S.O. immediately.

17. Place a sticker on the dose calibrator that indicates when the next linearity test is due.

6. Geometry independence means that the indicated activity does not change with volume or configuration. This test should be done using a syringe that is normally used for injections. Licensees who use generators and radiopharmaceutical kits should also do the test using a vial similiar in size, shape, and construction to the radiopharmaceutical kit vials normally used. The following test assumes injections are done with 3-cc plastic syringes and that radiopharmaceutical kits are made in 30-cc glass vials. If you do not use these, change the procedure so that your syringes and vials are tested throughout the range of volumes commonly used.

a. In a vial, mix 2 ml of a solution of Tc-99m with an activity concentration between 1 and 10 mCi/ml. Set out a second vial with nonradioactive saline. You may also use tap water.

b. Draw 0.5 ml of the Tc-99m solution into the syringe (2ml for vial) and assay it. Record the volume and millicuries indicated on the Dose Calibrator Geometry Form (see Exhibit 1.5d).

c. Remove the syringe from the calibrator, draw an additional 0.5 cc of nonradioactive saline or tap water, and assay again (2ml for vial). Record the volume and millicuries indicated.

d. Repeat the process until you have assayed a maximum volume.

e. Select as a standard the volume closest to that normally used for injections. For all the other volumes, divide the standard millicuries by the millicures indicated for each volume. The quotient is a volume correction factor.

The record will contain:

a) model and serial number of dose calibrator
b) source configuration
c) measured activity for each volume
d) correction factor (if necessary)
e) date of test
f) signature of R.S.O.

7. Accuracy Test

The Accuracy Test will be done at installation and at least annually thereafter. Cs-137 and Co-60 sources will be at least 50 microcuries. The Co-57 source will be at least 2 millicuries.

A. "Zero" and "Bkgd" the dose calibrator.

b. Assay a calibrated reference source at the appropriate setting (i.e., use Co-57 setting to assay Co-57). Record this measurement on the Accuracy Test Sheet (see Exhibit 1.5.c.). Repeat for a total of three determinations.

c. Average the three determinations. The average value should be within +/-5 percent of the certified activity of the reference source, mathematically corrected for decay.

d. Repeat the procedure for the other calibrated reference sources.

e. If the average value does not agree, within +/-5 percent, with the certified value of the reference source, the calibrator will be repaired or adjusted.

f. If the daily constancy test sources are not one of these sources, assay them and record the settings and indicated millicurie values with the accuracy data.

g. Put a sticker on the dose calibrator that indicates when the next accuracy test is due.

The record will include:

a) model and serial number of dose calibrator
b) model and serial number of each radionuclide
c) source radionuclide and calibrated activity
d) date of test
e) measured activity and % Error
f) signature of R.S.O.

8/10/87

EXHIBIT 1.5.a

Dose Calibrator Linearity Test
Data Sheet

Manufacturer: _____
Model : _____
Serial No. : _____

Date	Time	Assay (mCi)
__/__/__	am	_____
__/__/__	pm	_____
__/__/__	am	_____
__/__/__	pm	_____
__/__/__	am	_____
__/__/__	pm	_____
__/__/__	am	_____
__/__/__	pm	_____
__/__/__	am	_____
__/__/__	pm	_____

1. Take readings at approximately 0, 6, 24, 30, 48, 54, 72 and 78 hours decay but record the exact time.

2. Use the lowest range possible for each reading.

3. Start out with the maximum activity you would use to make up a kit and continue to collect data until the activity is below 10 microcuries.

Technologist: _____

8/10/87

Exhibit 1.5.b

Dose Calibrator Linearity Test

Manufacturer: _____
Model : _____
Serial No. : _____

Date	Time	Activity Measured(mCi)	Activity Calculated(mCi)	Percent Error

Calculated By: _____

R.S.O. Signature: _____

8/10/87

Exhibit 1.5.c

Dose Calibrator Accuracy Test

Manufacturer: _____
Model : _____
Serial No. : _____
Date : _____

Source	S/N	Calibration Date	Calibration Activity
Co-57			
Cs-137			
Co-60			

Source	Measured Activity	Calculated Activity	Percent Error
Co-57			
Cs-137			
Co-60			

Technologist: _____

Calculated By: _____

R.S.O. Signature: _____

Exhibit 1.5d

GEOMETRIC INDEPENDENCE FORM

DATE__/__/___

MANUFACTURER: _____

MODEL: _____

SERIAL NO: _____

Source Configuration: _____ ml syringe or _____ ml vial

Time (to nearest minute)	Volume (ml)*	Activity (mCi)
:		
:		
:		
:		
:		
:		
:		
:		
:		
:		

*For syringe proceed in 0.5 ml increments and for vial in 2ml increments until maximum volume is obtained.

TECHNOLOGIST: _____

Ehibit 1.5.e

CALICHECK LINEARITY DATA SHEET

Hospital _____

Dose Calibrator _____ Date __/__/___

Model _____ Technologist _____

Serial Number _____

Source (circle one) 20ml vial 30ml vial

Tube Color	Displayed Activity (mCi)* 1st Run	2nd Run
Black only		
Black & Red		
Black & Orange		
Black & Yellow		
Black & Green		
Black & Blue		
Black & Purple		

*All displayed activities should be measured on the lowest possible range setting.

The first run should be done starting with the maximum kit activity and the second run should be done starting with 3.5mCi. Both runs shall be done in a volume of 10-15ml.

Exhibit 1.5.f

"CALICHECK" LINEARITY REPORT

HOSPITAL
DATE __/__/__
DOSE CALIBRATOR MODEL SERIAL

Data Collected By:

Measured Activity (mCi) x Calibration Factor = Calibration Activity (mCi).

Acceptable Range for Calibration Activity: to

Results:

All calibration activities are within the acceptable range.

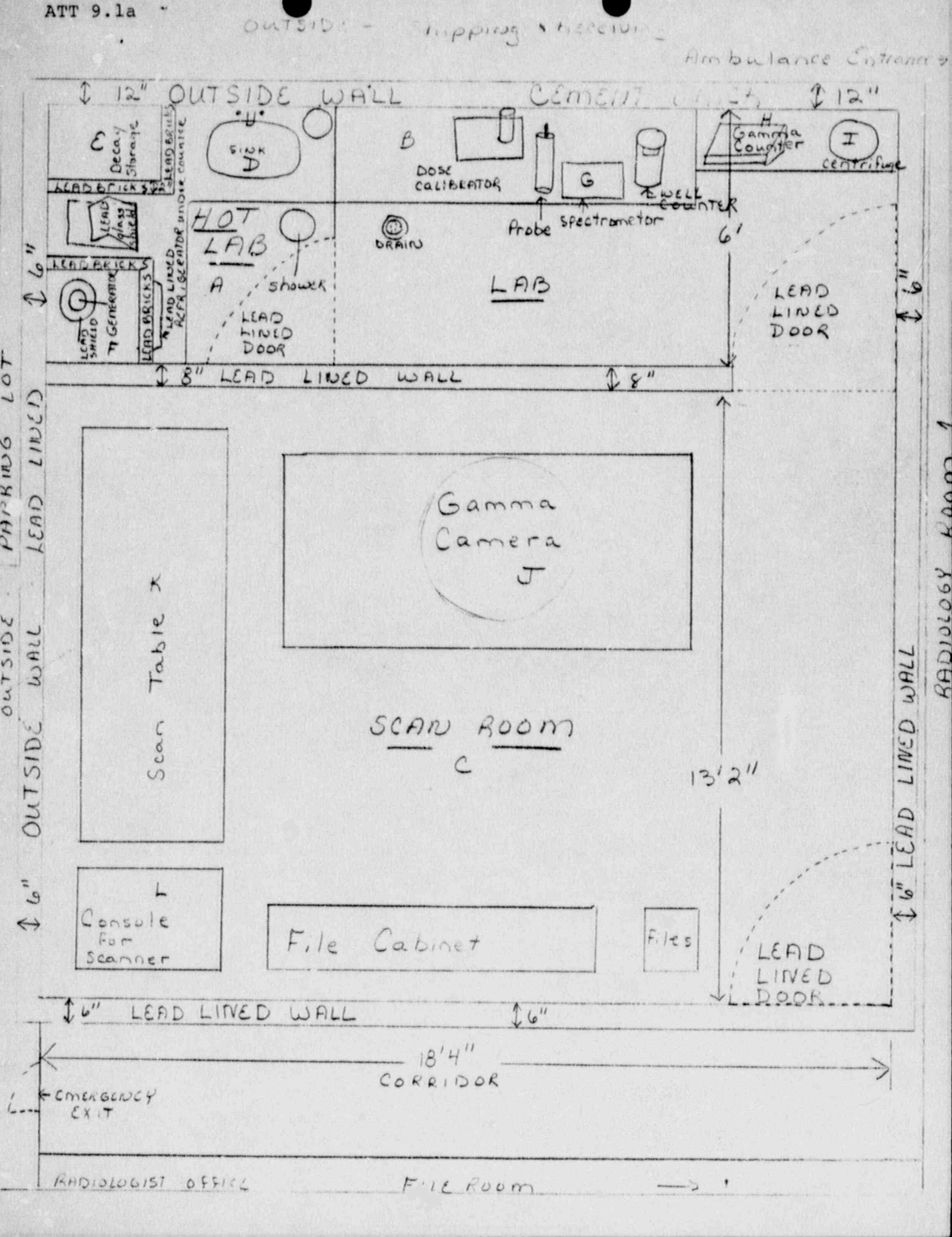
The next check is due __/__/__.

Data Collected By:

Calibrated By: Reviewed By:

Chet Bradbury, B.S.,R.T.N.M.
Radiation Safety Specialist Radiation Safety Officer

ATT 9.1a


OUTSIDE - Shipping Reception
Ambulance Entrance
12" OUTSIDE WALL CEMENT
12"
C Decay Storage
LEAD BRICKS
LEAD BRICKS
LEAD Glass Shield
LEAD BRICKS
LEAD SHIELD
GENERATOR
LEAD BRICKS
LEAD LINED REFRIGERATOR UNDER COUNTER
SINK D
HOT LAB A
LEAD LINED DOOR
shower
B
DOSE CALIBRATOR
DRAIN
Probe
G
spectrometer
WELL COUNTER
H Gamma Counter
I centrifuge
6'
LAB
LEAD LINED DOOR
6"
8" LEAD LINED WALL
8"
PARKING LOT
OUTSIDE WALL LEAD LINED
Gamma Camera J
Scan Table K
SCAN ROOM C
13'2"
RADIOLOGY ROOM
6" LEAD LINED WALL
L Console For Scanner
File Cabinet
Files
LEAD LINED DOOR
6"
6" LEAD LINED WALL
6"
18'4"
CORRIDOR
EMERGENCY EXIT
RADIOLOGIST OFFICE
FILE ROOM

ATT 10.8-9

GENERATOR RECEIVED _____

Tc^{99m} Elution Record

Trigger Level .07

Date	Time	mCi	ml	mCi/ml	Mo 99 uCi Assay	x	Corr. 3.5	Moly 99/Tc 99m Ratio	Initials

Manufacturer	Kit Lot	Exp. Date	Pharmaceutical	Tc 99m mCi/ml	ml	saline	Radiopharmaceutical	mCi/ml	Initials	Time

Date	Time	mCi	ml	mCi/ml	Mo 99 uCi Assay	x	Corr. 3.5	Moly 99/Tc 99m Ratio	Initials

Manufacturer	Kit Lot	Exp. Date	Pharmaceutical	Tc 99m mCi/ml	ml	Saline	Radiopharmaceutical	mCi/ml	Initials	Time

Multidose Vial Preparation and Use Log for Tc 99m as_____

Kit Source_____ Kit Lot_____ Exp. Date_____

Date Prepared	Time	Generator Received	mCi/ml	Prescribed dose	Measured dose	Patient	X-ray#	Initials	ml

"OFFICIAL RECORD COPY" M10

10868

(FOR LFMS USE)
INFORMATION FROM LTS

PROGRAM CODE: 02120
STATUS CODE: 2
FEE CATEGORY: 7C
EXP. DATE: 19880430
FEE COMMENTS:

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED
APPLICANT/LICENSEE: REDINGTON-FAIRVIEW GENERAL HOSPITAL
RECEIVED DATE: 880404
DOCKET NO: 3008713
CONTROL NO.: 108668
LICENSE NO.: 18-15190-01
ACTION TYPE: RENEWAL

2. FEE ATTACHED
AMOUNT: 580.00
CHECK NO.: 36541

3. COMMENTS

SIGNED BF
DATE 4/6/88

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED / ✓)

1. FEE CATEGORY AND AMOUNT: 7C $580

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:
AMENDMENT
RENEWAL ✓
LICENSE

3. OTHER

SIGNED S. Kimberley
DATE 4/13/88