

November 27, 2013

Jacqueline "Jackie" D. Cook Senior Health Physicist Division of Nuclear Materials Safety Nuclear Materials Safety Branch B 1600 E. Lamar Blvd., Arlington, TX 76011



Subject: Amendment to Radioactive Materials License 50-17838-01
Addition of Dr. Eric J. Maurer as Authorized User for 35.1000 for Yttrium-90
microspheres

Dear Ms. Cook,

We wish to amend our Radioactive Materials License 50-17838-01 to add Eric J. Maurer, M.D. as Authorized User for 35.1000 Other medical uses of byproduct material or radiation from byproduct material for Yttrium-90 microspheres. Please note that Dr. Maurer is an authorized user for 35.100 and 35.200 currently listed in our NRC Materials License.

Dr. Eric J. Maurer meets the training and experience requirements of 10 CFR 35.390 and 35.490. He has successfully completed training for Sir-spheres, including dose calculation and prescription, source order, dose administration through interventional radiology, and safety and protection procedures. The proctoring was provided by SirTex Medical Inc. in Providence Alaska Medical Center on 10/30/2013. Dr. Eric J. Maurer has also been actively involved in the procedure and accumulated work experiences in six cases for Sir-spheres for which he is seeking AU status. The six cases were implemented in the Providence Alaska Medical Center in the following dates separately:

Date	MR#
5/2/2012	1039485
5/16/2012	640923
10/9/2012	345452
10/24/2012	223584
11/6/2012	76525
10/30/2013	761327

PUBLIC
| Immediate Release
| Normal Release
| Non-Public
| A.3 Sensitive-Security Related
| A.7 Sensitive Internal
| Other: | Date: 12-10-13

The training and experience requirements were satisfactorily completed under supervision of the preceptor, Chakri S. Inampudi, M.D. who is AU of 35.1000 for



microspheres. Dr. Maurer also attended the training course for TheraSphere provided by the vendor, BTG International (or Nordion as previously posted).

Please see the attached documents as follows:

- 1. NRC Form 313A (AUS), signed by Dr. Chakri S. Inampudi, AU and Preceptor.
- 2. Board certificate of Dr. Eric J. Maurer.
- 3. Certificate for Angiography, Interventional Radiology.
- 4. Letter to certify the proctoring of Sir-spheres by SirTex.

If you have any questions, please do not hesitate to call me at (907) 212-5691.

Sincerely,

Yongli Ning, M.S.

Chief Medical Physicist - Radiation Oncology

Radiation Safety Officer

Providence Alaska Medical Center

3200 Providence Drive

Anchorage, AK 99516-6604

Tel: (907)212-5691

Email: yning@provak.org

# NRC FORM 313A (AUS) (05-2012)

U.S. NUCLEAR REGULATORY COMMISSION

Al (for us	ZED USER TRAINING AND PRECEPTOR ATTE es defined under 35.40 CFR 35.490, 35.491, a	STATION 00 and 35.600)	APPROVED BY EXPIRES: (05/3	OMB: NO. 3150-0120 1/2015)	
Name of Proposed Authorized User		State or Territory Where Licer	sed		
Eric J. Maurer, M.D.	9	Alaska			
Requested 35	.400 Manual brachytherapy	sources 35.600 Telethe	erapy unit(s)		
	.400 Ophthalmic use of stror	ntium-90 🔲 35.600 Gamm	a stereotactic rac	diosurgery unit(s)	
(check all that apply) 35	.600 Remote afterloader uni	t(s) \$\overline{\PM}\ 35.1000 \text{Y-0}	90 microspher	es	
	PART I TRAINING (Select one of the th				
date of application or the i required training and expe	* 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 b	oard certification.				
b. For 35.600, go to the to which authorization is	able in 3.e. and describe trainsought.	ning provider and dates of to	raining for each ty	ype of use for	
c. Skip to and complete Pa	art II Preceptor Attestation.				
2. Current 35.600 Authoriz	zed User Requesting Addit	tional Authorization for 35	.600 Use(s) Che	cked Above	
a. Go to the table in section	on 3.e. to document training f	for new device.			
b. Skip to and complete Pa	art II Preceptor Attestation.				
3. Training and Experien	ce for Proposed Authorize	ed User		Lin	
	a. Classroom and Laboratory Training 35.490 35.491 35.690				
Description of Trainin	g Locat	ion of Training	Clock Hours	Dates of Training*	
Radiation physics and instrumentation					
Radiation protection					
Mathematics pertaining to use and measurement of radioactivity	the				
Radiation biology					
	Total Hours	of Training:			

NRC FORM 313A (AUS) (05-2012)

(05-2012)

# AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

# 3. Training and Experience for Proposed Authorized User (continued)

b. Supervised Work and Clinical Experience for 10 CFR 35.490 (If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this page.)

Supervised Work Experience	Total Hours of Experience:		
Description of Experience Must Include:	Location of Experience/License or Permit Number of Facility	Confirm	Dates of Experience
Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys		Yes No	
Checking survey meters for proper operation		Yes No	
Preparing, implanting, and safely removing brachytherapy sources		Yes No	
Maintaining running inventories of material on hand		☐ Yes ☐ No	
Using administrative controls to prevent a medical event involving the use of byproduct material		Yes No	
Using emergency procedures to control byproduct material		☐ Yes	
Clinical experience in radiation oncology as part of an approved formal training program	Location of Experience/License of Permit Number of Facility	or	Dates of Experience
Approved by:	1000 dia 100		1
Residency Review Committee for Radiation Oncology of the ACGME Royal College of Physicians and Surgeons of Canada			
Committee on Postdoctoral Training of the American Osteopathic Association			
Supervising Individual	License/Permit Number listin Authorized User	ng supervising indi	vidual as an

Training and Experience for Propo	sed Authorized User (continued)		
c. Supervised Clinical Experience for	10 CFR 35.491		
Description of Experience	Location of Experience/License or Permit Number of Facility	Clock Hours	Dates of Experience
Use of strontium-90 for ophthalmic treatment, including: examination of each individual to be treated; calculation of the dose to be administered; administration of the dose; and follow up and review of each individual's case history			
Supervising Individual	License/Permit Number list Authorized User	ting supervising ind	lividual as an
d. Supervised Work and Clinical Expe	prience for 10 CEP 35 690		
Remote afterloader unit(s)	The second secon	ma stereotactic ra	diosurgeny uni
	reletiterapy unit(s)	na stereotactic re	diosargery arm
Supervised Work Experience	Total Hours of E	Experience:	
Description of Experience Must Include:	Location of Experience/License or Permit Number of Facility	Confirm	Dates of Experience
Reviewing full calibration measurements and periodic spot-checks		Yes No	
Preparing treatment plans and calculating treatment doses and times		Yes No	
Using administrative controls to prevent a medical event involving the use of byproduct material		☐ Yes	
Implementing emergency procedures to be followed in the event of the abnormal operation of the medical unit or console		☐ Yes	
Checking and using survey meters		Yes No	
Selecting the proper dose and how it is to be administered		☐ Yes	

	erience for Proposed					
d. Supervised Worl	and Clinical Experie	nce for 10 CF	FR 35.690 (continued)		1	
Clinical experience oncology as part of formal training prog	an approved	Location of Experience/License or Permit Number of Facility		Dates of Experience		
Approved by:						
Residency Rev Committee for I Oncology of the	Radiation ACGME					
Royal College of and Surgeons of						
Committee on F Training of the A Osteopathic As	American					
Supervising Individua	1		License/Permit Number listi Authorized User	ng supervising indivi	dual as an	
e. For 35.600, des sought.  Description of Training	cribe training provider		f training for each type of use Training Provider and Dates	for which authorize	zation is	
	Remote Afterior		pader Teletherapy		Gamma Stereotactic Radiosurgery	
Device operation						
Safety procedures for the device use						
Clinical use of the device						
	And the state of t	s necessary At	icense/Permit Number listing sur uthorized User	pervising individual a	is an	
Individual (If more than	work experience, provide n	nuitipie				
Individual (If more than to document supervised copies of this page.)		nultiple	MANAGER AND A SECOND MANAGEMENT	HAZOMANAM IN NATU ANA		

# NRC FORM 313A (AUS) U.S. NUCLEAR REGULATORY COMMISSION (05-2012) AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued) PART II - PRECEPTOR ATTESTATION This part must be completed by the individual's preceptor. The preceptor does not have to be the supervising Note: 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. By checking the boxes below, the preceptor is attesting that the individual has knowledge to fulfill the duties of the position sought and not attesting to the individual's "general clinical competency." First Section Check one of the following for each requested authorization: For 35.490: and 35.390: **Board Certification** has satisfactorily completed the requirements in ✓ I attest that Eric J. Maurer, M.D. Name of Proposed Authorized User 35.490(a)(1) and has achieved a level of competency sufficient to function independently as an authorized user of manual brachytherapy sources for the medical uses authorized under 10 CFR 35.400. OR Training and Experience has satisfactorily completed the 200 hours of I attest that Name of Proposed Authorized User classroom and laboratory training, 500 hours of supervised work experience, and 3 years of supervised clinical experience in radiation oncology, as required by 10 CFR 35.490(b)(1) and (b)(2), and has achieved a level of competency sufficient to function independently as an authorized user of manual brachytherapy sources for the medical uses authorized under 10 CFR 35.400. For 35.491: has satisfactorily completed the 24 hours of I attest that Name of Proposed Authorized User classroom and laboratory training applicable to the medical use of strontium-90 for ophthalmic radiotherapy, has used strontium-90 for ophthalmic treatment of 5 individuals, as required by 10 CFR 35.491(b), and has achieved a level of competency sufficient to function independently as an authorized user of strontium-90 for ophthalmic use.

**Second Section** 

# For 35.690:

#### **Board Certification**

I attest that

Name of Proposed Authorized User

has satisfactorily completed the requirements in

35.690(a)(1).

# OR

### Training and Experience

I attest that has satisfactorily completed 200 hours of classroom

Name of Proposed Authorized User

and laboratory training, 500 hours of supervised work experience, and 3 years of supervised clinical experience in radiation therapy, as required by 10 CFR 35.690(b)(1) and (b)(2).

AND

NRC FORM 313A (AUS) (05-2012)	U.S. NUCLEAR REGULATORY COMMISSION				
	NG AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)				
Preceptor Attestation (continued)					
Third Section					
For 35.690: (continued)					
I attest that	has received training required in 35.690(c) for device				
	s, and clinical use for the type(s) of use for which authorization is sought, as				
Remote afterloader unit	s) Teletherapy unit(s) Gamma stereotactic radiosurgery unit(s)				
	AND				
Fourth Section	Alto				
and the same of th	M.D. has achieved a level of competency sufficient to reposed Authorized User acy sufficient to function independently as an authorized user for:				
Remote afterloader unit(					
Fifth Section					
Complete the following for precept	or attestation and signature:				
I meet the requirements in an authorized user for:	10 CFR 35.490, 35.491, 35.690, or equivalent Agreement State requirements, as				
35.400 Manual brachyth	erapy sources 35.600 Teletherapy unit(s)				
35.400 Ophthalmic use	of strontium-90 35.600 Gamma stereotactic radiosurgery unit(s)				
35.600 Remote afterload	der unit(s) 35.1000 Y-90 microspheres				
Name of Preceptor	Signature / Telephone Number Date				
Chakri S. Inampudi, M.D.	(907) 212-3641 11. 26. 2013				
License/Permit Number/Facility Name					
NRC Materials License 50-17838-01, Amer	ndment No. 62, Providence Alaska Medical Center				



SIRTEX MEDICAL INC.

300 Unicorn Park Drive Woburn, MA 01801 Tel: +1 (781) 721 3800 Fax: +1 (781) 721 3880

Ref: 105US03

November 18, 2013

Dr Erik Maurer Providence Alaska 3200 Providence Drive Anchorage AK 99508

Dear Dr. Maurer,

Re: SIR-Spheres® Microspheres Training, Evaluation, Certification (TEC) Program

I am writing to confirm that on October 30, 2013, Dr Jayson Brower presented and discussed in detail the preparation and procedures associated with the treatment of patients with SIR-Spheres yttrium-90 microspheres that are injected via the hepatic artery to treat patients with unresectable liver tumors. The patients were treated with SIR-Spheres microspheres.

Dr Brower proctored the treatments and I am pleased to inform you that Dr Brower considers that you and your staff are now trained in the preparation and the clinical aspects of treating patients with SIR-Spheres microspheres.

This letter also certifies that you were proctored for at least 3 cases by a Sirtex certified proctor in the use of SIR-Spheres® microspheres.

I would like to thank you and your team for your support and commitment to the Sirtex **Training**, **Evaluation**, **Certification** (TEC) Program.

Yours sincerely,

cc: <Account Manager> TEC@sirtex.com

® SIR-Spheres is a Registered Trademark of Sirtex SIR-Spheres Pty Ltd

# Murnahan, Colleen

From:

Cook, Jackie

Sent:

Monday, December 02, 2013 8:40 AM

To:

Murnahan, Colleen

Cc:

Hill, Caro

Subject:

FW: License amendment for AU of 35.1000 Y-90 microspheres

**Attachments:** 

131127 NRC license Maurer.pdf; Form 313A (AUS) Maurer.pdf; Maurer ABR

certificate.jpg; Certificate of Angio & Intervenion.jpg; 2013 SirTex training Maurer.pdf

Colleen:

Please set up this request.

Thanks,

Jackie

From: Ning, Yongli [mailto:Yongli.Ning@providence.org]

Sent: Wednesday, November 27, 2013 1:42 PM

To: Cook, Jackie

Subject: License amendment for AU of 35.1000 Y-90 microspheres

Jackie,

Please see the attached for an amendment to our license 50-17838-01 to add Dr. Maurer as AU for 35.1000 Y-90 microspheres.

If you need the hard copy I will do that upon your request.

Thank you.

Yongli Ning, MS Chief Medical Physicist - Radiation Oncology Radiation Safety Officer Providence Alaska Medical Center Phone: 907 212-3186, 907 212-5691

Email: yning@provak.org

Cell: 907-230-2072; Fax: 907 212-3665

This message is intended for the sole use of the addressee, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If you are not the addressee you are hereby notified that you may not use, copy, disclose, or distribute to anyone the message or any information contained in the message. If you have received this message in error, please immediately advise the sender by reply email and delete this message.

Accounts Receivable/Payable and Regional Licensing Branches  License Fee Worksheet - License		Program Code: 02230 Status Code: Pending Amendment Fee Category: 7C Exp. Date: 03/31/2015 Fee Comments: Decom Fin Assur Reqd: N		
A. REGION	OINSHEEL - LICENS	oc rec manismular		
1. APPLICATION ATTAC Applicant/Licensee: Received Date: Docket Number: Mail Control Number: License Number: Action Type:	PROVIDENCE ALASKA 12/02/2013 3013426 582585 50-17838-01 Amendment	MEDICAL CENTER		
2. FEE ATTACHED  Amount:  Check No.:				
3. COMMENTS				
		Ween Murnahan 12-5-13		
B. LICENSE FEE MANA	GEMENT BRANCH (Check	when milestone 03 is entered / / )		
1. Fee Category and Ar	mount:			
Amendment:	olication may be processed t	for:		
Renewal:				
3. OTHER				
	Signed:			

[FOR ARPB USE]

BETWEEN:

Date:

STATE OF THE OF

# DATE

# 12/05/2013

	****				
Providence Alaska Medical Center ATTN: Yongli Ning, M.S. Radiation Safety Officer 3200 Providence Drive Anchorage, AK 99519-6604		LICENSE NUMBER			
		50-17838-01  MAIL CONTROL NUMBER 582585  LICENSING AND/OR TECHNICAL REVIEWER cmurnahan			
×	This is to acknowledge the receipt of your:				
	✓ LETTER and/or ☐ APPLICATION	DATED: 11/27/2013			
	The initial processing, which included an administrative	review, has been performed.			
	✓ AMENDMENT  TERMINATION  NE	EW LICENSE RENEWAL			
	There were no administrative omissions identified during our initial review.				
	This is to acknowledge receipt of your application for renewal of the material(s) license identifie above. Your application is deemed timely filed, and accordingly, the license will not expire until final action has been taken by this office.				
	Your application for a new NRC license did not include your taxpayer identification number. Please fill out NRC Form 531, located at the following link:				
	http://www.nrc.gov/reading-rm/doc-c	collections/forms/nrc531.pdf			
	Send the completed NRC Form 531, by facsimile, to the following number: (301) 415-5387				
	A copy of your action has been emailed to our License our Headquarters office in Rockville, MD. You will be a involved.				
<b>√</b>	Your application has been assigned the above listed M calling to inquire about this action, please refer to this obeen forwarded to a technical reviewer. Please note the normally completed within 180 days for a renewal application and identify additional omissions or require additional concerning the processing of your application, our confidence.	control number. Your application has nat the technical review, which is ication (90 days for all other requests), information. If you have any questions			
	Region IV				

Region IV
U. S. Nuclear Regulatory Commission
DNMS/NMSB - B
1600 E. Lamar Blvd.
Arlington, TX 76011-4511
(817) 200-1103 or (817) 200-1140

NRC FORM 532 (1-2012) emailed to licensee 12-5-13 Cm