



# INFORMATION REQUIRED FOR ITEMS 7 THROUGH 23

For Items 7 through 23, check the appropriate box(es) and submit a detailed description of all the requested information. Begin each item on a separate sheet. Identify the item number and the date of the application in the lower right corner of each page. If you indicate that an appendix to the medical licensing guide will be followed, do not submit the pages, but specify the revision number and date of the referenced guide: Regulatory Guide 10.8, Rev. \_\_\_\_\_ Date: \_\_\_\_\_

7. MEDICAL ISOTOPES COMMITTEE <i>Not required in private office. See CFR-10 Par 35.12 (4)(iii) (Check One)</i>		15. GENERAL RULES FOR THE SAFE USE OF RADIOACTIVE MATERIAL <i>(Check One)</i>	
<input type="checkbox"/>	Names and Specialties Attached; and	<input checked="" type="checkbox"/>	Appendix G Rules Followed; or
<input type="checkbox"/>	Duties as in Appendix B; or	<input type="checkbox"/>	Equivalent Rules Attached
<input type="checkbox"/>	Equivalent Duties Attached	16. EMERGENCY PROCEDURES <i>(Check One)</i>	
8. TRAINING AND EXPERIENCE		<input checked="" type="checkbox"/>	Appendix H Procedures Followed; or
<input checked="" type="checkbox"/>	Supplements A & B Attached for Each Individual User; and	<input type="checkbox"/>	Equivalent Procedures Attached
<input checked="" type="checkbox"/>	Supplement A Attached for RSO.	17. AREA SURVEY PROCEDURES <i>(Check One)</i>	
9. INSTRUMENTATION <i>(Check One)</i>		<input checked="" type="checkbox"/>	Appendix I Procedures Followed; or
<input type="checkbox"/>	Appendix C Form Attached; or	<input type="checkbox"/>	Equivalent Procedures Attached
<input checked="" type="checkbox"/>	List by Name and Model Number <i>See attached sheet</i>	18. WASTE DISPOSAL <i>(Check One)</i>	
10. CALIBRATION OF INSTRUMENTS		<input type="checkbox"/>	Appendix J Form Attached; or
<input type="checkbox"/>	Appendix D Procedures Followed for Survey Instruments; or <i>(Check One)</i>	<input type="checkbox"/>	Equivalent Information Attached
<input type="checkbox"/>	Equivalent Procedures Attached; and	19. THERAPEUTIC USE OF RADIOPHARMACEUTICALS <i>(Check One)</i>	
<input type="checkbox"/>	Appendix D Procedures Followed for Dose Calibrator; or <i>(Check One)</i>	<input type="checkbox"/>	Appendix K Procedures Followed; or
<input checked="" type="checkbox"/>	Equivalent Procedures Attached	<input type="checkbox"/>	Equivalent Procedures Attached
11. FACILITIES AND EQUIPMENT		20. THERAPEUTIC USE OF SEALED SOURCES	
<input checked="" type="checkbox"/>	Description and Diagram Attached	<input type="checkbox"/>	Detailed Information Attached; and
12. PERSONNEL TRAINING PROGRAM		<input type="checkbox"/>	Appendix L Procedures Followed; or <i>(Check One)</i>
<input checked="" type="checkbox"/>	Description of Training Attached	<input type="checkbox"/>	Equivalent Procedures Attached
13. PROCEDURES FOR ORDERING AND RECEIVING RADIOACTIVE MATERIAL		21. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE GASES (e.g., Xenon - 133)	
<input type="checkbox"/>	Detailed Information Attached <i>attached</i>	<input type="checkbox"/>	Detailed Information Attached
14. PROCEDURES FOR SAFELY OPENING PACKAGES CONTAINING RADIOACTIVE MATERIALS <i>(Check One)</i>		22. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE MATERIAL IN ANIMALS	
<input type="checkbox"/>	Appendix F Procedures Followed; or	<input type="checkbox"/>	Detailed Information Attached
<input type="checkbox"/>	Equivalent Procedures Attached <i>Exempt under 10 CFR 20-205 (5-i-v)</i>	23. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE MATERIAL SPECIFIED IN ITEM 6.b	
<input type="checkbox"/>		<input type="checkbox"/>	Detailed Information Attached

## 24. PERSONNEL MONITORING DEVICES

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

d. OTHER (Specify)

NONE

## 25. FOR PRIVATE PRACTICE APPLICANTS ONLY

a. HOSPITAL AGREEING TO ACCEPT PATIENTS CONTAINING RADIOACTIVE MATERIAL			b. ATTACH A COPY OF THE AGREEMENT LETTER SIGNED BY THE HOSPITAL ADMINISTRATOR.
NAME OF HOSPITAL			
MAILING ADDRESS			
CITY	STATE	ZIP CODE	c. WHEN REQUESTING THERAPY PROCEDURES, ATTACH A COPY OF RADIATION SAFETY PRECAUTIONS TO BE TAKEN AND LIST AVAILABLE RADIATION DETECTION INSTRUMENTS.

## 26. CERTIFICATE

(This item must be completed by applicant)

The applicant and any official executing this certificate on behalf of the applicant named in Item 1a certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Parts 30 and 35, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

a. LICENSE FEE REQUIRED (See Section 170.31, 10 CFR 170)	b. APPLICANT OR CERTIFYING OFFICIAL (Signature)
	(1) NAME (Type of Print) John T. Elston, M. D.
(1) LICENSE FEE CATEGORY: General Domestic License (Sec. 31.11 of CFR Part 31)	(2) TITLE Pathologist
(2) LICENSE FEE ENCLOSED: \$	c. DATE 6-18-79

## 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 Form NRC-313M. 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 30-36 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 used: (a) to provide records to State health departments for their information and use; and (b) to provide information 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 a NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you. A copy of the license issued will routinely be placed in the NRC's Public Document Room, 1717 H Street, N.W., Washington, D.C.
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.
5. **SYSTEM MANAGER(S) AND ADDRESS** Director, Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.



NUCLEAR REGULATORY COMMISSION

9. INSTRUMENTATION

Name and Model number

Abbott - AutoLogic

No 7407-02

Abbott - Logic Model III

NUCLEAR REGULATORY COMMISSION

10. CALIBRATION OF INSTRUMENTS

a. Survey Instrument

Routine survey of isotope area by moist swab technic performed after each day of use. No other monitoring equipment necessary in view of low level substances used.

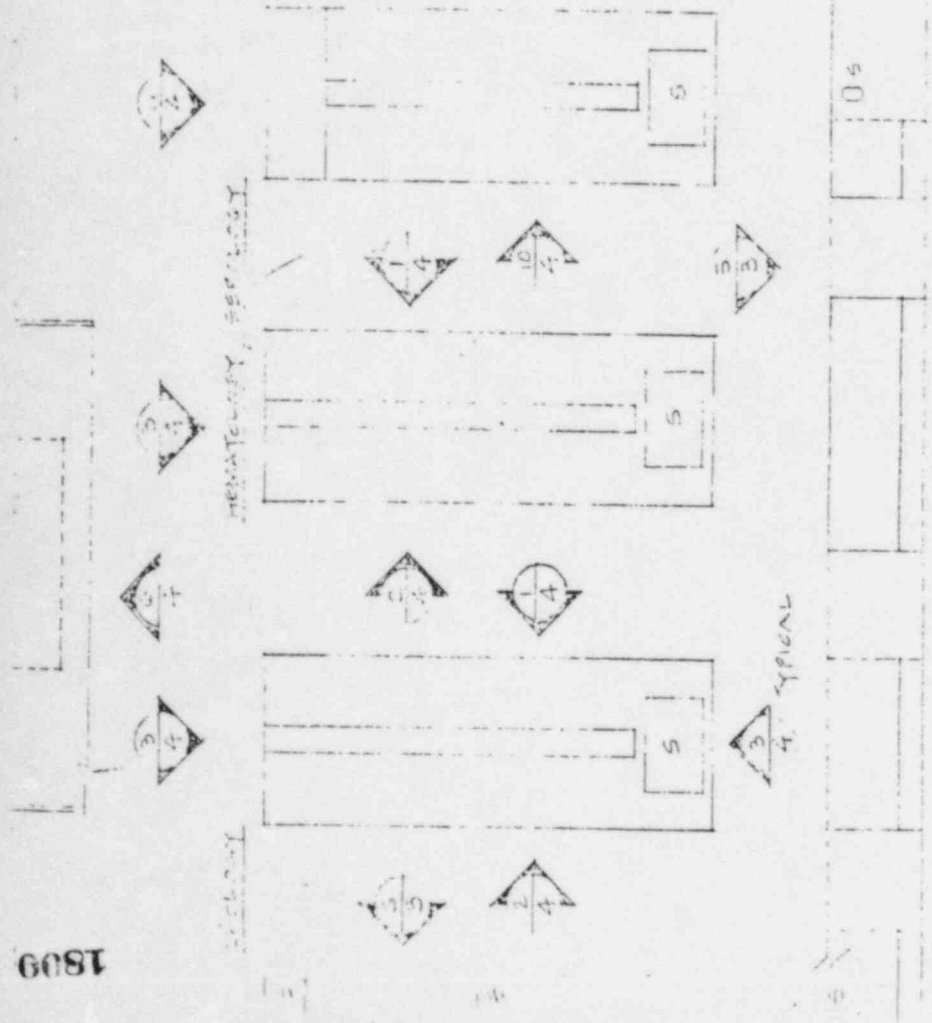
Item 10  
June 18, 1979

## 11. FACILITIES AND EQUIPMENT

Floor plan of isotope section in General Chemistry lab is attached. Isotope reagents stored in laboratory cabinets, empty reagent containers are kept on shelf until decay below detectable limits, then disposed of in sanitary land fill.

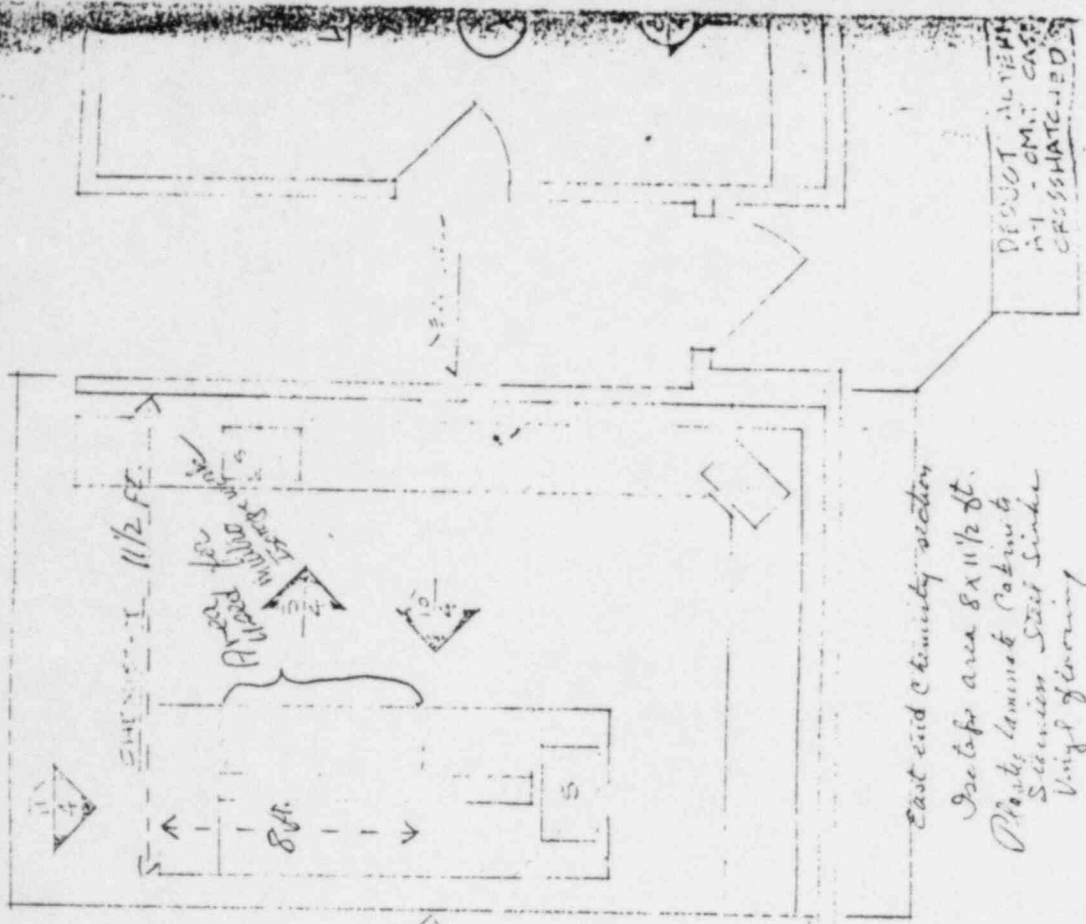
RACERASE BOND  
SOUTHINGTON CT. U.S.A.  
20% COTTON FIBER

Chin. Lab. Blackville 2805 5-27-64  
Hemo-Cham Section



SECTION MADE BY HANSON NINE 4 II PAGES 6 LAST PAGE

2805 5-27-64



East end chemistry section

Isotope area 8 x 11 1/2 ft.

Plastic laminated Cabinet

Stainless Steel Sink

Vinyl flooring

DESIGN ALTERNATIVE  
A-1 - CM. CASE  
CROSSHATCHED



12. PERSONNEL TRAINING PROGRAM

All persons performing in vitro analysis are Medical Technologists (MT-ASCP) who have had formal training in isotope technics. Written analytical procedures are carefully adhered to. All personnel have been instructed in use, handling, safety and have been made aware of NRC rules and regulations as well as licensees regulations.

Item 12  
June 18, 1979

FORM NRC-313M-SUPPLEMENT A  
(8-78)

U.S. NUCLEAR REGULATORY COMMISSION

**TRAINING AND EXPERIENCE  
AUTHORIZED USER OR RADIATION SAFETY OFFICER**

1. NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER JOHN T. ELSTON, M. D.	2. STATE OR TERRITORY IN WHICH LICENSED TO PRACTICE MEDICINE SOUTH DAKOTA
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**3. CERTIFICATION**

SPECIALTY BOARD A	CATEGORY B	MONTH AND YEAR CERTIFIED C
PATHOLOGY	PATHOLOGY-ANATOMIC	Nov. 1954

**4. TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES**

FIELD OF TRAINING A	LOCATION AND DATE(S) OF TRAINING B	TYPE AND LENGTH OF TRAINING	
		LECTURE/ LABORATORY COURSES (Hours) C	SUPERVISED LABORATORY EXPERIENCE (Hours) D
a. RADIATION PHYSICS AND INSTRUMENTATION	University of South Dakota December 1955. Nuclear Medicine Institute	48 hours	
b. RADIATION PROTECTION	Cleveland, Ohio, Nov.-Dec. 1973	96 hours.	
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY			
d. RADIATION BIOLOGY			
e. RADIOPHARMACEUTICAL CHEMISTRY			

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

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
I 131 I 125 Co-60 CR 51	5 MC less than 1 MC 57 1 MC less than 1 MC	St. John's Hospital, Rapid City, South Dakota (Now Rapid City Regional Hospital).	24 years continuous use of isotopes (uptake and in-vitro diagnostic tests)	Thyroid uptakes, Blood volume studies, RBC survival, GI absorption studies.

TRAINING AND EXPERIENCE  
AUTHORIZED USER OR RADIATION SAFETY OFFICER

1. NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER

DONALD H. KELLEY, M. D.

2. STATE OR TERRITORY IN  
WHICH LICENSED TO  
PRACTICE MEDICINE

3. CERTIFICATION

SPECIALTY BOARD A	CATEGORY B	MONTH AND YEAR CERTIFIED C
PATHOLOGY	P.A./C.P.	May 1972

4. TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES

FIELD OF TRAINING A	LOCATION AND DATE(S) OF TRAINING B	TYPE AND LENGTH OF TRAINING	
		LECTURE/ LABORATORY COURSES (Hours) C	SUPERVISED LABORATORY EXPERIENCE (Hours) D
a. RADIATION PHYSICS AND INSTRUMENTATION			
b. RADIATION PROTECTION	Information attached		
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY			
d. RADIATION BIOLOGY			
e. RADIOPHARMACEUTICAL CHEMISTRY			

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

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
	See	sheet attached		

HARVARD UNIVERSITY  
UNIVERSITY HEALTH SERVICES

75 Mt. Auburn Street  
Cambridge, Massachusetts 02138

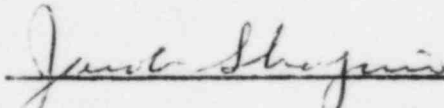
November 21, 1968

TO WHOM IT MAY CONCERN:

This is to certify that DONALD H. KELLEY participated in the STUDY PROGRAM IN THE SAFE USE OF RADIOISOTOPES IN RESEARCH conducted by Environmental Health & Safety, University Health Services, and satisfactorily completed a final examination given at the end of the program.

The program was designed to impart the principles and practice of radiation safety as it concerns the use of radioactive materials. Additionally, it presented elementary information on radioactivity measurement, standardization and monitoring techniques, mathematics and calculations basic to the use and measurement of radioactivity, and on biological effects of radiation.

The material was given in ten two-hour sessions, including two laboratory sessions.

  
Jacob Shapiro, Ph.D.  
Radiation Protection  
Officer

JS/nkt



EDUCATIONAL BACKGROUND IN USE OF RADIOISOTOPES

DONALD H. KELLEY, M.D.

(AS PER ITEMS 8+9, FORM AEC-313)

8 a, b, c, d. : "STUDY PROGRAM IN THE SAFE USE OF RADIOISOTOPES  
IN RESEARCH" (20 hrs), NOV. 1968, PRESENTED BY HARVARD  
UNIVERSITY HEALTH SERVICES (see attached letter)

8 b, c, d. : "MEDICAL RADIOISOTOPES COURSE". MAY 4-29,  
1970, PRESENTED BY OAK RIDGE ASSOCIATED UNIVERSITIES AT  
OAK RIDGE, TENN.

9 : 5 MC or less  $^{131}\text{I}$  : thyroid uptake, blood volume studies  
less than 1 MC  $^{125}\text{I}$  : RIA kit assays  
1 MC  $^{57}\text{Co}$  : Schilling tests  
less than 1 MC  $^{51}\text{Cr}$  : RBC survival studies

FOLLOWING 2 YRS EXPERIENCE DURING CLINICAL PATHOLOGY  
RESIDENCY, HAVE HAD 6 YRS EXPERIENCE IN USE OF ABOVE  
ISOTOPES IN PRACTICE OF PATHOLOGY AT RAPID CITY REGIONAL  
HOSPITAL, RAPID CITY, S.D.

ADDITIONAL EDUCATION "RADIOIMMUNOASSAY SYMPOSIUM", PRESENTED  
BY UNIV. OF CALIFORNIA (BERKELEY), AT SAN FRANCISCO  
JAN. 28-30, 1977.

UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



SANTA BARBARA • SANTA CRUZ

UNIVERSITY EXTENSION

2223 FULTON STREET  
BERKELEY, CALIFORNIA 94720

February 3, 1977

Donald Kelley  
1819 West Boulevard  
Rapid City, South Dakota 57701

Dear Donald Kelley:

This letter will serve as verification of your attendance at the Radioimmunoassay Symposium, January 28-30, 1977 at the Hyatt on Union Square in San Francisco, California.

You may submit this letter as confirmation of your registration to the association from which you are interested in receiving credit.

Sincerely yours,

Nathan W. Cohen, Ph.D.  
Program Coordinator  
Radioimmunoassay Symposium

jm

13. PROCEDURES FOR ORDERING AND RECEIVING RADIOACTIVE  
MATERIAL:

Copy of written procedure from manual attached.

Par XIII

# POLICY FOR RECEIPT OF SHIPMENT REGARDING RADIO-NUCLEOTIDES

Upon receipt of radio nucleotide shipment the following shall be so noted.

1. Supplier.
2. Type of test.
3. Number of tests received.
4. Lot number.
5. Date received.
6. Date expired.
7. Condition of shipment.

If shipment arrives in tact mark OK. If shipment arrives broken supplier should be notified. Specimen container should be thoroughly flushed with large volumes of water and sprayed with Rad Con. The residue should be wiped off and all areas monitered via cotton ball wipe mehhod. When low count is attained all materials may be discarded.

## **Contents are exempt from NRC or Agreement State licensing requirements.**

Radioactive Material—Not for Human Use—  
Introduction into foods, beverages, cosmet-  
ics, drugs, or medicinals or into products  
manufactured for commercial distribution is  
prohibited — exempt quantities should not be  
combined.



14. PROCEDURES FOR SAFELY OPENING PACKAGES CONTAINING  
RADIOACTIVE MATERIALS:

Exempt under 20.205 (5) (i) and (v) 10 CFR

18. WASTE DISPOSAL

Appendix J attached copy.

APPENDIX J

WASTE DISPOSAL

1. Liquid waste will be disposed of (check as appropriate)

\_\_\_\_\_ By commercial waste disposal service (see also item 4 below).

X In the sanitary sewer system in accordance with §20.303 of 10 CFR Part 20.

\_\_\_\_\_ Other (specify): \_\_\_\_\_

2. Mo-99/Tc-99m generators will be (check as appropriate)

\_\_\_\_\_ Returned to the manufacturer for disposal.

\_\_\_\_\_ Held for decay until radiation levels, as measured with a low-level survey meter and with all shielding removed, have reached background levels. All radiation labels will be removed or obliterated and the generators disposed of as normal trash. (Note: This method of disposal may not be practical for generators containing long-lived radioactive contaminants.)

\_\_\_\_\_ Disposed of by commercial waste disposal service (see also item 4 below).

\_\_\_\_\_ Other (specify): \_\_\_\_\_

3. Other solid waste will be (check as appropriate)

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

\_\_\_\_\_ Disposed of by commercial waste disposal service (see also item 4 below).

\_\_\_\_\_ Other (specify): \_\_\_\_\_

4. The commercial waste disposal service used will be

\_\_\_\_\_ (Name) \_\_\_\_\_ (City, State)

NRC/Agreement State License No. \_\_\_\_\_