NRC FORM 313
(9-85)
10 CFR 30, 32, 33, 34, 35 and 40

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED BY OMB
3150-0120
Expires: 8-31-87

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, NEVADA, 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 _____
- [X] C. RENEWAL OF LICENSE NUMBER #48-11895-01

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

St. Anthony's/Family Medical Center
2711 West Wells Street
Milwaukee, Wisconsin 53208

8907110158 880909
REG3 LIC30
48-11895-01 PDR

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

Same as #2.

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Mark J. Kapelinski, Stan A. Huber Consultants, Inc.

TELEPHONE NUMBER: (815) 485-6161

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 $ 580.00

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
	James F. Zahradka	President	02-15-88

14. VOLUNTARY ECONOMIC DATA

a. ANNUAL RECEIPTS
- [ ] <$250K
- [ ] $250K–500K
- [ ] $500K–750K
- [ ] $750K–1M
- [ ] $1M–3.5M
- [ ] $3.5M–7M
- [ ] $7M–10M
- [ ] >$10M

b. NUMBER OF EMPLOYEES *(Total for entire facility excluding outside contractors)*

c. NUMBER OF BEDS

d. WOULD YOU BE WILLING TO FURNISH COST INFORMATION *(dollar and/or staff hours)* ON THE ECONOMIC IMPACT OF CURRENT NRC REGULATIONS OR ANY FUTURE PROPOSED NRC REGULATIONS THAT MAY AFFECT YOU? *(NRC regulations permit it to protect confidential commercial or financial—proprietary—information furnished to the agency in confidence)*

- [ ] YES
- [ ] NO

RECEIVED
FEB 23 1988
REGION III

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	COMMENTS	APPROVED BY
Renewal	Mar-3-III	7C	CONTROL NO 84927	[signature]
AMOUNT RECEIVED	CHECK NUMBER			DATE
$580	018713			3/3/88

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 313. 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, 32, 33, 34, 35 and 40 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 (a) provided to State health departments for their information and use; and (b) provided 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 an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.

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. A request that information be held from public inspection must be in accordance with the provisions of 10 CFR 2.790. Withholding from public inspection shall not affect the right, if any, of persons properly and directly concerned need to inspect the document.

5. **SYSTEM MANAGER(S) AND ADDRESS:** U.S. Nuclear Regulatory Commission
Director, Division of Fuel Cycle and Material Safety
Office of Nuclear Material Safety and Safeguards
Washington, D.C. 20555

CONTROL NO. 8492 7

REF: NRC 313 ITEMS 5 AND 6

ITEM 5 - BYPRODUCT MATERIALS	AMOUNT	ITEM 6 - PURPOSE
a) Material in 31.11	As needed	In-Vitro Testing
b) Material in 35.100	As needed	Medical Use
c) Material in 35.200	As needed	Medical Use
d) Material in 35.300	As needed	Medical Use Iodine-131 as iodide for treatment of hyperthyroidism and cardiac dysfunction

REF: NRC 313 - ITEM 8

PERSONNEL TRAINING PROGRAM

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

REF: NRC 313 - ITEM 9.2

CALIBRATION OF SURVEY METERS

We have developed a survey instrument calibration procedure for your review that is appended as ATT 9.2.

REF: NRC 313 - ITEM 9.3

PROCEDURE FOR CALIBRATING DOSE CALIBRATOR

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

REF: NRC 313 - ITEM 9.4

PERSONNEL MONITORING

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

REF: NRC 313 - ITEM 9.5

TRANSPORTING OF IMAGING EQUIPMENT

Not applicable.

REF: NRC 313 - ITEM 10.1

RADIATION SAFETY COMMITTEE

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.

REF: NRC 313 - ITEM 10.2

ALARA

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

REF: NRC 313 - ITEM 10.3

LEAK TEST PROCEDURES

We have developed a leak test procedure for your review that is appended as ATT 10.3.

REF: NRC 313 - ITEM 10.4

SAFE USE OF RADIOACTIVE PHARMACEUTICALS

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

REF: NRC 313 - ITEM 10.5

SPILL PROCEDURES

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

REF: NRC 313 - ITEM 10.6

ORDERING AND RECEIVING OF RADIOACTIVE MATERIALS

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.

REF: NRC 313 - ITEM 10.7

OPENING PACKAGES CONTAINING RADIOACTIVE MATERIALS

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

REF: NRC 313 - ITEM 10.8

M.1 RECORDS OF UNIT DOSAGE USE

We will establish and implement the model procedure for a unit dosage record system that was published in Appendix M.1 to Regulatory Guide 10.8, Revision 2.

REF: NRC 313 - ITEM 10.9

M.2 RECORDS OF MULTIDOSE VIAL USE

We will establish and implement the model procedure for a multidose vial record system that was published in Appendix M.2 to Regulatory Guide 10.8, Revision 2.

REF: NRC 313 - ITEM 10.10

MO-99 CONCENTRATION RECORDS

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

REF: NRC 313 - ITEM 10.11

IMPLANT SOURCE USE RECORDS

Not applicable.

REF: NRC 313 - ITEM 10.12

AREA SURVEY PROCEDURES

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

REF: NRC 313 - ITEM 10.13

AIR CONCENTRATION CONTROL (XE-133)

We will collect spent noble gas in a shielded trap and monitor the trap effluent with an air contamination monitor that we will check regularly according to the manufacturer's instructions.

We will follow the model procedure for calculating worker dose from noble gases that was published in Appendix 0.1 to Regulatory Guide 10.8, Revision 2.

SPILLED GAS CLEARANCE TIME (Item 10.13.4)

We will calculate spilled gas clearance times according to the procedure that was published in Appendix 0.4 to Regulatory Guide 10.8, Revision 2.

REF: NRC 313 - ITEM 10.14

RADIOPHARMACEUTICAL THERAPY

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.

REF: NRC 313 - ITEM 10.15

IMPLANT THERAPY

Not applicable.

REF: NRC 313 - ITEM 11.1

WASTE DISPOSAL

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

ATT 7.1.1

AUTHORIZED USER(S)

NAME	AUTHORIZED USE
Harold B. Biller, M.D.	Item 5 a) b)

For training and experience of the above doctor, please reference St. Anthony's/Family Medical Center, Milwaukee, Wisconsin, NRC radioactive materials license #48-11895-01.

ATT 7.1.2

AUTHORIZED USER(S)

NAME	AUTHORIZED USE
Michael Conmy, M.D.	Item 5 b) c) d)

For training and experience of the above doctor, please reference St. Anthony's/Family Medical Center, Milwaukee, Wisconsin, NRC radioactive materials license #48-11895-01.

ATT 7.1.3

AUTHORIZED USER(S)

NAME	AUTHORIZED USE
Frank V. Kreitzer, M.D.	Item 5 a) b) c)

For training and experience of the above doctor, please reference St. Anthony's/Family Medical Center, Milwaukee, Wisconsin, NRC radioactive materials license #48-11895-01.

ATT 7.1.4

AUTHORIZED USER(S)

NAME	AUTHORIZED USE
Robert Lipo, M.D.	Item 5 a) b) c)

For training and experience of the above doctor, please reference St. Anthony's/Family Medical Center, Milwaukee, Wisconsin, NRC radioactive materials license #48-11895-01.

ATT 7.1.5

AUTHORIZED USER(S)

NAME	AUTHORIZED USE
Mark D. Molot, M.D.	Item 5 a) b)

For training and experience of the above doctor, please reference St. Anthony's/Family Medical Center, Milwaukee, Wisconsin, NRC radioactive materials license #48-11895-01.

ATT 7.1.6

AUTHORIZED USER(S)

NAME	AUTHORIZED USE
Richard Panish, M.D.	Item 5 a) b) c) d)

For training and experience of the above doctor, please reference St. Anthony's/Family Medical Center, Milwaukee, Wisconsin, NRC radioactive materials license #48-11895-01.

ATT 7.1.7

AUTHORIZED USER(S)

NAME	AUTHORIZED USE
Michael Phillips, M.D.	Item 5 a) b)

For training and experience of the above doctor, please reference St. Anthony's/Family Medical Center, Milwaukee, Wisconsin, NRC radioactive materials license #48-11895-01.

ATT 7.1.8

AUTHORIZED USER(S)

NAME	AUTHORIZED USE
Radiation Safety Officer	
Leo Stockland, M.D.	Item 5 a) b) c) d)

For training and experience of the above doctor, please reference St. Anthony's/Family Medical Center, Milwaukee, Wisconsin, NRC radioactive materials license #48-11895-01.

ATT 8.1

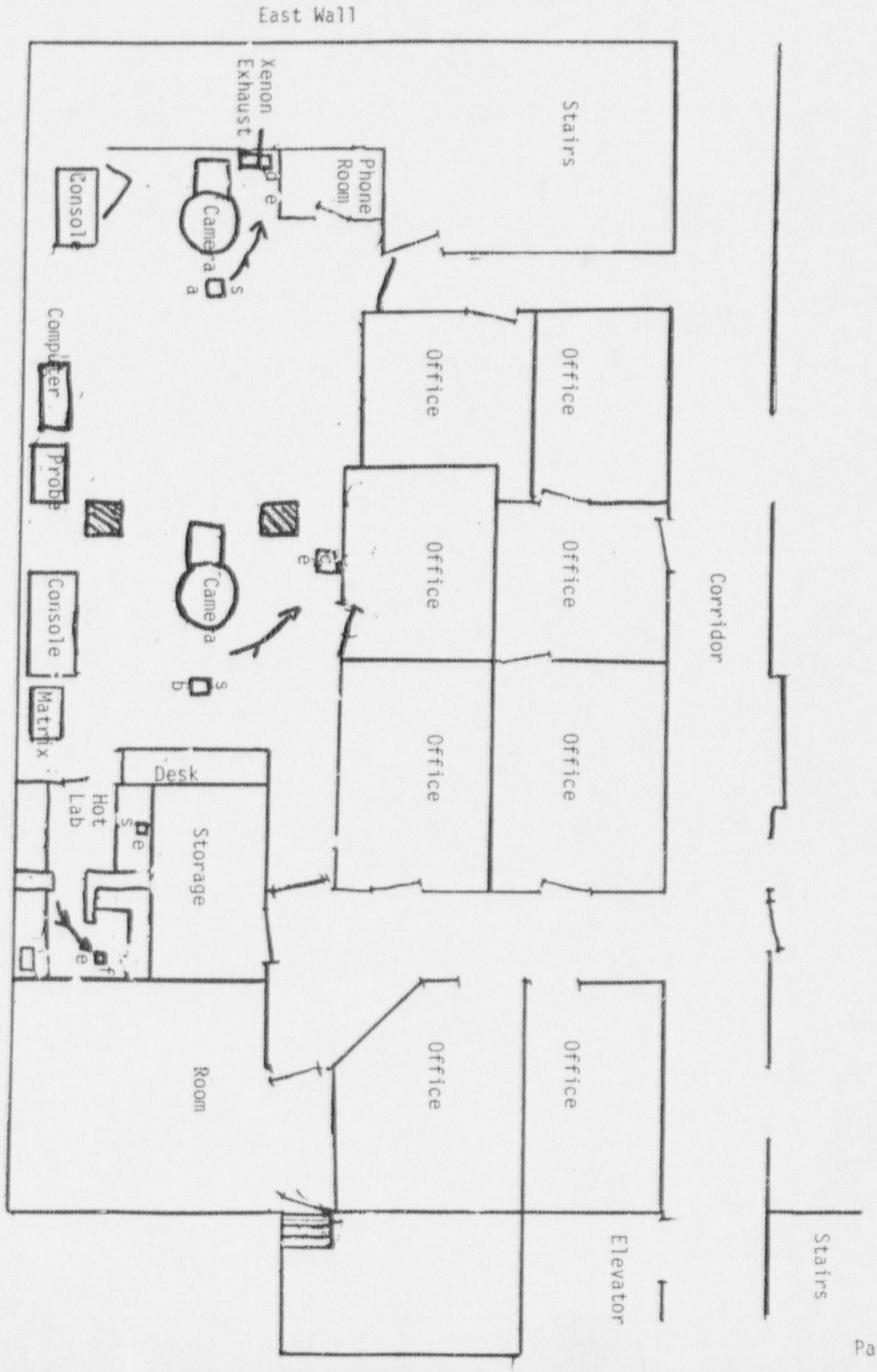
WORKERS RECEIVING TRAINING AS STATED IN APPENDIX A

Nuclear Medicine Personnel

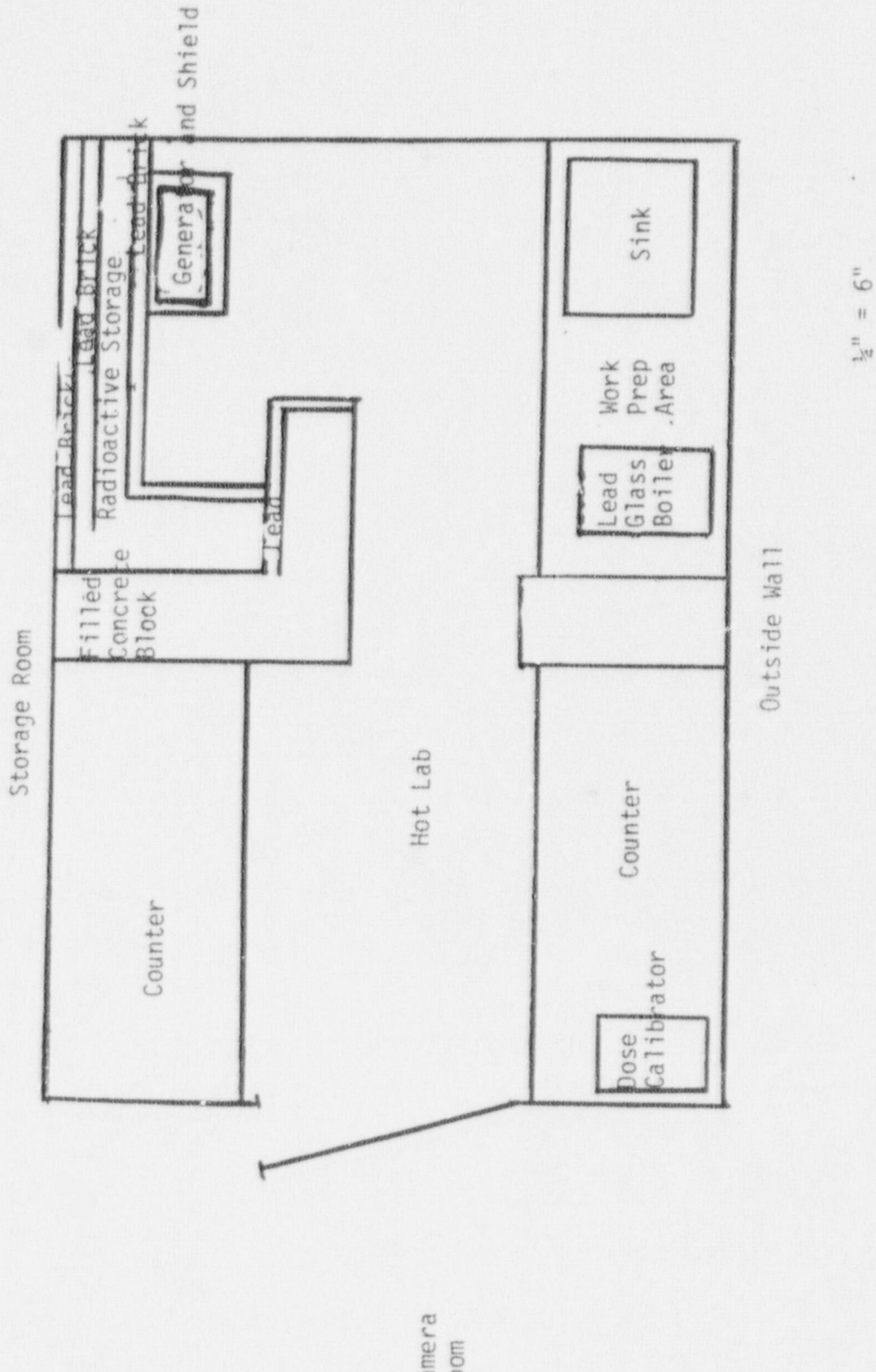
Housekeeping Personnel

Security Personnel, who are responsible for the off-duty hour receipt of radioactive materials.

Training will be in the form of lectures, demonstrations, slide presentations, and written instructions.


East Wall
Xenon Exhaust
Stairs
Phone Room
Consol
Camera a
Computer
Prob
Office
Office
Office
Office
Office
Office
Corridor
Console
Camera b
Matrix
Desk
Hot Lab
Storage
Room
Office
Office
Elevator
Stairs
North Wall - Wells Street
20' 4" x 38' x 8'h
= 2 ft.

St. Anthony's/Family Medical Center
2711 West Wells Street
Milwaukee, Wisconsin 53208



½" = 6"

ATT 9.2

CALIBRATION OF SURVEY METERS

Survey meters will be calibrated at least annually, and after repairs, by any firm that is approved by the NRC for such calibrations. Instruments will be calibrated on at least two (2) points on each scale range. Currently, our calibration service firm is Stan A. Huber Consultants, Inc., of New Lenox, Illinois, whose radiation sources and procedures are on file with the NRC under License #12-17503-01.

The licensee shall perform operational and constancy checks on survey instruments before each day's use to ensure proper functioning of the devices. For any infrequently used meters, these reference source operational checks shall be taken at least quarterly, per NRC Regulatory Guide 10.8, Revision 2, Appendix B, as well as after repairs and battery changes to assure constancy within ±20% of expected readings.

ATT 9.3

PROCEDURE FOR CALIBRATING DOCE CALIBRATOR

We shall follow the calibration methods and frequencies for dose calibrators as defined in the NRC Regulatory Guide 10.8, Revision 2, Appendix C.

For the linearity test, we will use a vial of Tc-99m, whose activity is equivalent to the maximum anticipated activity to be assayed. For the accuracy test, Stan A. Huber Consultants, Inc., of New Lenox, Illinois, or other licensed calibration firm, will use the following sources under the authority of their NRC License #12-17503-01:

Model NES-356, 200 microcuries of Cs-137 (high energy)

Model NES-352, 1 millicurie of Co-57 (low energy)
(Or other NRC approved Co-57 calibration sources of greater millicurie activity.)

Model NES-358, 250 microcuries of Ba-133 (medium energy)
(The minimum activities used for dose calibrator accuracy checks are 100 uCi each for Cs-137 and Ba-133, and 1 mCi for Co-57.)

We use a New England Nuclear Model NES-356, Cs-137 standard, 100 - 300 uCi, or any approved similar standard for our day of use dose calibrator constancy checks. Records of all tests and checks will be maintained.

We request use of the "Calicheck" (Calcorp) system, or "Lineator" (Atomic Products) system as an alternate method of performing dose calibrator quarterly linearity checks. The product certifications for these devices are on file with the NRC.

ATT 10.3

LEAK TEST PROCEDURES

We confirm that sealed sources will be stored in their original lead shielded containers. Any readings above background would indicate the need for additional shielding.

Leak testing of sealed sources will be performed on a semi-annual frequency. We will use the leak test services of Stan A. Huber Consultants, Inc., New Lenox, Illinois (NRC License #12-17503-01), using their Model LT-2 (or Model LT-3 if applicable) Leak Test Kit for sealed sources, or other firm specifically authorized by the U. S. Nuclear Regulatory Commission to perform these tests.

Procedure for Radiation Safety During Iodine Therapy Over 30 Millicuries

1. The patient's room will be as far away from the nursing station and heavy traffic hallways as is consistent with good medical care. It will be a private room with private sanitary facilities and should be without carpet.

2. Prepare the room for the procedure as follows:

   a) Use leak-proof absorbent paper to cover large surfaces (the bed, chairs, and the floor around the toilet) that are likely to be contaminated. Small items (telephone, door knobs, bed remote control, television control, and nurse call cord) may be covered with absorbent paper or plastic bags.

   b) Prepare separate boxes for linen, disposable waste, and non-disposable contaminated items. Place a single large re-closable plastic bag in each box, or supply several small plastic bags.

   c) Urine will be discarded by release to the sanitary sewer.

   d) Stock additional disposable gloves, absorbent paper, and radioactive waste labels in the room for use as necessary by Nursing, Nuclear Medicine, and radiation safety personnel.

3. Order disposable table service for the duration of the patient's stay. Inform the HouseKeeping Office that personnel should stay out of the room until otherwise notified.

4. Supply the nurses with film badges, TLDs, or pocket ionization chambers.

5. Brief the nurses on radiation safety precautions. Use the form (attached), "Nursing Instructions for Patients Treated with Iodine-131". Allow time for questions and answers during the briefing. Leave a written copy of the radiation safety precautions in the patient's chart or at the nurses' station.

6. Brief the patient on radiation safety procedures for the dosage administration, visitor control, radioactive waste, and other items as applicable.

7. Only those persons needed for medical, safety, or training purposes should be present during the administration.

8. Mark a visitors' "safe line" on the floor with tape as far from the patient as possible.

9. Following administration of the dosage, measure the exposure rate in mR/hr at bedside, at 1 meter from bedside, at the visitors' "safe line", and in

the surrounding hallways and rooms. Record this and any other necessary information on the nursing instructions form or the nurses' dosimeter signout form. Post the room with a "Radioactive Materials" sign.

10. For patients treated with liquid I-131, 1 day after the dosage administration, measure the thyroid burden of all personnel who were present for the administration. Also consider a thyroid burden assay for patient care personnel 2 days after the administration. Make a record of the worker's name, amount of I-131 activity in a thyroid phantom in microcuries and associated counts per minute, the counts per minute from the worker's thyroid, the calculated thyroid burden, and date.

11. As the therapy proceeds, pick-up waste for transfer to a decay-in-storage or decontamination area.

12. Do not release any patient until either the exposure rate from the patient is less than 5 millirem per hour at 1 meter or the retained radioactivity is less than 30 millicuries. If you use the exposure rate standard as the release criterion, measure it with a radiation measurement survey meter at a distance of 1 meter from the umbilicus while the patient is standing or, if the patient is not ambulatory, 1 meter from the bedside with the patient supine.

13. Before using the room for general occupancy, it must be decontaminated and released to the Admitting Office.

    a) Remove all absorbent paper, and place it in the appropriate container.

    b) Transfer all containers to a decay-in-storage or decontamination area.

    c) Use a radiation detection survey meter to check for room contamination. Clean contaminated areas until removable contamination is less than 200 dpm per 100 square centimeters.

    d) Call the Housekeeping Office to remove the cleaning restriction and call the Admitting Office to return the room to the vacant list.

The "Radiation Safety Checklist for Iodine Therapy Over 30 Millicuries" (attached) will also be used.

NURSING INSTRUCTIONS FOR PATIENTS TREATED WITH IODINE-131

Patient Name: ______________________ Patient Number: ______________________
Attending: ______________ Phone: _____ Pager: _____ Patient Room: ______________

Dose: ____mCi of _______ as __________ was administered at ___:___ am/pm
Signature: ______________________ Date: ___-___-___

RADIATION EXPOSURE RATES

Unrestricted areas: Door ___ ___mR/hr; rm ___ ___mR/hr; rm ___ ___mR/hr
Patient supine in bed or ____

Date	Time	Bedside	3 ft from bed	Door	______ ____
___-___-___	___:___ am/pm	_____mR/hr	_____mR/hr	_____mR/hr	_____mR/hr
___-___-___	___:___ am/pm	_____mR/hr	_____mR/hr	_____mR/hr	_____mR/hr
___-___-___	___:___ am/pm	_____mR/hr	_____mR/hr	_____mR/hr	_____mR/hr
___-___-___	___:___ am/pm	_____mR/hr	_____mR/hr	_____mR/hr	_____mR/hr
___-___-___	___:___ am/pm	_____mR/hr	_____mR/hr	_____mR/hr	_____mR/hr
___-___-___	___:___ am/pm	_____mR/hr	_____mR/hr	_____mR/hr	_____mR/hr

INSTRUCTIONS

Visitor Restrictions:

- ☐ No visitors.
- ☐ No visitors under 18 or pregnant.
- ☐ ____ minutes each day maximum for each visitor.
- ☐ Visitors must stay behind line on floor at all times.

Nursing Restrictions:

- ☐ Patient is restricted to room.
- ☐ No nurses who are pregnant may render care.
- ☐ ____ minutes each day per nurse in the room.

Patient Care:

- ☐ Wear disposable gloves. Wash your hands after caring for patient.
- ☐ Discard linen, bedclothes, plates, utensils, dressings, etc., in boxes in each room.
- ☐ Collect urine in containers provided. Discard feces in toilet.
- ☐ Discard urine and feces in toilet. Flush three times.
- ☐ Housekeeping personnel are not permitted in the room.
- ☐ Only RSO may release room to admitting office.
- ☐ Wear your radiation monitor when caring for patient. Leave at nursing station at the end of your shift. You may use the same monitor on your next shift. Do not share. Call RSO for additional monitors if needed.
- ☐ ____
- ☐ ____

In case of emergency, or if you have a question, call:
RSO: ______________ Work: ______ ______ Home: ______________ Pager: ______
MD: ______________ Work: ______________ Home: ______________ Pager: ______

RADIATION SAFETY CHECKLIST FOR IODINE THERAPY OVER 30 MILLICURIES

Patient: _____ Room: _____ Date: _____

PREPARATION

- ☐ Schedule a private room, with private sanitary facilities and without carpet, in a low traffic area.
- ☐ Cover large room surfaces with absorbent paper and small surfaces with absorbent paper or plastic bags.
- ☐ Prepare labeled boxes for used linen, disposable waste, and non-disposable contaminated items.
- ☐ Prepare urine collection containers if urine will be collected.
- ☐ Stock room with disposable gloves, absorbent paper, and "radioactive waste" labels.
- ☐ Mark a visitors' "safe line" on the floor.
- ☐ Order disposable table service.
- ☐ Notify Housekeeping to not clean the room until further notice.
- ☐ Brief the nursing staff on radiation safety measures.
- ☐ Supply the nursing staff with personnel radiation dosimeters.

ADMINISTRATION

- ☐ Clear the room of unneeded personnel.
- ☐ Brief the patient on the clinical procedure.
- ☐ Administer the dosage.
- ☐ Measure dose rates at bedside, 1 meter from bedside, visitors' "safe line", and surrounding hallways and rooms.
- ☐ Post the room with a "Radioactive Materials" sign.

FOLLOW-UP

- ☐ Measure the thyroid burden of all personnel who were present for the administration.
- ☐ Pick up waste for decay-in-storage or decontamination.
- ☐ Release the patient.
- ☐ Decontaminate and survey the room. Remove the "Radioactive Materials" sign.
- ☐ Call the Housekeeping Office to clean the room.

NURSING INSTRUCTIONS FOR PATIENTS RECEIVING RADIOTHERAPEUTIC DOSES LESS THAN 30 MILLICURIES

A. OUT PATIENTS:

Patients may be treated as Out Patients and released after administration of radiotherapeutic doses less than 30 millicuries.

B. IN PATIENTS:

If a patient is admitted to the hospital, there will be no restrictions regarding nursing care, visitors, and bathroom privileges.

However, the following procedures should be followed:

1. Patients using non-disposable urinal or bedpan:

   a) Gloves should be worn when handling urinal and bedpan.
   b) Dispose of excreta in toilet, flushing three (3) times.
   c) Clean bedpan in routine manner.
   d) Rinse urinal, filling with hot water three (3) times.
   e) Keep urinal and bedpan at patient's bedside until patient is discharged.
   f) The Radiation Safety Officer, or his delegate, will survey urinal and bedpan prior to this equipment being issued to other areas.

2. Patients using disposable urinal or bedpan:

   a) The R.S.O., or his delegate, will survey disposable urinal and/or bedpan before disposal, to insure background exposure limits.

3. If patient should soil self and/or bed with vomitus, feces, or urine:

   a) Notify the R.S.O.
   b) Wear gloves to handle all soiled material.
   c) Contain all non-absorbed liquid material with absorable disposable material.
   d) Store all soiled material in plastic bag for monitoring by R.S.O. prior to disposal.

RADIATION SAFETY OFFICER:
On Duty Phone:
Off Duty Phone:

EXHIBIT P

For therapy patients who have received less than 30 mCi and do not require hospitalization because of the amount of radioactive material present, for those patients we will follow the attached nursing instructions, "Nursing Instructions for Patients Receiving Radiotherapeutic Doses Less than 30 Millicuries".