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1/29/2018

United States NRC  
Materials Licensing Branch  
Region III  
2443 Warrenville Road STE 210  
Lisle, Illinois 60532-4352

RE: Amendment Request to 24-32264-01  
Docket No. 030-3553  
Control No. 601510

Dear Colleen,

Per your request included with this correspondence is the Radiation Safety Training and Preceptor Attestation NRC form 313A for RSO has been completed.

My cell number and e-mail address is included. Please call or e-mail if you have any questions:

Wallace Fuhrman, BA, RSO, CNMT, RT(R)(N)

SSM Radiation Safety Officer

E-mail: [wally.fuhrman@ssmhealth.com](mailto:wally.fuhrman@ssmhealth.com)

Office: (314)268-4012

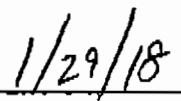
Cell: (314)795-0891

Fax: (314)577-5399

Thank you for your time in processing this SIR-Spheres Amendment.

Sincerely,

  
Wallace Fuhrman BA, CNMT, RT(R)(N)

  
Date

RECEIVED JAN 29 2018

NRC FORM 313A (RSO)  
(06-2016)

U.S. NUCLEAR REGULATORY COMMISSION


**RADIATION SAFETY OFFICER TRAINING  
AND EXPERIENCE AND PRECEPTOR ATTESTATION**  
[10 CFR 35.50]
APPROVED BY OMB: NO. 3150-0120  
EXPIRES: 06/30/2019

Name of Proposed Radiation Safety Officer

Wallace O. Fuhrman

Requested Authorization(s) *The license authorizes the following medical uses (check all that apply):*

- ☐ 35.100    ☐ 35.200    ☐ 35.300    ☐ 35.400    ☐ 35.500    ☐ 35.600 (remote afterloader)  
☐ 35.600 (teletherapy)    ☐ 35.600 (gamma stereotactic radiosurgery)    ☒ 35.1000 (Y-90 SIR-Sphere)

**PART I -- TRAINING AND EXPERIENCE***(Select one of the four methods below)*

\*Training and Experience, including board certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the uses checked above.

☐ **1. Board Certification**

- a. Provide a copy of the board certification.
- b. Use Table 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.
- c. Skip to and complete Part II Preceptor Attestation.

**OR**☐ **2. Current Radiation Safety Officer Seeking Authorization to Be Recognized as a Radiation Safety Officer for the Additional Medical Uses Checked Above**

- a. Use the table in section 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for the additional types of medical use for which recognition as RSO is sought.
- b. Skip to and complete Part II Preceptor Attestation.

**OR**☐ **3. Structured Educational Program for Proposed Radiation Safety Officer**

## a. Classroom and Laboratory Training

Description of Training	Location of Training	Clock Hours	Dates of Training*
Radiation physics and instrumentation			
Radiation protection			
Mathematics pertaining to the use and measurement of radioactivity			
Radiation biology			
Radiation dosimetry			
Total Hours of Training: <input type="text"/>			

NRC FORM 313A (RSO)  
(06-2016)

U.S. NUCLEAR REGULATORY COMMISSION

**RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)****3. Structured Educational Program for Proposed Radiation Safety Officer (continued)****b. Supervised Radiation Safety Experience***(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)*

Description of Experience	Location of Training/ License or Permit Number of Facility	Dates of Training*
Shipping, receiving, and performing related radiation surveys		
Using and performing checks for proper operation of instruments used to determine the activity of dosages, survey meters, and instruments used to measure radionuclides		
Securing and controlling byproduct material		
Using administrative controls to avoid mistakes in administration of byproduct material		
Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures		
Using emergency procedures to control byproduct material		
Disposing of byproduct material		
Licensed Material Used (e.g., 35.100, 35.200, etc.) <sup>+</sup>		

<sup>+</sup> Choose all applicable sections of 10 CFR Part 35 to describe radioisotopes and quantities used: 35.100, 35.200, 35.300, 35.400, 35.500, 35.600 remote afterloader units, 35.600 teletherapy units, 35.600 gamma stereotactic radiosurgery units, emerging technologies (provide list of devices).

NRC FORM 313A (RSO)  
(06-2016)

U.S. NUCLEAR REGULATORY COMMISSION

**RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)****3. Structured Educational Program for Proposed Radiation Safety Officer (continued)****b. Supervised Radiation Safety Experience (continued)***(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)*

Supervising Individual	License/Permit Number listing supervising individual as a Radiation Safety Officer
This license authorizes the following medical uses: <input type="checkbox"/> 35.100 <input type="checkbox"/> 35.200 <input type="checkbox"/> 35.300 <input type="checkbox"/> 35.400 <input type="checkbox"/> 35.500 <input type="checkbox"/> 35.600 (remote afterloader) <input type="checkbox"/> 35.600 (teletherapy) <input type="checkbox"/> 35.600 (gamma stereotactic radiosurgery) <input type="checkbox"/> 35.1000 ( _____ )	

**c. Describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.**

Description of Training	Training Provided By	Dates of Training*
Radiation safety, regulatory issues, and emergency procedures for 35.100, 35.200, and 35.500 uses		
Radiation safety, regulatory issues, and emergency procedures for 35.300 uses		
Radiation safety, regulatory issues, and emergency procedures for 35.400 uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - teletherapy uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - remote afterloader uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - gamma stereotactic radiosurgery uses		
Radiation safety, regulatory issues, and emergency procedures for 35.1000, specify use(s): <i>SIR-Sphere Yttrium-90 microspheres</i>	Training provided by: SIRTEX Medical, Inc. (Reference: Letter from Shane T. Allen, Regional Sales Manager, to Wally Fuhrman, dated 1/12/2018)	01/12/2018

NRC FORM 313A (R50)  
(06-2016)

U.S. NUCLEAR REGULATORY COMMISSION

## RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

## 3. Structured Educational Program for Proposed Radiation Safety Officer (continued)

## b. Supervised Radiation Safety Experience (continued)

(If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this section.)

Supervising Individual	License/Permit Number listing supervising individual as a Radiation Safety Officer
This license authorizes the following medical uses:	
<input type="checkbox"/> 35.100	<input type="checkbox"/> 35.200
<input type="checkbox"/> 35.500	<input type="checkbox"/> 35.600 (remote afterloader)
<input type="checkbox"/> 35.600 (gamma stereotactic radiosurgery)	<input type="checkbox"/> 35.300
	<input type="checkbox"/> 35.400
	<input type="checkbox"/> 35.600 (teletherapy)
	<input type="checkbox"/> 35.1000 ( _____ )

## c. Describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.

Description of Training	Training Provided By	Dates of Training*
Radiation safety, regulatory issues, and emergency procedures for 35.100, 35.200, and 35.500 uses		
Radiation safety, regulatory issues, and emergency procedures for 35.300 uses		
Radiation safety, regulatory issues, and emergency procedures for 35.400 uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - teletherapy uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - remote afterloader uses		
Radiation safety, regulatory issues, and emergency procedures for 35.600 - gamma stereotactic radiosurgery uses		
Radiation safety, regulatory issues, and emergency procedures for 35.1000, specify use(s): SIR-Sphere Yttrium-90 microspheres	Reviewed with Wallace O. Fuhrman: Written Directive & Medical Events specific to SIR-Sphere Y-90 microspheres reviewed, consistent with 10CFR35.3045 and 2/12/2016 Licensing Guide. by Mark G. Hauechen, M.S., J.D., Radiation Safety Officer Saint Louis University; NRC License No. 24-00196-07	01/29/2018

NRC FORM 313A (RSO)  
(06-2016)

U.S. NUCLEAR REGULATORY COMMISSION

**RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)****3. Structured Educational Program for Proposed Radiation Safety Officer (continued)**

- c. Training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license (continued)

Supervising Individual *If training was provided by supervising RSO, AU, AMP, or ANP. (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)*

License/Permit Number listing supervising individual

(For Y-90 SIR-Sphere; see letter from SIRTEX Medical, Inc.)

License/Permit lists supervising individual as:

- ☐ Radiation Safety Officer      ☐ Authorized User      ☐ Authorized Nuclear Pharmacist  
☐ Authorized Medical Physicist

Authorized as RSO, AU, ANP, or AMP for the following medical uses:

- ☐ 35.100      ☐ 35.200      ☐ 35.300      ☐ 35.400  
☐ 35.500      ☐ 35.600 (remote afterloader)      ☐ 35.600 (teletherapy)  
☐ 35.600 (gamma stereotactic radiosurgery)      ☒ 35.1000 (Y-90 SIR-Sphere)

- d. Skip to and complete Part II Preceptor Attestation.

OR

☐ **4. Authorized User, Authorized Medical Physicist, or Authorized Nuclear Pharmacist identified on the licensee's license**

- a. Provide license number.  
 b. Use the table in section 3.c. to describe training in radiation safety, regulatory issues, and emergency procedures for all types of medical use on the license.  
 c. Skip to and complete Part II Preceptor Attestation.

**PART II – PRECEPTOR ATTESTATION**

Note: This part must be completed by the individual's preceptor. The preceptor does not have to be the supervising individual as long as the preceptor provides, directs, or verifies training and experience required. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each.

**First Section**

Check one of the following:

☐ **1. Board Certification**

☐ I attest that \_\_\_\_\_ has satisfactorily completed the requirements in  
 Name of Proposed Radiation Safety Officer

10 CFR 35.50(a)(1)(i) and (a)(1)(ii); or 35.50 (a)(2)(i) and (a)(2)(ii); or 35.50(c)(1).

OR

☐ **2. Structured Educational Program for Proposed Radiation Safety Officers**

☐ I attest that \_\_\_\_\_ has satisfactorily completed a structural educational  
 Name of Proposed Radiation Safety Officer

program consisting of both 200 hours of classroom and laboratory training and one year of full-time radiation safety experience as required by 10 CFR 35.50(b)(1).

OR

NRC FORM 313A (RSO)  
(06-2016)

U.S. NUCLEAR REGULATORY COMMISSION

## RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

Preceptor Attestation (continued)

## First Section (continued)

Check one of the following:

☐ 3. Additional Authorization as Radiation Safety Officer☐ I attest that \_\_\_\_\_ is an  
Name of Proposed Radiation Safety Officer☐ Authorized User☐ Authorized Nuclear Pharmacist☐ Authorized Medical Physicist

identified on the Licensees license and has experience with the radiation safety aspects of similar type of use of byproduct material for which the individual has Radiation Safety Officer responsibilities

AND

## Second Section

Complete for all (check all that apply):

☒ I attest that Wallace O. Fuhrman has training in the radiation safety, regulatory issues, and  
Name of Proposed Radiation Safety Officer

emergency procedures for the following types of use:

☐ 35.100☐ 35.200☐ 35.300 oral administration of less than or equal to 33 millicuries of sodium iodide I-131, for which a written directive is required☐ 35.300 oral administration of greater than 33 millicuries of sodium iodide I-131☐ 35.300 parenteral administration of any beta-emitter, or a photon-emitting radionuclide with a photon energy less than 150 keV for which a written directive is required☐ 35.300 parenteral administration of any other radionuclide for which a written directive is required☐ 35.400☐ 35.500☐ 35.600 remote afterloader units☐ 35.600 teletherapy units☐ 35.600 gamma stereotactic radiosurgery units☒ 35.1000 emerging technologies, including:

SIR-Sphere Yttrium-90 microspheres

NRC FORM 313A (RSO)  
(08-2018)

U.S. NUCLEAR REGULATORY COMMISSION

## RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

AND

Third Section  
Complete for ALL

☒ I attest that Wallace O. Fuhrman has achieved a level of radiation safety knowledge  
Name of Proposed Radiation Safety Officer  
sufficient to function independently as a Radiation Safety Officer for a medical use licensee.

Fourth Section  
Complete the following for Preceptor Attestation and signature

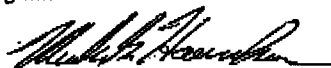
I am the Radiation Safety Officer for Saint Louis University  
Name of Facility

License/Permit Number: 24-00196-07

Name of Preceptor

Mark G. Haenchen, M.S., J.D.

Signature



Telephone Number

3149776885

Date

01/29/2018



SSMHealth

(SSM Health  
CARDINAL GLENNON  
CHILDREN'S HOSPITAL)

To: COLLEEN CASEY From: WALLY FUHRMAN  
Phone (recipient): 630-829-9841 Phone (sender): 314-795-0891  
Fax: 630-515-1078 Date: 1/29/2018  
No. of pages (including cover): 9

Subject line: SIR - SPHERES Amend. (Delegation of Authority)

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## Message:

AMENDMENT REQUEST TO 24-32264-01  
DOCKET # 030-3553  
CONTROL # 601510