

NRC FORM 313
(3-2009)
10 CFR 30, 32, 33,
34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120

EXPIRES: 3/31/2012

APPLICATION FOR MATERIALS LICENSE

Estimated burden per response to comply with this mandatory collection request: 4.3 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 Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, 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.

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.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

IF YOU ARE LOCATED IN:

OFFICE OF FEDERAL & STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS
DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

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

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, 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:

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, 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

NUCLEAR MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
612 E. LAMAR BOULEVARD, SUITE 400
ARLINGTON, TX 76011-4125

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.

1. THIS IS AN APPLICATION FOR (Check appropriate item)
 A. NEW LICENSE
 B. AMENDMENT TO LICENSE NUMBER
 C. RENEWAL OF LICENSE NUMBER **NR 24-32264-01**

2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)
**SSM Cardinal Glennon Children's Medical Center
1465 South Grand Blvd.
Saint Louis, MO 36104**

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED
**SSM Cardinal Glennon Children's Medical Center
1465 South Grand Blvd.
Saint Louis, MO 63104**

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION
Cindy Strawhun or Vickie McCullough
TELEPHONE NUMBER
(314) 577-5626

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 EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES (See 10 CFR 170 and Section 170.31)
FEE CATEGORY **NA** AMOUNT ENCLOSED \$ **0.00**

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, 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 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.

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE
Patti Collins, Laboratory Director

SIGNATURE *Patti Collins* DATE **9-15-10**

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	

RECEIVED SEP 17 2010

Suggested Format for Providing Information Requested in Items 5 Through 11 or NRC Form 313

Table C.1 Items 5 & 6: Materials to Be Possessed and Proposed Uses

Yes	No	Radioisotope	Manufacturer or Distributor Model No.	Quantity	Use As Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
X		Cesium-137	Each of the following requested sealed sources, devices, and source/device combinations is the subject of an approved Sealed Source and Device Registration Certificate: Sealed source manufacturer's (or distributor's) name and model number: <u>ORIS/CBI Model CSL-15</u> Device manufacturer's (or distributor's) and model number: <u>IDL-437C</u>	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Not applicable [] Uses are: (Submit safety analysis supporting safe use)

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Yes	No	Radioisotope	Manufacturer or Distributor Model No.	Quantity	Use As Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
	<input checked="" type="checkbox"/>	Cobalt-60	Each of the following requested sealed sources, devices, and source/device combinations is the subject of an approved Sealed Source and Device Registration Certificate: Sealed source manufacturer's (or distributor's) name and model number: _____ Device manufacturer's (or distributor's) and model number: _____	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes []	<input checked="" type="checkbox"/> Not applicable _____ <input type="checkbox"/> Uses are: _____ (Submit safety analysis supporting safe use)
	<input checked="" type="checkbox"/>	Strontium-90	Each of the following requested sealed sources, devices, and source/device combinations is the subject of an approved Sealed Source and Device Registration Certificate: Sealed source manufacturer's (or distributor's) name and model number: _____ Device manufacturer's (or distributor's) and model number: _____	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes []	<input checked="" type="checkbox"/> Not applicable _____ <input type="checkbox"/> Uses are: _____ (Submit safety analysis supporting safe use)

Yes	No	Radioisotope	Manufacturer or Distributor Model No.	Quantity	Use As Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
		Other (specify)	Sealed source manufacturer or distributor and model number: Device manufacturer or distributor and model number:	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes []	[] Not applicable [] Uses are: (Submit safety analysis supporting safe use)
<i>Financial Assurance Required and Evidence of Financial Assurance Provided</i>						

Table C.2 Items 7 Through 11: Training and Experience, Facilities and Equipment, Radiation Safety Program, and Waste Disposal

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
7. Individual(s) Responsible For Radiation Safety Program And Their Training And Experience	Before obtaining licensed materials, the proposed RSO will have successfully completed the training described in Appendix G in NUREG - 1556, Vol. 5, dated October 1998 AND	<input checked="" type="checkbox"/>	[]
7.1 Radiation Safety Officer (RSO) Name: <u>Greg Laurias, MD</u>	Before being named as the RSO, future RSOs will have successfully completed the training described in Appendix G in NUREG - 1556, Vol. 5 dated October, 1998. Within 30 days of naming a new RSO, we will submit the RSO's name to NRC for inclusion in our license.		
7. Individual(s) Responsible For Radiation Safety Program And Their Training And Experience			
7.2 Authorized Users	Before using licensed materials, authorized users will receive the training described in Appendix G in NUREG - 1556, Vol. 5, dated October 1998	<input checked="" type="checkbox"/>	[]

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Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
8. Training for Individuals Working in or Frequenting Restricted Areas	The applicant’s training program will be examined during inspection, but should not be submitted in the license application.	Need Not Be Submitted with Application	
9. Facilities and Equipment	We will ensure that each area where a self-shielded irradiator is located corresponds to the “Conditions of Normal Use” and “Limitations and/or Other Considerations of Use” on the applicable irradiator’s Sealed Source and Device Registration Certificate; the floor beneath a self-shielded irradiator is adequate to support the weight of the irradiator; each self-shielded irradiator is secured to prevent unauthorized access or removal; <i>and</i> each area where a self-shielded irradiator is located is equipped with an automatically operated fire detection and control system (sprinkler, chemical, or gas) or the location of the area and other controls ensure a low-level radiation risk attributable to fires.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Radiation Safety Program 10.1 Audit Program	The applicant’s program for reviewing the content and implementation of its radiation protection program will be examined during inspections, but should <i>not</i> be submitted in the license application.	Need Not Be Submitted with Application	
10. Radiation Safety Program 10.2 Radiation Monitoring Instruments	<p>We will use instruments that meet the radiation monitoring instrument specifications published in Appendix K to NUREG - 1556, Vol. 5, dated October, 1998. Additionally, each survey meter will have been calibrated by the manufacturer or other person authorized by the NRC or an Agreement State to perform survey meter calibrations no more than 12 months before the date the meter is used.</p> <p style="text-align: center;">OR</p> <p>We will use instruments that meet the radiation monitoring instrument specifications published in Appendix K to NUREG - 1556, Vol. 5, dated October, 1998. Additionally, we will implement the model survey meter calibration program published in Appendix K to NUREG - 1556, Vol. 5, dated October, 1998, and we will ensure that each survey meter will have been calibrated no more than 12 months before the date the meter is used.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10. Radiation Safety Program 10.3 Material Receipt and Accountability	Physical inventories will be conducted at intervals not to exceed 6 months to account for all sealed sources and devices received and possessed under the license.	<input checked="" type="checkbox"/>	[]
10. Radiation Safety Program 10.4 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 10 CFR Part 20 or we will provide dosimetry that meets the Criteria in the section entitled "Radiation Safety Program - Occupational Dose" in NUREG - 1556, Vol. 5, dated October, 1998.	<input checked="" type="checkbox"/>	[]
10. Radiation Safety Program 10.5 Public Dose	No response is required from the applicant in a license application, but documentation demonstrating compliance will be examined during inspection.	Need Not Be Submitted with Application	
10. Radiation Safety Program 10.6 Operating & Emergency Procedures	<p>If we change our operating and emergency procedures without amending our license, we will ensure that: the changes are reviewed and approved by licensee management and the RSO; affected licensee staff are trained in the procedures before they are implemented; the changes are consistent with applicable license conditions and the procedures or commitments submitted in the license application; and the changes do not degrade the safety of the program.</p> <p style="text-align: center;">AND</p> <p>Operating and emergency procedures will be developed, implemented, maintained, and distributed and will meet the Criteria in the section entitled, "Radiation Safety program - Operating and Emergency Procedures" in NUREG - 1556, Vol. 5, dated October, 1998.</p>	<input checked="" type="checkbox"/>	
		<input checked="" type="checkbox"/>	[]

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Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
<p>10. Radiation Safety Program 10.7 Leak Test</p>	<p>Leak tests will be performed at intervals approved by the NRC or an Agreement State and specified in the Sealed Source and Device Registration Certificate. Leak tests will be performed by an organization authorized by NRC or an Agreement State to provide leak testing services for other licensees or using a leak test kit supplied by an organization authorized by NRC or an Agreement State to provide leak test kits to other licensees and according to the manufacturer's (or distributor's) and kit supplier's instructions.</p> <p style="text-align: center;">OR</p> <p>Leak tests will be performed at intervals approved by the NRC or an Agreement State and specified in the Sealed Source and Device Registration Certificate. Leak tests will be performed by an organization authorized by NRC or an Agreement State to provide leak testing services for other licensees or using a leak test kit supplied by an organization authorized by NRC or an Agreement State to provide leak test kits to other licensees and according to the manufacturer's (or distributor's) and kit supplier's instructions. As an alternative, we will implement the model leak test program published in Appendix P to NUREG - 1556, Vol. 5, dated October, 1998.</p>	<p style="text-align: center;"><input checked="" type="checkbox"/></p> <p style="text-align: center;"><input type="checkbox"/></p>	<p style="text-align: center;">[]</p>
<p>10. Radiation Safety Program 10.8 Maintenance</p>	<p><u>ROUTINE MAINTENANCE</u> We will implement and maintain procedures for routine maintenance of our self-shielded irradiators according to each manufacturer's (or distributor's) written recommendations and instructions.</p> <p><u>NON-ROUTINE MAINTENANCE</u> We will have the self-shielded irradiator manufacturer (or distributor's) or other person authorized by NRC or an Agreement State perform non-routine maintenance.</p>	<p style="text-align: center;"><input checked="" type="checkbox"/></p> <p style="text-align: center;"><input checked="" type="checkbox"/></p>	<p style="text-align: center;">[]</p> <p>[] The information listed in Appendix I supporting a request to perform non-routine maintenance in-house is attached.</p>

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10. Radiation Safety Program 10.9 Transportation	No response is needed from applicants during the licensing phase. However, before offering a Type B package for shipment, a licensee needs to have registered with NRC as a user of the package and obtained NRC's approval of its QA program. Transportation issues will be reviewed during inspection.	Need Not Be Submitted with Application	
10. Radiation Safety Program 10.10 Minimization of Contamination	The applicant does <i>not</i> need to submit a response to the minimization of contamination section if the applicant's responses meet the criteria for the following sections: "Radioactive Material - Sealed Sources and Devices," "Facilities and Equipment," "Radiation Safety Program - Operating and Emergency Procedures," "Radiation Safety Program - Leak Tests," and "Waste Management - Self-Shielded Irradiator Transfer and Disposal."	Need Not Be Submitted with Application	
11. Waste Management 11.1 Self-Shielded Irradiator Disposal & Transfer	The applicant does <i>not</i> need to provide a response to this item during the licensing phase. However, the licensee should develop, implement, and maintain self-shielded irradiator transfer and waste disposal procedures in its radiation safety program.	Need Not Be Submitted with Application	

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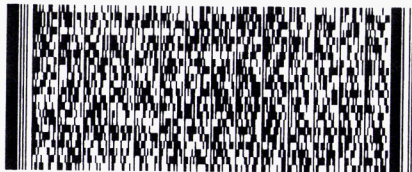
From: Origin ID: CPSA (314) 577-5624
LAURIE WALLACH
SSM CARDINAL GLENNON CHILDRENS HOS
PATHOLOGY DEPARTMENT
1465 SOUTH GRAND BLVD
ST. LOUIS, MO 63104



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SHIP TO: (314) 577-5624 BILL SENDER
US Nuclear Regulatory Comm Reg III
Nuclear Materials Licensing Branch
2443 WARRENVILLE RD STE 210

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