

## 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 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 \_\_\_\_\_  
☐ C. RENEWAL OF LICENSE NUMBER \_\_\_\_\_

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

DR. RICHARD I. POLTSNER, P.C.  
1043 CURTISS AVENUE  
DOWNERS GROVE, ILLINOIS 60515

LEL 23538

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

1043 CURTISS AVENUE  
DOWNERS GROVE, ILLINOIS 60515

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

NANCY R. SCHRAMM

## TELEPHONE NUMBER

312-969-7714

SUBMIT ITEMS 5 THROUGH 11 ON 8 1/2 x 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

## 5. RADIOACTIVE MATERIAL

a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time.

## 6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

## 7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING 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

## AMOUNT ENCLOSED \$

## 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

*Nancy R. Schramm*

NANCY R. SCHRAMM

Administrative Assistant

6/11/85

## 14. ANNUAL RECEIPTS

< \$250K	\$1M—3.5M
\$250K—500K	\$3.5M—7M
\$500K—750K	\$7M—10M
\$750K—1M	> \$10M

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

## c. NUMBER OF BEDS

1. WOULD YOU BE WILLING TO FURNISH COST INFORMATION (Salary 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

## FOR NRC USE ONLY

TYPE OF FEE: *Appfe* FEE LOG: *June 11* FEE CATEGORY: *7C* COMMENTS:

## AMOUNT RECEIVED

## CHECK NUMBER

*\$580*

*4083*

PRIVACY ACT STATE

8508220440 850808  
REG3 LIC30  
12-23538-01 PDR

## APPROVED BY

## DATE

*[Signature]*  
*7/9/85*  
*19034*

## 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

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

OFFICIAL BUSINESS  
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SUPPLEMENTAL INFORMATION

DR. RICHARD I. POLISNER, P.C.

5.
    - a. Iodine-125
    - b. Solid, sealed source AECL C-324 or Amersham IMC P2 LIXI scope Model LSM-82-209
    - c. 500 mCi per source
  6. As a source of ionizing radiation for the purpose of diagnostic x-ray of sick or injured patients.
  7. RICHARD I. POLISNER, D.P.M. *active license*
    - a. Eight (8) hours of Physics at Case Western Reserve University 1962 - 1966.
    - b. Course in Clinical Radiation & Clinical Radiology, Ohio College of Podiatric Medicine 1966 - 1970.
    - c. Extensive use of radioactive iodine isotopes in renal research at Western Reserve University Medical School 1964 - 1970.
    - d. Lixi Radiation Safety Training Course - Certificate attached.
- MICHAEL SCHWARTZMAN, D.P.M. *active license expires 1979*
- a. 1 year Physics undergraduate including basics, theoretical aspects of radiation, University of Illinois.
  - b. 1 year Radiology, Illinois College of Podiatric Medicine. Included physics, radiation laws in State of Illinois, e.g. allowable RADS, etc.
  - c. Residency - V.A. Medical Center, Marion, IL. Experience with fluoroscopy, CAT scan including preventive measures to radiative exposure.
  - d. Lixi Radiation Safety Training Course - Certificate attached.
8. Not applicable
  9. Sketch of facility attached.

Facility is located at 1043 Curtiss Street, Downers Grove, IL 60515 in a one story building of brick construction. The building has five units, applicant occupies rearmost unit of building. Building faces north with rear entrances to the south. The LIXI scope is supplied with the necessary safety equipment for storage and use.

10. Qualified personnel will be trained by licensee using the Lixi, Inc. Training Course and LIXI scope Instruction Manual. Outline of course attached. Such persons may only use the device under the direct supervision and presence of licensee.

Orders for material will be placed using Lixi, Inc. catalog numbers and specifications. When received, packages will be inspected for damage. Contents will be inspected and operational checks performed. Receiving records will be maintained and material will be logged into accountability system. Device will be placed in secured storage until utilized.

Licensee will observe the following general rules:

- a. Device will be kept in secure storage when not in use. Locks will be kept in place.
- b. Licensee will not permit anyone to place fingers, hands or feet into beam to test device for operation.

Supplemental Information, Dr. Richard I. Polisner, Continued:

- c. The device will not be used to experiment on patients. Use will be limited to diagnostic examination of patients with specific applicable medical problems.
- d. Source holder will be left attached to device except for leak testing and source exchange.
- e. Device will be returned to secure storage after use.

All precautions and procedures as described in the following:

- f. Licensee will not remove the sealed source from the source holder.
- g. Leak test will be performed at six month intervals.
- h. Transport of materials will be in accordance with D.O.T. Regulations.
- i. Source exchange will be through the manufacturer.
- j. Manual will be followed.
- k. During transport and at temporary job sites, the licensee will insure that the device is attended and secured at all times by the licensee, or locked in secure storage.
- l. In the event of an accident wherein damage to the LIXI scope occurs, NRC will be notified immediately.

11. Disposal of material will be by return of source holders to Lixi, Inc.



# CERTIFICATE OF TRAINING

## RADIATION SAFETY

This is to certify that Richard Polishner, D.P.M.

has completed the LIXI™ Radiation Safety Training Course on file with the U.S. Nuclear Regulatory Commission.

This training was completed on: April 23, 1985

This training course was developed by Lixi, Inc. and S.A. Huber Consultants Inc. for the purpose of providing the necessary training in radiation safety and experience for LIXI™ scope users. The training was given as approved by the NRC under License Nos. 12-17503-01 and 12-18215-01.

This also certifies that the trainee has personally operated a working LIXI™ scope, under supervision, in the aforementioned course.

A copy of this certificate is to be provided to the NRC or Agreement State as proof that the trainee has the necessary experience to make a specific application for a Byproduct Material License to possess and use a LIXI™ scope.

This document was prepared in conformity with Title 10, Code of Federal Regulations, and all information contained herein is true and correct to the best of our knowledge and belief.

Certified by: Lixi, Inc.

Instructor: Carol L. Bonita

Signature: Carol L. Bonita

Under License No: 12-18215-01

Date: April 23, 1985

# CERTIFICATE OF TRAINING

## RADIATION SAFETY

This is to certify that Michael Schwartzman, D.P.M.

has completed the LIXI™ Radiation Safety Training Course on file with the U.S. Nuclear Regulatory Commission.

This training was completed on: April 23, 1985

This training course was developed by Lixi, Inc. and S.A. Huber Consultants Inc. for the purpose of providing the necessary training in radiation safety and experience for LIXI™ scope users. The training was given as approved by the NRC under License Nos. 12-17503-01 and 12-18215-01.

This also certifies that the trainee has personally operated a working LIXI™ scope, under supervision, in the aforementioned course.

A copy of this certificate is to be provided to the NRC or Agreement State as proof that the trainee has the necessary experience to make a specific application for a Byproduct Material License to possess and use a LIXI™ scope.

This document was prepared in conformity with Title 10, Code of Federal Regulations, and all information contained herein is true and correct to the best of our knowledge and belief.

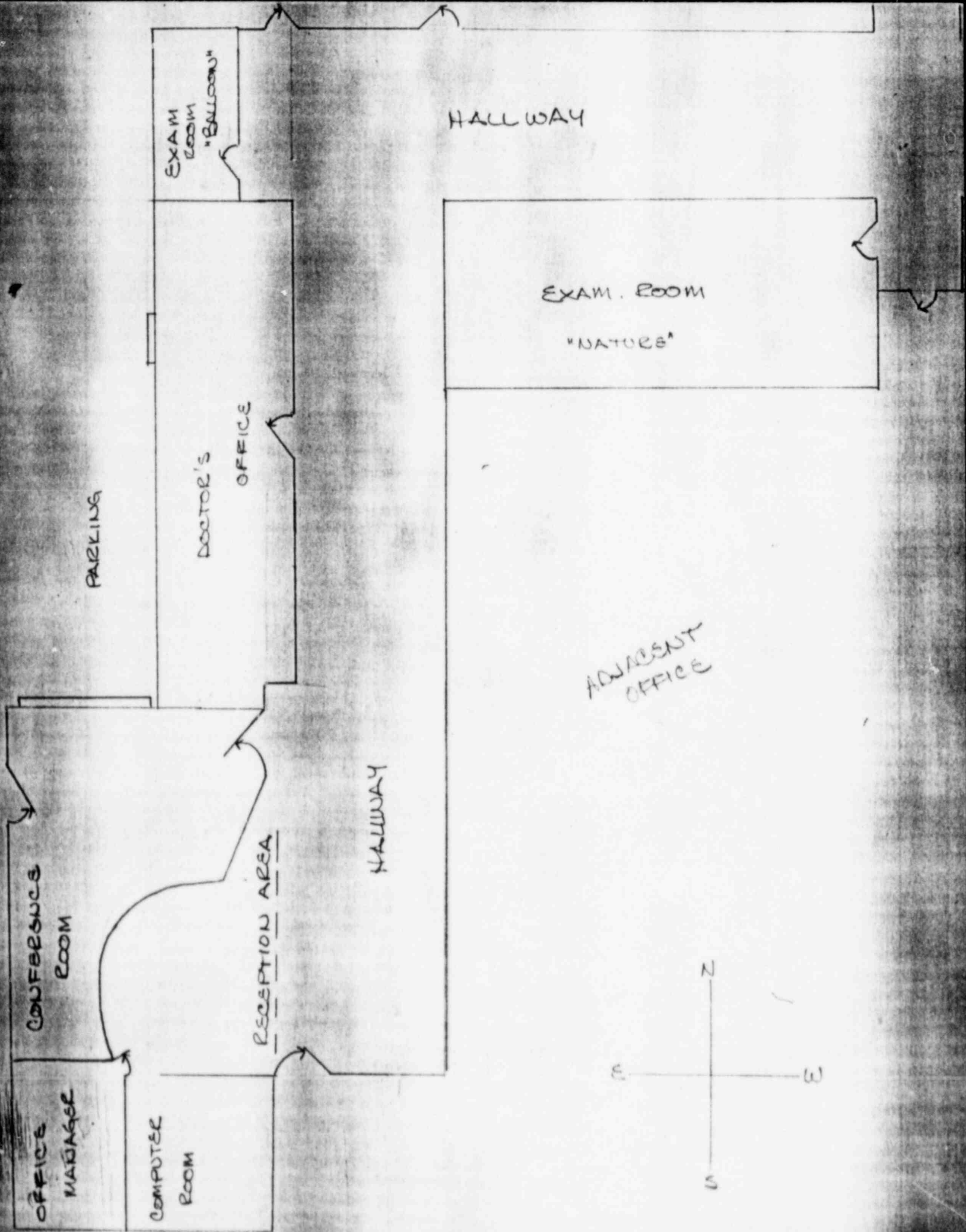
Certified by: Lixi, Inc.

Instructor: Carol L. Bonita

Signature: *Carol L. Bonita*

Under License No: 12-18215-01

Date: April 23, 1985





LAB

X-RAY  
PROC.

PARKING

BATHROOM

EXAM.  
ROOM  
"APPLE"

UXI STORAGE

H  
A  
L  
L  
W  
A  
Y

EXAM.  
ROOM  
"TREES"

PARKING

EXAM. ROOM  
"INTERNATIONAL"

EXAM.  
ROOM  
"ANIMAL"

EXAM. ROOM  
"WESTERN"

HALLWAY

BATHROOM

EXAM. ROOM  
"NATURE"

ADJACENT  
OFFICE

ADJACENT  
OFFICE



Lixiscope Accountability and Source Exchange Record

There is a separate log sheet for each Lixiscope to most easily ascertain its location at all times. It is either in storage or being used by, or under the supervision of, a specific licensed user at a specific location or destination.

Description: Lixiscope Model # \_\_\_\_\_ Serial # \_\_\_\_\_  
 Source Head Serial # \_\_\_\_\_ Activity \_\_\_\_\_ mCi on Calibration date \_\_\_\_\_

The "Notes" column is to be used to record the source head serial number, activity and calibration date of receipt of the new source head when it arrives from Lixi, Inc. and to indicate date of "old source returned to Lixi". Initial check-in to storage (upon original receipt of the Lixiscope) was performed by \_\_\_\_\_ on \_\_\_\_\_  
 name of licensed user Date of receipt

ACCOUNTABILITY RECORD

(Print or Write Legibly)

	By: Licensed User Name	To: Location or Destination	Date	NOTES (See instruc- tions above)
Check-Out	_____	_____	_____	_____
In	_____	Secured in Storage	_____	_____
Out	_____	_____	_____	_____
In	_____	Secured in Storage	_____	_____
Out	_____	_____	_____	_____
In	_____	Secured in Storage	_____	_____
Out	_____	_____	_____	_____
In	_____	Secured in Storage	_____	_____
Out	_____	_____	_____	_____
In	_____	Secured in Storage	_____	_____
Out	_____	_____	_____	_____
In	_____	Secured in Storage	_____	_____

Inventory Page No. \_\_\_\_\_

PERMANENT SOURCE LOG

Iodine-125 Sealed Sources - Receipt, and Disposal Record

Iodine-125 Source Serial Number	Lixi Source Holder Model Number and Serial Number	Date Received	Total Activity & Calibration Date	Source Location	Date Disposed (Returned to Supplier)

Company Name \_\_\_\_\_

License No. \_\_\_\_\_

QUARTERLY PHYSICAL INVENTORY

Company Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 \_\_\_\_\_

Date \_\_\_\_\_

Iodine-125 Source Serial Number	Lixi Source Holder Model Number and Serial Number	Initial Activity and Date	Source Location
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			

License No. \_\_\_\_\_

Signature \_\_\_\_\_

RADIATION PROTECTION PROGRAM  
(for Lixiscope Operations)

APPENDIX C

Ref: NRC 313 I

Item 10

1. Radiation Surveys

Since the source of radiation in the Lixiscope and the radioactive material (low energy I-125) are well known and controlled, it is considered unnecessary to make physical radiation surveys. The initial certification of radiation survey of the loaded source holder (Lixiscope head) is provided with each unit and should be kept on file. These certificates give the original radiation readings of each Lixiscope in the "on" and "off" positions and those radiation levels become less as the I-125 sealed source decays, until the source is again eventually replaced.

2. Records Management Program

In addition to reviewing and keeping the radiation survey records for each Lixiscope, the Radiation Safety Officer (RSO) (listed in the facility's Lixiscope NRC license application or amendments) is responsible for maintaining the following records:

- a) Quarterly physical inventory of the Lixiscope(s). This condition can be met by maintaining the attached "Lixiscope Accountability and Source Exchange Record", if each Lixiscope is used at least once every 3 months or more frequently.
- b) Receipt, use and disposal records. The just described "Lixiscope Accountability and Source Exchange Record" has written instructions to properly record the original Lixiscope receipt and return, as well as all subsequent source head receipt details and return dates.
- c) Personnel monitoring is not required since radiation survey documentation, plus training and security requirements, indicates that it is highly unlikely any individual will receive a dose equal or greater than the radiation levels at which such monitoring is required as indicated in Title 10 Code of Federal Regulations Part 20.
- d) Documentation of at least an annual radiation safety review of this written radiation protection program and the facility's Lixiscope license application and any amendments, shall be made by the RSO for all licensed users of the Lixiscope that are under his/her responsibility. Such a documented review shall also be performed with any new trained personnel.
- e) License applications, amendment application copies and corresponding license and amendment documents shall be maintained in an organized manner for review at any time.



- f) Semi-annual leak test records for each I-125 source head must be maintained.

3. Semi-annual Leak Tests

The semi-annual leak tests are to be performed by using the "Leak Test Kit for Sealed Sources" from S.A. Huber Consultants, Inc. - 235 Essex Lane, New Lenox, IL 60451 and following the instructions with that kit. S.A. Huber Consultants, Inc. NRC license number is 12-17503-01. Their Leak Test kits and procedures are on file with the NRC Product Certification Branch.

4. Instructions to Personnel

In addition to the radiation safety instructions already specified in this written program, all personnel using the Lixiscope must have either attended the Lixiscope Training Program or received similar documented training, as indicated in item 2d of this safety program. In this manner, all users will be well aware of the needs to:

- a) Never leave the Lixiscope unattended or in an area where there is access by unauthorized personnel.
- b) Be completely familiar with the Lixiscope operating manual and safety precautions, "on" and "off" indicators, etc.
- c) Account for the Lixiscope at all times and return it after use to its locked storage area, which is posted with a "Caution Radioactive Material" sign.
- d) Be familiar with good radiation safety practices, ALARA philosophy, and to notify the Radiation Safety Officer (RSO) immediately if any questions or problems arise. The RSO can then call Lixi, Inc.; a nuclear consultant or the NRC, if any further assistance is needed.
- e) Emergency procedures, in the event of any fire, damage, loss or theft of the Lixiscope, the RSO is to be immediately notified at the phone number(s) listed below.
- f) Incoming radioactive shipments (source head exchanges) are to be immediately delivered to the RSO for proper checking and records maintenance as defined earlier herein. If any package is apparently damaged, the RSO will immediately arrange to have a calibrated survey meter delivered to check the outside package radiation level prior to opening and, if proper, to check the inside and Lixiscope readings after consulting with Lixi, Inc. or a nuclear consultant.

Radiation Safety Officer: L.L. Schramm

Office Phone: 969-7714

Home Phone: 665-9238

LIXI RADIATION SAFETY TRAINING COURSE  
TABLE OF CONTENTS

<u>SECTION A</u>	<u>THE BASICS.....</u>	<u>1</u>
1.	Purpose of this Course.....	2
2.	How to Take (or Deliver) this Training Course.....	3
3.	Radiation Terminology and Definitions.....	4
4.	Introduction to the LIXI Instruction Manual.....	5
5.	Safety of the LIXI Instruction Manual.....	6
<u>SECTION B</u>	<u>THE KEY ELEMENTS OF TRAINING.....</u>	<u>10</u>
1.	Lixi Training.....	11
2.	Explanatory Elements in the Course.....	11
a)	Federal State Regulations	
b)	Radiation Safety Instruction to Workers	
c)	The Radiation Management Program	
d)	Application for License to Possess Iodine-125 In a Lixiscope	
e)	Review of LIXI Instruction Manual	
3.	Demonstration of lixiscopes.....	13
<u>SECTION C</u>	<u>THE REGULATION.....</u>	<u>14</u>
1.	Overview of NRC and Agreement State Regulations....	15
2.	NRC and Agreement States.....	16
3.	How to Obtain NRC, Agreement State and DOT Regulations and Guides.....	16
4.	Summary of NRC Title 10, Part 19 Regulations Pertinent to the Lixiscope.....	17
5.	Summary of NRC Title 10, Part 20 Regulations Pertinent to the Lixiscope.....	19
6.	How to Interpret Regulations and Keep Current.....	22
7.	The Department of Transportation (DOT) Regulations.....	23
<u>SECTION D</u>	<u>THE LICENSE CONDITIONS.....</u>	<u>24</u>
1.	NRC Industrial License Application for lixiscopes.....	25
2.	Other Categories of Licenses and Types of Application Forms.....	29

3.	Your Specific License Application Attachments.....	29
a)	Personnel Training Certificate(s), resume(s) and National Lixiscope Registry (NLR)	
b)	Facility Sketch of Storage Room and Adjoining Areas	
c)	Description of Equipment and/or Procedures for Storage, Transportation, Device Handling, and Security Applicable to your facilities	
d)	Your Specific Radiation Protection Program (and Leak Test Commitment)	
e)	Accountability, Source Exchange and Inventory Record System	
4.	For Help with your License Applications and Amendments.....	30
5.	Reciprocity Recognition of Licenses.....	30
 <u>SECTION E</u> <u>THE RADIATION SAFETY (MANAGEMENT) PROGRAM..</u>		
1.	Purpose of Radiation Safety Program.....	32
2.	The Responsibilities of a Radiation Safety Officer (RSO).....	32
3.	Record System.....	34
a)	License File	
b)	Regulations	
c)	Regulatory Guides and Notices	
d)	Personnel Training Records	
e)	Receiving and Shipping Records	
f)	Accountability and Inventory Records	
g)	Leak Test Kit and Certificate File	
h)	Shipping Instructions and DOT Forms	
i)	Inspection File	
j)	Incident Reports and Emergency Contacts	
k)	Lixi, Inc. Data and Consultant Reports	
l)	Annual Audits and Personnel Reviews	
m)	"Year at a Glance" Management Chart	
4.	Posting Notices and Labels.....	37
5.	Inspection Preparedness.....	37

SECTION F      RADIATION SAFETY PRINCIPLES and PRACTICE...38

1. The "ALARA" Philosophy.....	39
2. Time, Distance and Shielding - Basic Radiation Safety Principles.....	40
3. Inverse Square Law.....	41
4. Half-Life.....	41
5. Maximum Permissible Dose (MPD).....	42
6. Characteristics of I-125 Used in the Lixiscope.....	42
7. Radiation Biology.....	42
8. Security Against Theft, Loss and Unauthorized Use.....	43
9. New Users Orientation.....	43
10. Annual Radiation Safety Reviews.....	43
11. Leak Test Kit Instructions.....	44
12. Iodine-125 Shipping Instructions.....	44
13. DOT "Shipper's Declaration For Dangerous Goods" Form.....	44
14. Radiation Safety References and National Council for Radiation Protection Publications.....	45

SECTION G      REVIEW OF COURSE and EXAMINATION.....46

1. Reasons for Review.....	47
2. Reasons for Examination.....	47
3. Examination.....	48

SECTION H      STEPS AFTER TRAINING.....52

1. Processing of Training Certificates through National Lixiscope Registry.....	53
2. Preparation of Lixiscope License Applications.....	53
3. Ordering Regulations and Guides.....	53
4. Ordering a lixiscope.....	54
5. Establishment of Record System.....	54
6. Call Lixi, Inc. for Assistance.....	54



# APPENDIX

A	Radiation Survey of Lixiscope.....	55
B	Regulatory Agencies.....	58
	1) Agreement States	
	2) NRC "Notice to Employees"	
C	Application For Byproduct Material License.....	62
	1) Industrial Application	
	2) Example Facility Sketch	
	3) Facilities and Equipment	
	4) Radiation Protection Program	
D	Title 10 Chapter 1, Code of Federal Regulations Part 19.....	69
E	Title 10 Chapter 1, Code of Federal Regulations Part 20.....	72
F	Instructions For Return Shipments of I-125 Source Heads.....	102
	1) Certificate of Compliance for Type A Package	
	2) Shipper's Declaration For Dangerous Goods	
G	Publications.....	110
	1) Sample Letter to Obtain NRC Regulations and Guides	
	2) Instructions for Purchasing NRC Publications	
H	National Lixiscope Registry.....	Delete
I	Formal Training in Radiation Safety and Experience Certificate.....	116
J	Lixiscope Accountability and Source Exchange Record.....	117
K	Leak Test.....	118
	1) Leak Test Kit Instructions	
	2) Sample Leak Test Certificate	
L	Year at a Glance - Radiation Management Schedule.....	121
M	Sample Control Records.....	122
	1) Sealed Sources - Receipt and Disposal Record	
	2) Quarterly Physical Inventory Form	
	3) Radioactive Shipment Handling and Inspection Form	