

<b>NRC FORM 313</b> (4-2004) 10 CFR 30, 32, 33, 34, 35, 36, 39, and 40	<b>U.S. NUCLEAR REGULATORY COMMISSION</b>	<b>APPROVED BY OMB: NO. 3150-0120</b> Estimated burden per response to comply with this mandatory collection request: 7 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to <a href="mailto:infocollects@nrc.gov">infocollects@nrc.gov</a> , and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.
<b>APPLICATION FOR MATERIAL LICENSE</b>		
<b>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.</b>		
<b>APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:</b>  DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555-0001		<b>IF YOU ARE LOCATED IN:</b>  ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:  MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION III 2443 WARRENVILLE ROAD, SUITE 210 LISLE, IL 60532-4352
<b>ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:</b>  <b>IF YOU ARE LOCATED IN:</b>  ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, MISSISSIPPI, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:  LICENSING ASSISTANCE TEAM DIVISION OF NUCLEAR MATERIALS SAFETY U.S. NUCLEAR REGULATORY COMMISSION, REGION I 475 ALLENDALE ROAD KING OF PRUSSIA, PA 19406-1415		ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:  NUCLEAR MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION IV 611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TX 76011-4005
<b>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 JURISDICTIONS.</b>		
<b>1. THIS IS AN APPLICATION FOR (Check appropriate item)</b> <input type="checkbox"/> A. NEW LICENSE <input type="checkbox"/> B. AMENDMENT TO LICENSE NUMBER _____ <input checked="" type="checkbox"/> C. RENEWAL OF LICENSE NUMBER <u>47-23070-01</u>		<b>2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)</b> Putnam General Hospital 1400 Hospital Drive Hurricane, WV 25526
<b>3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED</b> 1400 Hospital Drive Hurricane, WV 25526		<b>4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION</b> M. Douglass Allan, M.S.  <b>TELEPHONE NUMBER</b> (304) 526-1141
<b>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.</b>		
<b>5. RADIOACTIVE MATERIAL</b> a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.		<b>6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.</b>
<b>7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.</b>		<b>8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.</b>
<b>9. FACILITIES AND EQUIPMENT.</b>		<b>10. RADIATION SAFETY PROGRAM.</b>
<b>11. WASTE MANAGEMENT.</b>		<b>12. LICENSE FEES (See 10 CFR 170 and Section 170.31)</b> FEE CATEGORY <u>7C</u> AMOUNT ENCLOSED \$ <u>0.00</u>
<b>13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.</b>  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, 36, 39, 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 52 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		
<b>CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE</b> Brenda J. Moore CEO/COO		<b>SIGNATURE</b> <i>Brenda J. Moore</i>
		<b>DATE</b> 1/12/05
<b>FOR NRC USE ONLY</b>		
TYPE OF FEE	FEE LOG	FEE CATEGORY
AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
APPROVED BY	DATE	

**Item 5 and 6—Revised to include limit for D.**

<b>Byproduct Material</b>	<b>Chemical/Physical Form</b>	<b>Maximum Amount</b>
<b>A. Any byproduct material included in 10CFR 35.100</b>	<b>A. Any</b>	<b>A. As needed for medical use.</b>
<b>B. Any byproduct material included in 10CFR 35.200</b>	<b>B. Any</b>	<b>B. As needed for medical use.</b>
<b>C. Any byproduct material included in 10 CFR 35.300</b>	<b>C. Any unsealed form for preparation and administration as specified in 10 CFR 35.72</b>	<b>C. 55.5 gigabecquerels (1.5 Curies) for medical use.</b>
<b>D. Any byproduct material with a halflife less than 120 days, except I-131</b>	<b>D. Any form for uses described in 10 CFR 35.300 initially distributed in accordance with a specific license pursuant to 10 CFR 35.72 or a specific license issued to the manufacturer by an Agreement State pursuant to equivalent State regulations.</b>	<b>D. 55.5 gigabecquerels (1.5 Curies) for medical use.</b>

**Item 7.1.1****Individual Responsible for Radiation Safety Program:****James Alan Cochrane, M.D.**

Dr. Cochrane is qualified to serve as RSO by virtue of the following:

1. He has been serving as the NRC-approved RSO on this license for which renewal is being requested. (47-23070-01).
2. He is certified by the American Board of Radiology.

**Item 7.1.2****Authorized Users:**

Proposed Authorized Users: (Individuals not currently included on the license are listed in **bold font**.)

User	Use
James Alan Cochrane, M.D.	Uses identified in 10 CFR 35.100; 35.200, 35.300 (diagnostic uses only), and Iodine 131 for treatment of hyperthyroidism and/or cardiac dysfunction.
William S. Sheils, Jr., M.D.	Uses identified in 10 CFR 35.100, 35.200, and 35.300.
Hans G. Dransfeld, M.D.	Uses identified in 10 CFR 35.100, 35.200, and 35.300.
Paul V. Akers, M.D.	"
Richard E. McWhorter, M.D.	"
Peter A. Chirico, M.D.	"
Rodger A. Blake, M.D.	"
Marsha S. Anderson, M.D.	Uses identified in 10CFR 35.100, 35.200, and 35.300 (diagnostic uses only)
Torin P. Walters, M.D.	"
Michael V. Korona, Jr., M.D.	"
Joseph W. Dransfeld, M.D.	"
Donald R. Lewis, M.D.	Uses identified in 10 CFR 35.100, 35.200 and 35.300.
Charles M. Siegler, M.D.	Uses identified in 10CFR 35.100, 35.200, and 35.300 (diagnostic uses only)
Mohammed Y. Haffar, M.D.	Uses identified in 10 CFR 35.200.
Maria Luna T. Navarro, M.D.	Technetium-99m for cardiac studies
Bassam Moushmoush, M.D.	Uses identified in 10 CFR 35.200
Rick J. Compton, M.D.	Uses identified in 10CFR 35.100, 35.200, and 35.300 (diagnostic uses only)
Eric L. Leonard, M.D.	"
Lee C. Halkal, M.D.	"
Paul D. Akers, II, M.D.	"
Paul H. Blom, M.D.	"
<b>Kellie K. Gooding, M.D.</b>	Uses identified in 10CFR 35.100, 35.200, and 35.300

We have intentionally omitted current users named Dennis Burton, Robert Santee, and Paul Capito as they recently left the facility.

### Item 9—Equipment—Revised

Radiation monitoring instruments will be calibrated by a person qualified to perform survey meter calibrations.

We use survey meters of the type of Ludlum Model 3 survey meter that has a range from 0 mR/h to 200 mR/h.

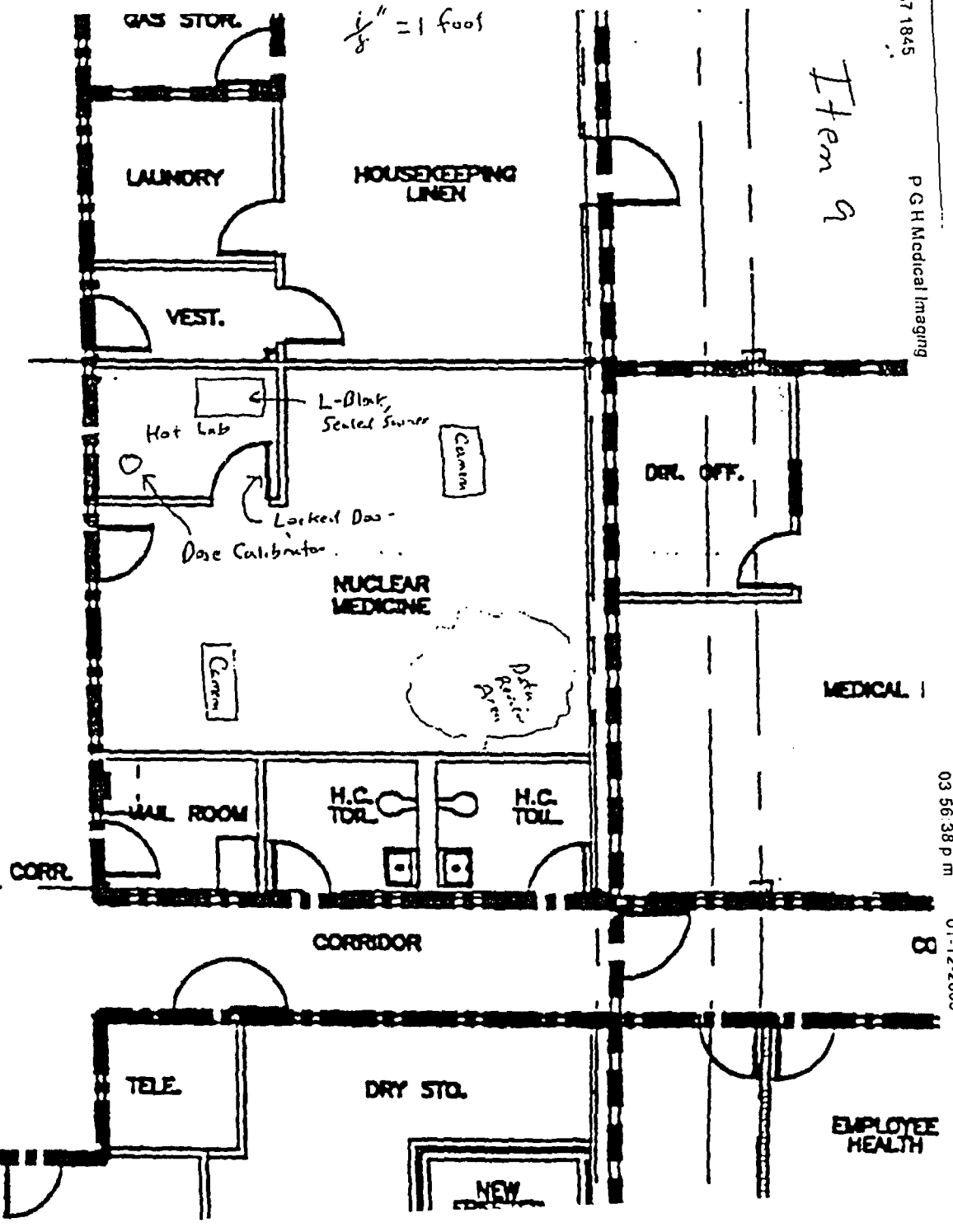
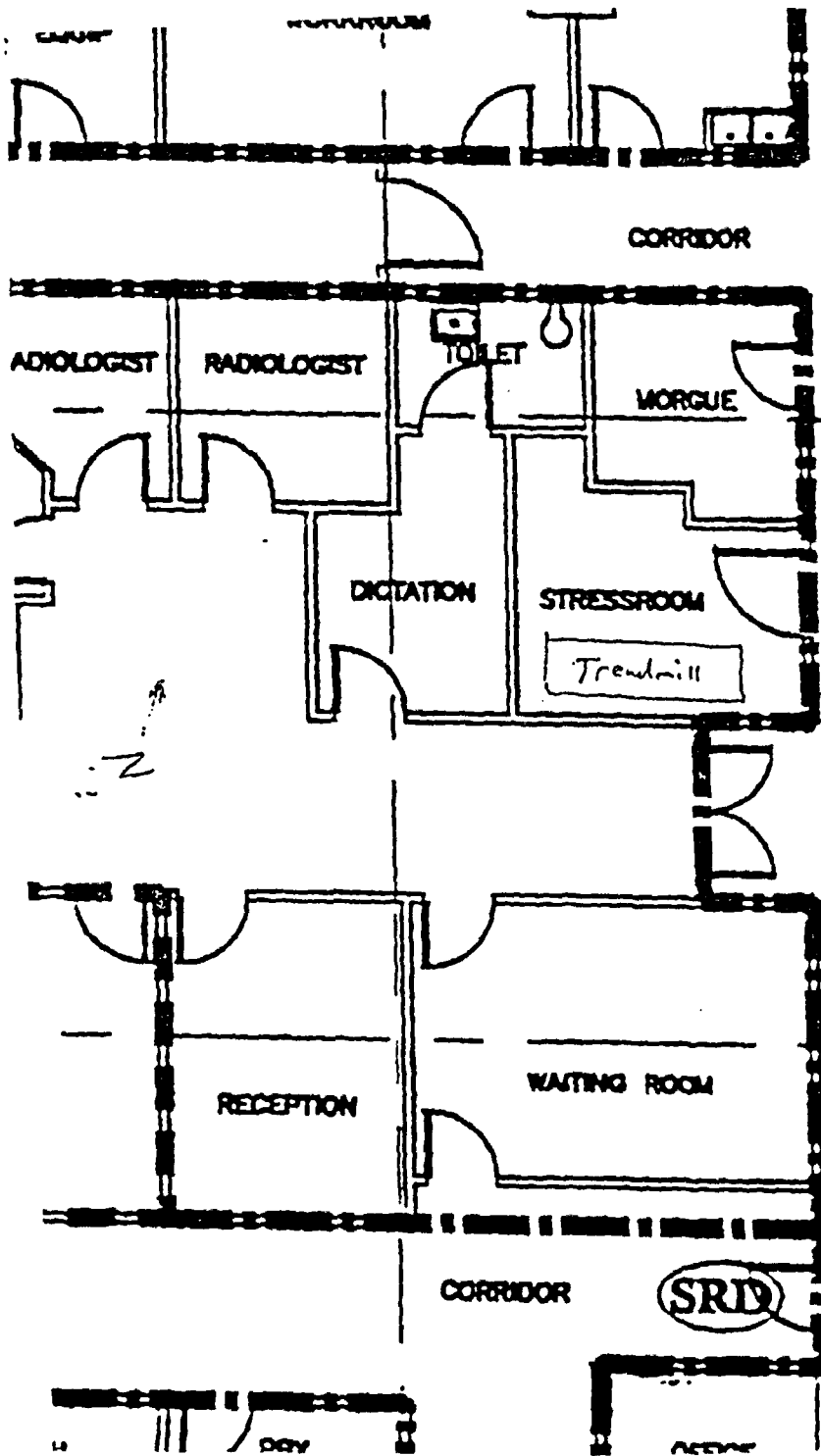
We use a system such as the Biodex Atomlab Thyroid Uptake and Well Counter system for analysis of wipe tests.

Even though we use unit doses from a nuclear pharmacy, we have and maintain a dose calibrator. Equipment used to measure dosages will be calibrated in accordance with nationally recognized standards or the manufacturer's instructions.

We reserve the right to upgrade our survey instruments as necessary as long as they are adequate to measure the type and level of radiation for which they are used.

**Item 9--revised**  
**Facilities and Equipment**

**Item 9.1: An annotated drawing is enclosed.**



Item 9

## Item 9.2

### Discussion

All radioactive byproduct material is delivered to the Hot Lab and used in the Nuclear Medicine Laboratory. The Hot Lab (in which radioactive materials are stored) is un-numbered and the Nuclear Medicine Imaging room is un-numbered. The Stress Lab is across the hall and is also un-numbered. All are on the ground (only) floor of the hospital.



## Item 9.3

## Adjacent Areas:

Note: Hospital has only one floor—Ground Floor—and has not numbered the rooms.

AREA	DESCRIPTION	STATUS
Vestibule	Entry to Linen Storage	Unrestricted
Housekeeping Linen	Linen Storage	Unrestricted
Stores Room	Storage of Supplies	Unrestricted
Medical Records	Medical Records Files	Unrestricted
Corridors	For Staff, Patients, and Visitors	Unrestricted
H.C. Toilet	For Staff, Patients, and Visitors	Unrestricted
H.C. Toilet	For Staff, Patients, and Visitors	Unrestricted
Mail Room	Unoccupied except when mail is being placed in or removed from boxes	Unrestricted
Waiting Room	For Radiology Department Out-patients	Unrestricted
Morgue	(Morgue)	Unrestricted

#### Item 9.4

The patient doses are stored in shielded containers in the hot lab.

The sealed calibration sources are also stored in lead containers in the hot lab.

The concept is that each individual source of radiation is shielded rather than depending upon walls to protect from the cumulative exposure from all the sources.

## Item 10

### Occupational Dose:

Either we will perform a prospective evaluation demonstrating that unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10% of the allowable limits in 10CFR 20 or we will provide dosimetry that meets the requirements listed under "Criteria" in NUREG 1556, Vol 9, "Consolidated Guidance About Materials Licenses," dated October 2002. We use dosimetry provided by Landauer and have developed and will implement written procedures for monitoring occupational dose in accordance with 10 CFR 20.1101 and that meet the requirements in Subparts C and F of 10 CFR Part 20.

### Area Surveys:

We have developed and will implement and maintain written procedures for area surveys in accordance with 10 CFR 20.2202 that meet the requirements of 10 CFR 20.1501 and 10 CFR 35.70.

### Safe Use of Unsealed Licensed Material

We have developed and will implement and maintain procedures for safe use of unsealed byproduct material that meet the requirements of 10 CFR 20.1101 and 10 CFR 20.1301.

### Spill Procedures:

We have developed and will implement and maintain written procedures for safe response to spills of licensed material in accordance with 10 CFR 20.1101.

**Contamination Control:** The Nuclear Imaging facility is located adjacent to the rest of the diagnostic radiology department, providing good control of the area. Technologists perform daily radiation surveys and weekly wipe tests of areas more likely to be subject to contamination. Short-lived radionuclides are used. The short half-lives provide assurance that there will be no contamination problem when eventual decommissioning is required.

We have developed and will implement written package opening procedures that meet the requirements of 10 CFR 20.1906.

We have developed and will implement written procedures for area surveys in accordance with 10 CFR 20.1101 and that meet the requirement of 10 CFR 20.1501 and 10 CFR 35.70.

We have developed and will implement written procedures for administrations requiring a written directive in accordance with 10 CFR 35.41.

We have developed and will implement procedures for safe use of unsealed licensed material that meet the requirements of 10 CFR 20.1101, 10 CFR 20.1301, and 10 CFR 35.69.

We have developed and will implement written procedures for safe response to spills of licensed material in accordance with 10 CFR 20.1101.

We have developed and will implement written procedures for safe response to emergencies involving sealed sources in accordance with 10 CFR 20.1101.

We have developed and will provide written instructions to patients or human research subjects released pursuant to 10 CFR 35.75 that meet the requirements of 10 CFR 35.75

**Item 11**

We have developed and will implement written waste disposal procedures for licensed material in accordance with 10 CFR 20.11012, and that meet the requirements of the applicable section of Subpart K to 10 CFR Part 20 and 10 CFR 35.92.