

## APPENDIX (continued)

FORM NRC-313 I (1-79) 10 CFR 30		U.S. NUCLEAR REGULATORY COMMISSION		1. APPLICATION FOR: (Check and/or complete as appropriate) Specific License	
<b>APPLICATION FOR BYPRODUCT MATERIAL LICENSE INDUSTRIAL</b>				a. NEW LICENSE    Yes	
See attached instructions for details.  Completed applications are filed in duplicate with the Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety, and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555 or applications may be filed in person at the Commission's office at 117 H Street, N.W., Washington, D. C. or 7915 Eastern Avenue, Silver Spring, Maryland.				b. AMENDMENT TO: LICENSE NUMBER	
				c. RENEWAL OF: LICENSE NUMBER	
2. APPLICANT'S NAME (Institution, firm, person, etc.) Siemens Medical Systems, Inc.  TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION 312/635-3396			3. NAME OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION Inid S. Deneau  TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION 312/635-3396		
4. APPLICANT'S MAILING ADDRESS (Include Zip Code) Siemens Health Physics Services 2000 Nuclear Drive Des Plaines, IL 60005			5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED (Include Zip Code)  See Appendix A		
(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)					
6. INDIVIDUAL(S) WHO WILL USE OR DIRECTLY SUPERVISE THE USE OF LICENSED MATERIAL (See Items 16 and 17 for required training and experience of each individual named below)					
FULL NAME			TITLE		
Licensed material used only by			service technicians trained		
in-house and under direct supervision of the			service manager.		
7. RADIATION PROTECTION OFFICER William E. Todd See Appendix B			Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15.		
<b>8. LICENSED MATERIAL</b>					
LINE NO	ELEMENT AND MASS NUMBER	CHEMICAL AND/OR PHYSICAL FORM	NAME OF MANUFACTURER AND MODEL NUMBER (If Sealed Source)	MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTIVITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME	
A	B	C	D		
(1)	Americium 241	Sealed Source	Any	500 mCi	
(2)	Barium 133	Sealed Source	Any	25 mCi	
(3)	8512090169 841105				
(4)	REG3 LIC30				
	12-00369-02    PDR				
DESCRIBE USE OF LICENSED MATERIAL E					
(1)	For use in installation, testing, and demonstration of devices.				
(2)	For use in installation, testing, and demonstration of devices.				
(3)					
(4)					

## APPENDIX (continued)

9. STORAGE OF SEALED SOURCES						
LINE NO.	CONTAINER AND/OR DEVICE IN WHICH EACH SEALED SOURCE WILL BE STORED OR USED. A.	NAME OF MANUFACTURER B.	MODEL NUMBER C.			
(1)	See Appendix C					
(2)						
(3)						
(4)						

10. RADIATION DETECTION INSTRUMENTS						
LINE NO.	TYPE OF INSTRUMENT A	MANUFACTURER'S NAME B	MODEL NUMBER C	NUMBER AVAILABLE D	RADIATION DETECTED (alpha, beta, gamma, neutron) E	SENSITIVITY RANGE (milliroentgens/hour or counts/minute) F
(1)	N/A					
(2)						
(3)						
(4)						

11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10	
<input type="checkbox"/> a. CALIBRATED BY SERVICE COMPANY NAME, ADDRESS, AND FREQUENCY N/A	<input type="checkbox"/> b. CALIBRATED BY APPLICANT <i>Attach a separate sheet describing method, frequency and standards used for calibrating instruments.</i>

12. PERSONNEL MONITORING DEVICES		
TYPE (Check and/or complete as appropriate.) A	SUPPLIER (Service Company) B	EXCHANGE FREQUENCY C
<input checked="" type="checkbox"/> (1) FILM BADGE  <input type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD)  <input type="checkbox"/> (3) OTHER (Specify): _____ _____ _____	Siemens Gammasonics, Inc. Health Physics Services 2000 Nuclear Drive Des Plaines, IL 60018	<input checked="" type="checkbox"/> MONTHLY  <input type="checkbox"/> QUARTERLY  <input type="checkbox"/> OTHER (Specify): _____ _____ _____

13. FACILITIES AND EQUIPMENT (Check where appropriate and attach annotated sketch(es) and description(s).)	
<input type="checkbox"/> a. LABORATORY FACILITIES, PLANT FACILITIES, FUME HOODS (Include filtration, if any), ETC. <input type="checkbox"/> b. STORAGE FACILITIES, CONTAINERS, SPECIAL SHIELDING (fixed and/or temporary), ETC. <input type="checkbox"/> c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC. N/A <input type="checkbox"/> d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC.	

14. WASTE DISPOSAL	
a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED	
b. IF COMMERCIAL WASTE DISPOSAL SERVICE IS NOT EMPLOYED, SUBMIT A DETAILED DESCRIPTION OF METHODS WHICH WILL BE USED FOR DISPOSING OF RADIOACTIVE WASTES AND ESTIMATES OF THE TYPE AND AMOUNT OF ACTIVITY INVOLVED. IF THE APPLICATION IS FOR SEALED SOURCES AND DEVICES AND THEY WILL BE RETURNED TO THE MANUFACTURER, SO STATE. All radioactive materials for disposal are sent to Siemens Gammasonics in Des Plaines, IL., where the materials are processed for disposal by a commercial company. Radioactive wastes consist of only decayed sealed sources.	

APPENDIX (continued)

INFORMATION REQUIRED FOR ITEMS 15, 16 AND 17

Describe in detail the information required for Items 15, 16 and 17. Begin each item on a separate page and key to the application as follows:

15. **RADIATION PROTECTION PROGRAM.** Describe the radiation protection program as appropriate for the material to be used including the duties and responsibilities of the Radiation Protection Officer, control measures, bioassay procedures (if needed), day-to-day general safety instruction to be followed, etc. If the application is for sealed source's also submit leak testing procedures, or if leak testing will be performed using a leak test kit, specify manufacturer and model number of the leak test kit.  
See Appendix D
16. **FORMAL TRAINING IN RADIATION SAFETY.** Attach a resume for each individual named in Items 6 and 7. Describe individual's formal training in the following areas where applicable. Include the name of person or institution providing the training, duration of training, when training was received, etc.
  - a. Principles and practices of radiation protection.
  - b. Radioactivity measurement standardization and monitoring techniques and instruments.
  - c. Mathematics and calculations basic to the use and measurement of radioactivity.
  - d. Biological effects of radiation.
17. **EXPERIENCE.** Attach a resume for each individual named in Items 6 and 7. Describe individual's work experience with radiation, including where experience was obtained. Work experience or on-the-job training should be commensurate with the proposed use. Include list of radioisotopes and maximum activity of each used.

RECEIVED BY LFMB	
Date	7/30/84
Loc	Long...
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**18. CERTIFICATE**  
(This item must be completed by applicant)

Applicant	27295
Check No.	27295
Amount	\$930.30
Type of Fee	App
Date Check Rec'd	7/30/84
Received By	

The applicant and any official executing this certificate on behalf of the applicant named in Item 2, certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Part 30, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our 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.

a. LICENSE FEE REQUIRED (See Section 170.31, 10 CFR 170)	b. CERTIFYING OFFICIAL (Signature) <i>William E. Todd</i>
(1) LICENSE FEE CATEGORY: 3N	c. NAME (Type or print) William E. Todd
(2) LICENSE FEE ENCLOSED: \$ 930.00	d. TITLE Radiation Safety Officer
	e. DATE July 23, 1984

Appendix A  
Item 5

Once a year an update of all Siemens Medical Systems field office location addresses will be submitted. The following are the present office locations:

- |                                   |  |
|-----------------------------------|--|
| 1) Boston SMS Office              | 32 Wexford Street<br>Needham, MA 02194                         |
| 2) Philadelphia SMS Office        | 18 Olney Avenue<br>Cherry Hill, NJ 08003                       |
| 3) New Jersey/New York SMS Office | 111 Northfield Avenue<br>West Orange, NJ 07052                 |
| 4) Washington, D.C. SMD Office    | 7320-B Parkway Drive<br>Hanover, MD 21076                      |
| 5) Detroit SMS Office             | 31513 N. Western Highway<br>Farmington Hills, MI 48018         |
| 6) Cincinnati SMS Office          | 11256 Cornell Park Drive<br>Suite #500<br>Cincinnati, OH 45242 |
| 7) Chicago SMS Office             | 1550 Higgins Road<br>Suite #125<br>Elk Grove Village, IL 60007 |
| 8) St. Louis SMS Office           | 1906 Craigshire<br>St. Louis, MO 63141                         |
| 9) Milwaukee SMS Office           | 12040 W. Ferrick Street<br>Wauwatosa, WI 53222                 |

November 19, 1982

MEMORANDUM

TO: All Federal and/or Agreement State  
Radiation Control Agencies

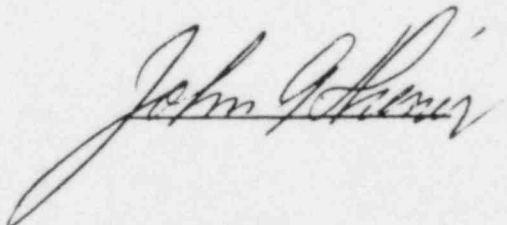
RE: Radiation Control Responsibility

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Please be advised that effective October 1, 1982, Siemens Corporation has formed Siemens Medical Systems, Inc. All service personnel, utilizing radioactive material, report to Siemens Medical Systems, Inc.

Mr. William Todd, Health Physicist, has been appointed to the position of Radiation Safety Officer of Siemens Medical Systems, Inc. Mr. Todd will have the responsibility for the establishment, maintenance and/or implementation of administrative control relative to the licensing, use, acquisition, storage, disposal, record keeping and accounting relative to the safe use of radioactive material throughout all service office and resident locations.

Sincerely,





Siemens Gammasonics, Inc.

Calibrator Use Instructions

Model CM3004 calibrator - 250 uCi Cobalt 57.  
Model 096202 calibrator - 2 mCi Cobalt 57.  
Model 096204 calibrator - 2 mCi Americium 241.

These devices may be used only by Siemens service personnel or by Siemens Gammasonics home office personnel who have been trained in their use.

These devices may not be used for field calibration without the approval of the district service manager.

These devices must NOT be left unattended, transferred, loaned or left overnight at a customer's facility.

A field service use log must be maintained showing the location, date and name of user each time a calibrator is used.

These calibrators must be leak tested every six months. When sources are used in the field the service engineer must have a copy of the latest leak test certificate in his/her possession.

Do not remove the shielded cap(s) from the source until it is to be used.

Sources in a field service office must be stored in a locked posted cabinet. Sources in the field must be stored in the service engineers tool box in a locked company car. The tool box must be labeled as a radioactive material storage area. These devices must not be removed from their storage location except when needed for instrument calibration.

If the source must be shipped it must be packaged in accordance with Department Of Transportation (DOT) regulations.

Sources may only be disposed of by returning them to Siemens Gammasonics, Inc.

Loss of or damage to one of these devices must be reported IMMEDIATELY to the Health Physics Department, Siemens Gammasonics, Inc. (312)635-3396. Night number: (312)635-3100.

I. Radiation Protection Program

A. Request and Receipt of Radioactive Materials

All requests for sealed sources are ordered and received by Siemens Gammasonics, Inc., in Des Plaines. After all processing is performed at Siemens Gammasonics, the source is transferred to the field service location for use. All package processing is in accordance with 10 CFR 20.205.

B. Storage of Sealed Sources

All sealed sources are stored in a locked cabinet with a radiation caution sign posted on the outside. The sources are stored with lead shielding covering the bore hole of the source holder. Sources in the field are stored in a locked tool box with a radiation caution sign on the outside.

C. Transport of Sealed Sources

Sealed sources are transported in the service engineer's locked tool box in the locked trunk of the car. A "Use Log" card is maintained for each sealed source which provides a record of where the source is at all times.

D. Accountability of Sealed Sources

The District Manager, also the Radiation Protection Officer, is responsible for maintaining records of receipt, use, and disposal of all radioactive materials in their district. A computer printout of all sealed sources located by districts is sent to each district RPO every six months for verification. The RPO provides an accurate account of these sources and acknowledges by signing the computer printout. One copy is on file at the district office and another copy is kept at the Siemens Des Plaines office.

E. Leak Test of Sealed Sources

Sealed sources are leak tested every six months. Siemens Gammasonics, Inc., in Des Plaines provides a leak test service which is utilized by Siemens Medical Systems for analyses of the leak tests. Leak test certificates for the sealed sources are on file at the service office location.

III. Day-to-Day General Safety Instructions

Please refer to the field service office manual included with this application.



## Field Service Training

### I. Basic Principles of Radiation

- Types of radioactive material
- Amounts of radioactive material
- Interaction with matter
- Radiation exposure - doses, exposure levels and limits
- Effects of radiation

### II. Radiation Safety

- Handling of radioactive material
- Time, distance, and shielding
- How to perform wipe surveys and action levels
- Contamination control
- Personnel dosimetry
- Storage and transportation of radioactive materials
- Disposal of radioactive materials
- Emergency procedures

### III. Record Keeping

- Use log card
- Leak testing and leak test certificates
- Accountability of radioactive materials

### IV. NRC and/or Agreement State Regulatory Requirements