

**DIAGNOSTIC
RADIOLOGY**
**RADIATION
THERAPY**
**DIAGNOSTIC
RADIOLOGISTS**

D.R. WIERDA, M.D.
 V.A. DZINTARS, M.D.
 T.M. CINK, M.D.
 T.E. MASTERTSON, M.D.
 A.I. SOYE, M.D.
 G.L. FAMESTAD, M.D.
 C.L. STOKKA, M.D.
 M.J. KIHNE, M.D.
 R.L. WELTER, M.D.
 T.W. FREE, D.O.
 P.A. NELSON, M.D.
 B.A. PAULSON, M.D.
 J.J. BAKA, M.D.
 E.J. CZARNECKI, M.D.
 S.M. OUFFEK, M.D.
 D.L. CROSBY, M.D.
 D.C. RIFE, M.D.
 T.D. YEAGER, M.D.
 D.W. BEAN, M.D.
 J.R. ALPERS, M.D.
 S. CHOUDHRY, M.D.
 C.E. FLOHR, M.D.
 C. GREGORY, M.D.
 M.T. PARDY, M.D.
 M.R. CASEY, M.D.
 M.S. HELGESON, M.D.

**RADIATION
ONCOLOGISTS**

K.R. ERICKSON, M.D.
 J.F. GRIFFIN, M.D.
 K.L. SCHNEEKLOTH, M.D.
 S.C. MCGRAW, M.D.

**OUTREACH
RADIOLOGISTS**

W.P. PANNING, M.D.
 R.W. HART, M.D.

ADMINISTRATION

G.L. LARSON

**MEDICAL
PHYSICS**

C. CARVER, M.S.
 R. MASSOTH, Ph.D.
 C. OSMER, Ph.D.
 S. MOECKLY, M.S.

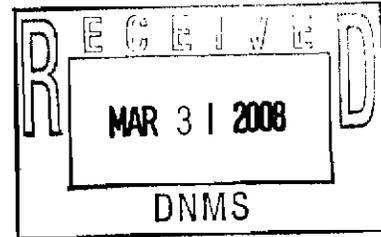
Medical X-Ray Center
 1417 S. Minnesota
 Sioux Falls, SD 57105
 (605) 336-0515
 Fax (605) 336-0812
 1-800-473-0271
 www.medx-ray.com

ACI
 1000 E. 21st Street
 Sioux Falls, SD 57105
 (605) 331-3674
 Fax (605) 331-3597
 1-800-473-0271
 www.medx-ray.com

Business Office
 1501 S. Minnesota
 Sioux Falls, SD 57105
 (605) 336-0517
 Fax (605) 336-2874
 1-800-473-0271
 www.medx-ray.com

March 26, 2008

Materials Licensing Section
 U.S. Nuclear Regulatory Commission, Region IV
 611 Ryan Plaza Drive, Suite #400
 Arlington, TX 76011-8064



**RE: Addition of an Authorized User for 35.600 materials
 Change of Radiation Safety Officer
 Removal of Authorized Users**

License #: 40-27480-01

To Whom It May Concern:

We would like to request the following amendments to our NRC Materials License #40-27480-01:

- 1.) We would like to add Dr. Barbara Schlager, MD to our authorized user list for 10CFR35.600 Remote Afterloader uses. She has been on previous NRC licenses for 10CFR35.400 uses so would qualify for the Classroom and Laboratory training for 10CFR35.690 under that appointment. We have provided specific training for the 10CFR35.600 Remote Afterloader use and have appended the appropriate documentation to this letter.
- 2.) We would like to replace Dr. John Griffin, MD as RSO with Mr. Charles M. Carver, MS for this license. Dr Griffin resigning the RSO status to reduce his workload. He is continuing with Medical X-Ray Center, P.C. in his capacity as a physician and member of the Board of Directors.
- 3.) We would like to remove Drs. Phillip G. Benzmilller, MD, Marshall L. Brewer, MD, Daryl Ray Wierda, MD, RobertP. DeClark, MD and Robert J. Schmall, MD from our list of authorized users. In a recent review of our license it was noticed that Drs. Weirda and DeClark had retired and Drs. Benzmilller, Brewer and Schmall had left the company and were not removed from the license.
 Dr. Bentzmiller left as of January 1, 2005
 Dr. Brewer left as of May 9, 2005
 Dr Schmall left as of June 15, 2007
 Dr. DeClark retired as of May 31, 2006
 Dr. Weirda retired as of October 5, 2007

In Summary:

We request the following additions to our NRC license:

<i>Authorized User</i>	<i>Authorized Uses</i>	<i>Basis</i>
Barbara A. Schlager, MD	35.600	Experienced Authorized User under 10CFR35.57, 35.59 and 35.690 as Board Certified and listed on an existing radioactive materials license (NRC 37-01421-01) and use specific training provided on-site.
<i>Radiation Safety Officer (RSO)</i>		<i>Basis</i>
Charles M. Carver, MS		Documented training and experience as required under 10CFR35.50.

We request the following subtractions from our NRC license:

<i>Authorized User</i>	<i>Authorized Uses</i>	<i>Basis</i>
Phillip G. Benzmilller, MD	35.100; 35.200; 31.11	No longer employed by Medical X-Ray Center, P.C.
Marshall L. Brewer, MD	35.100; 35.200; 31.11	No longer employed by Medical X-Ray Center, P.C.
Robert J. Schmall, MD	35.100; 35.200: Oral administration of sodium iodide Iodine-131: 31.11	No longer employed by Medical X-Ray Center, P.C.
Daryl Ray Wierda, MD	35.100; 35.200; 31.11	Retired from Medical X-Ray Center, P.C.
Robert P. DeClark, MD	35.100; 35.200; 35.300; 31.11	Retired from Medical X-Ray Center, P.C.
<i>Radiation Safety Officer (RSO)</i>		<i>Basis</i>
John Griffin, MD		Reduce workload. Staying with Medical X-Ray Center, P.C. in capacity as physician and member of Board of Directors.

Thank you for your attention to this matter. Please contact me or Charles M. Carver, MS if you have any questions or require further information at 605-336-0515.

Sincerely,


John F. Griffin, M.D.
Radiation Safety Officer
Board Member and Partner, Medical X-Ray Center, P.C.

- Attachments: (A) Dr Schlager's form 313A(AUS)
(B) Charles M. Carver's Attestation
(C.) Dr. Kathleen Schneekloth's Attestation
(D) Dr. Kirsten Erickson's Attestation
(E) Dr. Steven McGraw's Attestation
(F) Dr. Schlager's ABR Certificate in Therapeutic Radiology
(G) Dr. Schlager's South Dakota Medical License
(H) Letter certifying Dr. Schlager's AU status on NRC License #37-01421-01
(I) Mr. Carver's form 313A(RSO)

Attachment A

**AUTHORIZED USER TRAINING AND EXPERIENCE
AND PRECEPTOR ATTESTATION**
(for uses defined under 35.400 and 35.600)
[10 CFR 35.490, 35.491, and 35.690]

APPROVED BY OMB: NO. 3150-0120
EXPIRES: 10/31/2008

Name of Proposed Authorized User

Dr. Barbara A. Schlager, MD

State or Territory Where Licensed

South Dakota

Requested

35.400 Manual brachytherapy sources 35.600 Teletherapy unit(s)

Authorization(s)

35.400 Ophthalmic use of strontium-90 35.600 Gamma stereotactic radiosurgery unit(s)

(check all that apply)

35.600 Remote afterloader unit(s)

PART I -- TRAINING AND EXPERIENCE
(Select one of the three 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. For 35.600, go to the table in 3.e. and describe training provider and dates of training for each type of use for which authorization is sought.
- c. Skip to and complete Part II Preceptor Attestation.

2. Current 35.600 Authorized User Requesting Additional Authorization for 35.600 Use(s) Checked Above

- a. Go to the table in section 3.e. to document training for new device.
- b. Skip to and complete Part II Preceptor Attestation.

3. Training and Experience for Proposed Authorized User

- a. Classroom and Laboratory Training 35.490 35.491 35.690

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			

Total Hours of Training:

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		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Checking survey meters for proper operation		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Preparing, implanting, and safely removing brachytherapy sources		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Maintaining running inventories of material on hand		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Using administrative controls to prevent a medical event involving the use of byproduct material		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Using emergency procedures to control byproduct material		<input type="checkbox"/> Yes <input type="checkbox"/> No	

Clinical experience in radiation oncology as part of an approved formal training program	Location of Experience/License or Permit Number of Facility	Dates of Experience*
Approved by: <input type="checkbox"/> Residency Review Committee for Radiation Oncology of the ACGME <input type="checkbox"/> Royal College of Physicians and Surgeons of Canada <input type="checkbox"/> Committee on Postdoctoral Training of the American Osteopathic Association		
Supervising Individual	License/Permit Number listing supervising individual as an Authorized User	

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Training and Experience for Proposed 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 listing supervising individual as an Authorized User	

d. Supervised Work and Clinical Experience for 10 CFR 35.690

- Remote afterloader unit(s) Teletherapy unit(s) Gamma stereotactic radiosurgery unit(s)

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*
Reviewing full calibration measurements and periodic spot-checks		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Preparing treatment plans and calculating treatment doses and times		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Using administrative controls to prevent a medical event involving the use of byproduct material		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Implementing emergency procedures to be followed in the event of the abnormal operation of the medical unit or console		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Checking and using survey meters		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Selecting the proper dose and how it is to be administered		<input type="checkbox"/> Yes <input type="checkbox"/> No	

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

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

d. Supervised Work and Clinical Experience for 10 CFR 35.690 (continued)

Clinical experience in radiation oncology as part of an approved formal training program	Location of Experience/License or Permit Number of Facility	Dates of Experience*
Approved by: <input type="checkbox"/> Residency Review Committee for Radiation Oncology of the ACGME <input type="checkbox"/> Royal College of Physicians and Surgeons of Canada <input type="checkbox"/> Committee on Postdoctoral Training of the American Osteopathic Association		
Supervising Individual	License/Permit Number listing supervising individual as an Authorized User	

e. For 35.600, describe training provider and dates of training for each type of use for which authorization is sought.

Description of Training	Training Provider and Dates		
	Remote Afterloader	Teletherapy	Gamma Stereotactic Radiosurgery
Device operation	See attachments A, B, C and D		
Safety procedures for the device use	See attachments A, B, C and D		
Clinical use of the device	See attachments A, B, C and D		
Supervising Individual. <i>If training provided by Supervising Individual (if more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this page.)</i> See attachments A, B, C and D		License/Permit Number listing supervising individual as an Authorized User See attachments A, B, C and D	
Authorized for the following types of use: <input checked="" type="checkbox"/> Remote afterloader unit(s) <input type="checkbox"/> Teletherapy unit(s) <input type="checkbox"/> Gamma stereotactic radiosurgery unit(s)			

f. Provide completed Part II Preceptor Attestation.

Attachment B

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

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

d. Supervised Work and Clinical Experience for 10 CFR 35.690 (continued)

Clinical experience in radiation oncology as part of an approved formal training program	Location of Experience/License or Permit Number of Facility	Dates of Experience*
Approved by: <input type="checkbox"/> Residency Review Committee for Radiation Oncology of the ACGME <input type="checkbox"/> Royal College of Physicians and Surgeons of Canada <input type="checkbox"/> Committee on Postdoctoral Training of the American Osteopathic Association		
Supervising Individual	License/Permit Number listing supervising individual as an Authorized User	

e. For 35.600, describe training provider and dates of training for each type of use for which authorization is sought.

Description of Training	Training Provider and Dates		
	Remote Afterloader	Teletherapy	Gamma Stereotactic Radiosurgery
Device operation	Nucletron V2 HDR - 5/14/2007		
Safety procedures for the device use	Nucletron V2 HDR - 5/14/2007		
Clinical use of the device	Nucletron V2 HDR - 5/14/2007		
Supervising Individual. <i>If training provided by Supervising Individual (if more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this page.)</i> Charles M. Carver, MS		License/Permit Number listing supervising individual as an Authorized User 40-27480-01	
Authorized for the following types of use:			
<input checked="" type="checkbox"/> Remote afterloader unit(s) <input type="checkbox"/> Teletherapy unit(s) <input type="checkbox"/> Gamma stereotactic radiosurgery unit(s)			

f. Provide completed Part II Preceptor Attestation.

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

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 for each requested authorization:

For 35.490:

Board Certification

I attest that _____ has satisfactorily completed the requirements in
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

I attest that _____ has satisfactorily completed the 200 hours of
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:

I attest that _____ has satisfactorily completed the 24 hours of
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 Dr. Barbara A. Schlager, MD has satisfactorily completed the requirements in
Name of Proposed Authorized User
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

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

Preceptor Attestation (continued)

Third Section

For 35.690: (continued)

I attest that Dr. Barbara A. Schlager, MD has received training required in 35.690(c) for device
Name of Proposed Authorized User
operation, safety procedures, and clinical use for the type(s) of use for which authorization is sought, as
checked below.

Remote afterloader unit(s) Teletherapy unit(s) Gamma stereotactic radiosurgery unit(s)

AND

Fourth Section

I attest that Dr. Barbara A. Schlager, MD has achieved a level of competency sufficient to
Name of Proposed Authorized User
achieve a level of competency sufficient to function independently as an authorized user for:

Remote afterloader unit(s) Teletherapy unit(s) Gamma stereotactic radiosurgery unit(s)

Fifth Section

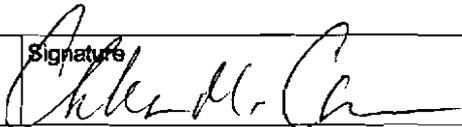
Complete the following for preceptor attestation and signature:

I meet the requirements in 10 CFR 35.490, 35.491, 35.690, or equivalent Agreement State requirements, as
an authorized user for:

35.400 Manual brachytherapy sources 35.600 Teletherapy unit(s)

35.400 Ophthalmic use of strontium-90 35.600 Gamma stereotactic radiosurgery unit(s)

35.600 Remote afterloader unit(s)

Name of Preceptor Charles M. Carver, MS	Signature 	Telephone Number 605-336-0515	Date 03/14/2008
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License/Permit Number/Facility Name
40-27480-01 Medical X-Ray Center, P.C.

Description of Training

Device operation - Dr. Schlager was shown the correct use and operation of the HDR unit and the various applicators associated with the treatment of patients. The devices and the dates of instruction are listed and a description of the devices is included below. The instruction consisted of the AU or AMP discussing the proper use with a hands on demonstration of the device. After the demonstration, Dr. Schlager repeated the handling of the device to the satisfaction of the instructor. This was done repeatedly and included the actual use of the device on patients under the supervision of the AU or AMP. The patient treatments were performed over several weeks and required the insertion of the applicator device on each day of treatment.

Safety Procedures for the Device Use - Dr. Schlager was shown the safe use of the devices. In the case of the applicators, she was shown how to disassemble them for removal both under normal conditions and in an emergency situation. Included was how to place them in the emergency safe and the rationale for the procedures was discussed. In the case of the HDR unit, the treatment process was demonstrated and the procedure rationale was discussed. The procedures for emergency source retraction were discussed and demonstrated (as far as was possible without the actual source being exposed). The sequence of events in an emergency were discussed and Dr. Schlager was shown where the emergency equipment was kept, what was maintained in the kit and the rationale behind each piece.

Clinical Use of the Device - Dr. Schlager performed clinical operations of the HDR unit and associated applicators on patients on multiple occasions under the direct supervision of the AU or AMP as appropriate.

Devices

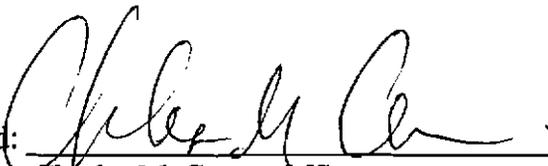
Nucletron V2 HDR unit - This is the device that contains the radioactive source. It is also known as the remote afterloader. It attaches to the applicator devices with transfer tubes and controls the motion, position and the time that the radioactive source is out of the safe.

Mammosite - This is an applicator that is specific to breast brachytherapy. It is an inflatable balloon that is placed in the lumpectomy defect and allows access to the tumor bed by the radioactive source. This is considered an interstitial brachytherapy device.

T&O - This is an applicator used to treat cervical and uterine cancers. It is an abbreviation for Tandem and Ovoid. The tandem is placed through the cervical os into the uterus and the ovoids are placed to either side of the cervical os in the vaginal vault. This is considered an intra-cavitary brachytherapy.

VC - This is an applicator used to treat the vaginal cuff post-operatively. It is placed in the

vagina all the way up to the vaginal vault to boost the radiation dose to that area. This is considered an intra-cavitary brachytherapy.

Signed: 
Charles M. Carver, MS

Attachment C

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

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

d. Supervised Work and Clinical Experience for 10 CFR 35.690 (continued)

Clinical experience in radiation oncology as part of an approved formal training program	Location of Experience/License or Permit Number of Facility	Dates of Experience*
Approved by: <input type="checkbox"/> Residency Review Committee for Radiation Oncology of the ACGME <input type="checkbox"/> Royal College of Physicians and Surgeons of Canada <input type="checkbox"/> Committee on Postdoctoral Training of the American Osteopathic Association		
Supervising Individual		License/Permit Number listing supervising individual as an Authorized User

e. For 35.600, describe training provider and dates of training for each type of use for which authorization is sought.

Description of Training	Training Provider and Dates		
	Remote Afterloader	Teletherapy	Gamma Stereotactic Radiosurgery
Device operation	T&O - 5/23, 5/29, 5/31, 6/4/2007 VC - 5/21, 5/24, 5/29, 5/31/2007		
Safety procedures for the device use	T&O - 5/23, 5/29, 5/31, 6/4/2007 VC - 5/21, 5/24, 5/29, 5/31/2007		
Clinical use of the device	T&O - 5/31, 6/4, 7/31, 8/2, 8/7/2007 VC - 5/29, 5/31/2007		
Supervising Individual. <i>If training provided by Supervising Individual (If more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this page.)</i> Dr. Kathleen Schneekloth, MD		License/Permit Number listing supervising individual as an Authorized User 40-27480-01	

Authorized for the following types of use:

- Remote afterloader unit(s)
 Teletherapy unit(s)
 Gamma stereotactic radiosurgery unit(s)

f. Provide completed Part II Preceptor Attestation.

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

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 for each requested authorization:

For 35.490:

Board Certification

I attest that _____ has satisfactorily completed the requirements in
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

I attest that _____ has satisfactorily completed the 200 hours of
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:

I attest that _____ has satisfactorily completed the 24 hours of
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 Dr. Barbara A. Schlager, MD _____ has satisfactorily completed the requirements in
Name of Proposed Authorized User
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

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

Preceptor Attestation (continued)

Third Section

For 35.690: (continued)

I attest that Dr. Barbara A. Schlager, MD has received training required in 35.690(c) for device
Name of Proposed Authorized User
operation, safety procedures, and clinical use for the type(s) of use for which authorization is sought, as
checked below.

Remote afterloader unit(s) Teletherapy unit(s) Gamma stereotactic radiosurgery unit(s)

AND

Fourth Section

I attest that Dr. Barbara A. Schlager, MD has achieved a level of competency sufficient to
Name of Proposed Authorized User
achieve a level of competency sufficient to function independently as an authorized user for:

Remote afterloader unit(s) Teletherapy unit(s) Gamma stereotactic radiosurgery unit(s)

Fifth Section

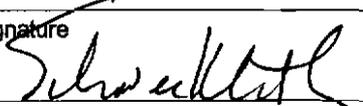
Complete the following for preceptor attestation and signature:

I meet the requirements in 10 CFR 35.490, 35.491, 35.690, or equivalent Agreement State requirements, as
an authorized user for:

35.400 Manual brachytherapy sources 35.600 Teletherapy unit(s)

35.400 Ophthalmic use of strontium-90 35.600 Gamma stereotactic radiosurgery unit(s)

35.600 Remote afterloader unit(s)

Name of Preceptor Dr. Kathleen Schneekloth, MD	Signature 	Telephone Number 605-336-0515	Date 03/14/2008
---	--	----------------------------------	--------------------

License/Permit Number/Facility Name
40-27480-01 Medical X-Ray Center, P.C.

Description of Training

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Safety Procedures for the Device Use - Dr. Schlager was shown the safe use of the devices. In the case of the applicators, she was shown how to disassemble them for removal both under normal conditions and in an emergency situation. Included was how to place them in the emergency safe and the rationale for the procedures was discussed. In the case of the HDR unit, the treatment process was demonstrated and the procedure rationale was discussed. The procedures for emergency source retraction were discussed and demonstrated (as far as was possible without the actual source being exposed). The sequence of events in an emergency were discussed and Dr. Schlager was shown where the emergency equipment was kept, what was maintained in the kit and the rationale behind each piece.

Clinical Use of the Device - Dr. Schlager performed clinical operations of the HDR unit and associated applicators on patients on multiple occasions under the direct supervision of the AU or AMP as appropriate.

Devices

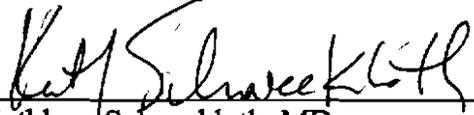
Nucletron V2 HDR unit - This is the device that contains the radioactive source. It is also known as the remote afterloader. It attaches to the applicator devices with transfer tubes and controls the motion, position and the time that the radioactive source is out of the safe.

Mammosite - This is an applicator that is specific to breast brachytherapy. It is an inflatable balloon that is placed in the lumpectomy defect and allows access to the tumor bed by the radioactive source. This is considered an interstitial brachytherapy device.

T&O - This is an applicator used to treat cervical and uterine cancers. It is an abbreviation for Tandem and Ovoid. The tandem is placed through the cervical os into the uterus and the ovoids are placed to either side of the cervical os in the vaginal vault. This is considered an intra-cavitary brachytherapy.

VC - This is an applicator used to treat the vaginal cuff post-operatively. It is placed in the

vagina all the way up to the vaginal vault to boost the radiation dose to that area. This is considered an intra-cavitary brachytherapy.

Signed: 
Kathleen Schneekloth, MD

Attachment D

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

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

d. Supervised Work and Clinical Experience for 10 CFR 35.690 (continued)

Clinical experience in radiation oncology as part of an approved formal training program	Location of Experience/License or Permit Number of Facility	Dates of Experience*
Approved by: <input type="checkbox"/> Residency Review Committee for Radiation Oncology of the ACGME <input type="checkbox"/> Royal College of Physicians and Surgeons of Canada <input type="checkbox"/> Committee on Postdoctoral Training of the American Osteopathic Association		
Supervising Individual	License/Permit Number listing supervising individual as an Authorized User	

e. For 35.600, describe training provider and dates of training for each type of use for which authorization is sought.

Description of Training	Training Provider and Dates		
	Remote Afterloader	Teletherapy	Gamma Stereotactic Radiosurgery
Device operation	T&O - 08/07/2007 VC - 08/09/2007		
Safety procedures for the device use	T&O - 08/07/2007 VC - 08/09/2007		
Clinical use of the device	T&O - 08/07/2007 VC - 08/09/2007		
Supervising Individual. <i>If training provided by Supervising individual (if more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this page.)</i> Dr. Kirsten Erickson, MD		License/Permit Number listing supervising individual as an Authorized User 40-27480-01	
Authorized for the following types of use:			
<input checked="" type="checkbox"/> Remote afterloader unit(s) <input type="checkbox"/> Teletherapy unit(s) <input type="checkbox"/> Gamma stereotactic radiosurgery unit(s)			

f. Provide completed Part II Preceptor Attestation.

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

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 for each requested authorization:

For 35.490:

Board Certification

I attest that _____ has satisfactorily completed the requirements in
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

I attest that _____ has satisfactorily completed the 200 hours of
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:

I attest that _____ has satisfactorily completed the 24 hours of
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 Dr. Barbara A. Schlager, MD has satisfactorily completed the requirements in
Name of Proposed Authorized User
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

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

Preceptor Attestation (continued)

Third Section

For 35.690: (continued)

I attest that Dr. Barbara A. Schlager, MD has received training required in 35.690(c) for device
Name of Proposed Authorized User
operation, safety procedures, and clinical use for the type(s) of use for which authorization is sought, as
checked below.

Remote afterloader unit(s) Teletherapy unit(s) Gamma stereotactic radiosurgery unit(s)

AND

Fourth Section

I attest that Dr. Barbara A. Schlager, MD has achieved a level of competency sufficient to
Name of Proposed Authorized User
achieve a level of competency sufficient to function independently as an authorized user for:

Remote afterloader unit(s) Teletherapy unit(s) Gamma stereotactic radiosurgery unit(s)

Fifth Section

Complete the following for preceptor attestation and signature:

I meet the requirements in 10 CFR 35.490, 35.491, 35.690, or equivalent Agreement State requirements, as
an authorized user for:

35.400 Manual brachytherapy sources 35.600 Teletherapy unit(s)

35.400 Ophthalmic use of strontium-90 35.600 Gamma stereotactic radiosurgery unit(s)

35.600 Remote afterloader unit(s)

Name of Preceptor Dr. Kirsten Erickson, MD	Signature 	Telephone Number 605-336-0515	Date 03/14/2008
---	--	----------------------------------	--------------------

License/Permit Number/Facility Name
40-27480-01 Medical X-Ray Center, P.C.

Description of Training

Device operation - Dr. Schlager was shown the correct use and operation of the HDR unit and the various applicators associated with the treatment of patients. The devices and the dates of instruction are listed and a description of the devices is included below. The instruction consisted of the AU or AMP discussing the proper use with a hands on demonstration of the device. After the demonstration, Dr. Schlager repeated the handling of the device to the satisfaction of the instructor. This was done repeatedly and included the actual use of the device on patients under the supervision of the AU or AMP. The patient treatments were performed over several weeks and required the insertion of the applicator device on each day of treatment.

Safety Procedures for the Device Use - Dr. Schlager was shown the safe use of the devices. In the case of the applicators, she was shown how to disassemble them for removal both under normal conditions and in an emergency situation. Included was how to place them in the emergency safe and the rationale for the procedures was discussed. In the case of the HDR unit, the treatment process was demonstrated and the procedure rationale was discussed. The procedures for emergency source retraction were discussed and demonstrated (as far as was possible without the actual source being exposed). The sequence of events in an emergency were discussed and Dr. Schlager was shown where the emergency equipment was kept, what was maintained in the kit and the rationale behind each piece.

Clinical Use of the Device - Dr. Schlager performed clinical operations of the HDR unit and associated applicators on patients on multiple occasions under the direct supervision of the AU or AMP as appropriate.

Devices

Nucletron V2 HDR unit - This is the device that contains the radioactive source. It is also known as the remote afterloader. It attaches to the applicator devices with transfer tubes and controls the motion, position and the time that the radioactive source is out of the safe.

Mammosite - This is an applicator that is specific to breast brachytherapy. It is an inflatable balloon that is placed in the lumpectomy defect and allows access to the tumor bed by the radioactive source. This is considered an interstitial brachytherapy device.

T&O - This is an applicator used to treat cervical and uterine cancers. It is an abbreviation for Tandem and Ovoid. The tandem is placed through the cervical os into the uterus and the ovoids are placed to either side of the cervical os in the vaginal vault. This is considered an intra-cavitary brachytherapy.

VC - This is an applicator used to treat the vaginal cuff post-operatively. It is placed in the

vagina all the way up to the vaginal vault to boost the radiation dose to that area. This is considered an intra-cavitary brachytherapy.

Signed: 
Kirsten Erickson, MD

Attachment E

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

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

d. Supervised Work and Clinical Experience for 10 CFR 35.690 (continued)

Clinical experience in radiation oncology as part of an approved formal training program	Location of Experience/License or Permit Number of Facility	Dates of Experience*
Approved by: <input type="checkbox"/> Residency Review Committee for Radiation Oncology of the ACGME <input type="checkbox"/> Royal College of Physicians and Surgeons of Canada <input type="checkbox"/> Committee on Postdoctoral Training of the American Osteopathic Association		
Supervising Individual		License/Permit Number listing supervising individual as an Authorized User

e. For 35.600, describe training provider and dates of training for each type of use for which authorization is sought.

Description of Training	Training Provider and Dates		
	Remote Afterloader	Teletherapy	Gamma Stereotactic Radiosurgery
Device operation	Mammosite - 5/10, 5/14 - 5/18/07		
Safety procedures for the device use	Mammosite - 5/10, 5/14 - 5/18/07		
Clinical use of the device	Mammosite - 5/10, 5/14 - 5/18, 7/17, 7/19/2007		
Supervising Individual. <i>If training provided by Supervising Individual (if more than one supervising individual is necessary to document supervised work experience, provide multiple copies of this page.)</i> Dr. Steven McGraw, MD		License/Permit Number listing supervising individual as an Authorized User 40-27480-01	
Authorized for the following types of use: <input checked="" type="checkbox"/> Remote afterloader unit(s) <input type="checkbox"/> Teletherapy unit(s) <input type="checkbox"/> Gamma stereotactic radiosurgery unit(s)			

f. Provide completed Part II Preceptor Attestation.

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

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 for each requested authorization:

For 35.490:

Board Certification

I attest that _____ has satisfactorily completed the requirements in

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

I attest that _____ has satisfactorily completed the 200 hours of

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:

I attest that _____ has satisfactorily completed the 24 hours of

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 Dr. Barbara A. Schlager, MD has satisfactorily completed the requirements in

Name of Proposed Authorized User

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

AUTHORIZED USER TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

Preceptor Attestation (continued)

Third Section

For 35.690: (continued)

I attest that Dr. Barbara A. Schlager, MD has received training required in 35.690(c) for device
Name of Proposed Authorized User
operation, safety procedures, and clinical use for the type(s) of use for which authorization is sought, as checked below.

Remote afterloader unit(s) Teletherapy unit(s) Gamma stereotactic radiosurgery unit(s)

AND

Fourth Section

I attest that Dr. Barbara A. Schlager, MD has achieved a level of competency sufficient to
Name of Proposed Authorized User
achieve a level of competency sufficient to function independently as an authorized user for:

Remote afterloader unit(s) Teletherapy unit(s) Gamma stereotactic radiosurgery unit(s)

Fifth Section

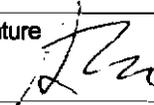
Complete the following for preceptor attestation and signature:

I meet the requirements in 10 CFR 35.490, 35.491, 35.690, or equivalent Agreement State requirements, as an authorized user for:

35.400 Manual brachytherapy sources 35.600 Teletherapy unit(s)

35.400 Ophthalmic use of strontium-90 35.600 Gamma stereotactic radiosurgery unit(s)

35.600 Remote afterloader unit(s)

Name of Preceptor Dr. Steven McGraw, MD	Signature 	Telephone Number 605-338-0515	Date 03/14/2008
--	--	----------------------------------	--------------------

License/Permit Number/Facility Name
40-27480-01 Medical X-Ray Center, P.C.

Description of Training

Device operation - Dr. Schlager was shown the correct use and operation of the HDR unit and the various applicators associated with the treatment of patients. The devices and the dates of instruction are listed and a description of the devices is included below. The instruction consisted of the AU or AMP discussing the proper use with a hands on demonstration of the device. After the demonstration, Dr. Schlager repeated the handling of the device to the satisfaction of the instructor. This was done repeatedly and included the actual use of the device on patients under the supervision of the AU or AMP. The patient treatments were performed over several weeks and required the insertion of the applicator device on each day of treatment.

Safety Procedures for the Device Use - Dr. Schlager was shown the safe use of the devices. In the case of the applicators, she was shown how to disassemble them for removal both under normal conditions and in an emergency situation. Included was how to place them in the emergency safe and the rationale for the procedures was discussed. In the case of the HDR unit, the treatment process was demonstrated and the procedure rationale was discussed. The procedures for emergency source retraction were discussed and demonstrated (as far as was possible without the actual source being exposed). The sequence of events in an emergency were discussed and Dr. Schlager was shown where the emergency equipment was kept, what was maintained in the kit and the rationale behind each piece.

Clinical Use of the Device - Dr. Schalger performed clinical operations of the HDR unit and associated applicators on patients on multiple occasions under the direct supervision of the AU or AMP as appropriate.

Devices

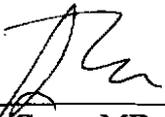
Nucletron V2 HDR unit - This is the device that contains the radioactive source. It is also known as the remote afterloader. It attaches to the applicator devices with transfer tubes and controls the motion, position and the time that the radioactive source is out of the safe.

Mammosite - This is an applicator that is specific to breast brachytherapy. It is an inflatable balloon that is placed in the lumpectomy defect and allows access to the tumor bed by the radioactive source. This is considered an interstitial brachytherapy device.

T&O - This is an applicator used to treat cervical and uterine cancers. It is an abbreviation for Tandem and Ovoid. The tandem is placed through the cervical os into the uterus and the ovoids are placed to either side of the cervical os in the vaginal vault. This is considered an intra-cavitary brachytherapy.

VC - This is an applicator used to treat the vaginal cuff post-operatively. It is placed in the

vagina all the way up to the vaginal vault to boost the radiation dose to that area. This is considered an intra-cavitary brachytherapy.

Signed:  _____
Steven McGraw, MD

Attachment F

The American Board of Radiology

*Organized through the cooperation of the
American College of Radiology, the American Roentgen Ray Society,
the American Radium Society, the Radiological Society of North America,
the Section on Radiology of the American Medical Association
and the American Society of Therapeutic Radiologists
Hereby certifies that*

Barbara A. Schlager, M.D.

*Has pursued an accepted course of graduate study
and clinical work, has met certain standards and qualifications and
has passed the examinations conducted under the authority of
The American Board of Radiology*

On this first day of June, 1984

*Thereby demonstrating to the satisfaction of the Board
that she is qualified to practice the specialty of*

Therapeutic Radiology



Attachment G

THIS IS YOUR LICENSE
Detach and retain card for your records.

Barbara A. Schlager, MD

SOUTH DAKOTA BOARD OF MEDICAL
AND OSTEOPATHIC EXAMINERS

SD License Number: 5903

Barbara A. Schlager, MD

is licensed to practice Medicine or Osteopathy as provided
by the laws of the State of South Dakota.

Not Valid After: March 1, 2009

Milton Mutch, MD, Secretary

Initialed By

Attachment H

Geisinger
Health System

**GEISINGER
FOX CHASE**
THE HENRY CANCER CENTER

Permit for Use of Ionizing Radiation

PERMIT # 050510

Issue Date: 05/10/05
Expiration Date: 05/10/10

NRC License # 37-01421-01
PA DEP License # PA-0006

Barbara A. Schlager, M.D.
is hereby granted the status "Authorized
User of Radioisotopes" for the procedures
listed below:

NRC Code Ref.	PA DEP Ref.	Description
35.400	224.301	Manual Brachytherapy
-	Ch. 228	Linear Accelerator

This Permit is issued based on information submitted to the Medical Health Physics Office and is subject to the terms and conditions of the application materials and associated documents. The Geisinger Radiation Safety Committee reserves the right to withdraw this permit prior to the stated expiration date.

Mildred Fleetwood, PhD.
Chair, Radiation Safety Committee
Geisinger Health System

Catherine M. Andarko, M.S., CHP
Director, System, Medical Health Physics
Radiation Safety Officer
Geisinger Health System

Medical Health Physics
Office
M.C. 29-00
100 North Academy
Avenue
Danville, PA 17822
570 271 7015 Tel
570 214 9248 Fax

Catherine M. Anderko
Director, System
Medical Health Physics

GEISINGER
FOX CHASE
THE HENRY CANCER CENTER

June 7, 2007

To Whom It May Concern:

This letter is to verify that Barbara A Schlager, M.D. was an authorized user on Nuclear Regulatory Commission license #37-01421-01 and Pennsylvania Department of Environmental Protection license #PA-0006 issued to Geisinger Medical Center, Danville, PA.

Barbara A Schlager, M.D. was authorized for the following categories of use:

NRC Code Ref.	PA DEP Ref.	Description
35.400	224.301	Manual Brachytherapy
-	Ch. 228	Linear Accelerator

If additional information is required, please feel free to contact me.

Sincerely,

Catherine Anderko

Catherine M. Anderko, M.S., CHP, DABR
Director, System, Medical Health Physics
Radiation Safety Officer
Geisinger Health System

*Kathy
Please sign &
give back to
Marie
Marie -
that's a
pen label also
T.Y.
ca*

Attachment I

**RADIATION SAFETY OFFICER TRAINING AND EXPERIENCE
AND PRECEPTOR ATTESTATION
[10 CFR 35.50]**

APPROVED BY OMB: NO. 3150-0120
EXPIRES: 10/31/2008

Name of Proposed Radiation Safety Officer

Charles M. Carver, MS

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 (IVBT Sr-90)

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:			

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.)+ _____ _____ _____		

+ 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).

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	Dr. John Griffin, M.D.	Oct 1, 1999 to Present
Radiation safety, regulatory issues, and emergency procedures for 35.300 uses	Dr. John Griffin, M.D.	Oct 1, 1999 to Present
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	Dr. John Griffin, M.D.	Oct 1, 1999 to Present
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):	Dr. John Griffin, M.D.	Oct 1, 1999 to Present

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)

<p>Supervising Individual <i>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.)</i></p> <p>Dr. John Griffin, M.D.</p>	<p>License/Permit Number listing supervising individual</p> <p style="text-align: center;">40-27480-01</p>
<p>License/Permit lists supervising individual as:</p> <p><input checked="" type="checkbox"/> Radiation Safety Officer <input type="checkbox"/> Authorized User <input type="checkbox"/> Authorized Nuclear Pharmacist</p> <p><input type="checkbox"/> Authorized Medical Physicist</p> <p>Authorized as RSO, AU, ANP, or AMP for the following medical uses:</p> <p><input checked="" type="checkbox"/> 35.100 <input checked="" type="checkbox"/> 35.200 <input checked="" type="checkbox"/> 35.300 <input type="checkbox"/> 35.400</p> <p><input type="checkbox"/> 35.500 <input checked="" type="checkbox"/> 35.600 (remote afterloader) <input type="checkbox"/> 35.600 (teletherapy)</p> <p><input type="checkbox"/> 35.600 (gamma stereotactic radiosurgery) <input checked="" type="checkbox"/> 35.1000 (_____)</p>	

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

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 Charles M. Carver, MS 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 Charles M. Carver, MS 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:
IVBT Sr-90

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

AND

**Third Section
Complete for ALL**

I attest that Charles M. Carver, MS 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 Medical X-Ray Center, P.C.
Name of Facility

License/Permit Number: 40-27480-01

Name of Preceptor	Signature	Telephone Number	Date
Dr. John Griffin, M.D.	<i>John J. Griffin M.D.</i>	(605) 336-0515	03/26/2008

ACCEPTANCE REVIEW MEMO (ARM)

Licensee: Medical X-Ray Center, P.C. **License No.:** 40-27480-01
Docket No.: 030-33335 **Mail Control No.:** 471767
Type of Action: Amend **Date of Requested Action:** 03-26-08
Reviewer Assigned: **ARM reviewer(s):** Torres

Response	Deficiencies Noted During Acceptance Review
	<input type="checkbox"/> Open ended possession limits. Submit inventory. Limit possession. <input type="checkbox"/> Submit copies of latest leak test results. <input type="checkbox"/> Add IC L.C./Fingerprint LC, add SUNSI markings to license. <input type="checkbox"/> Confirm with licensee if they have NARM material.

Reviewer's Initials: _____ **Date:** _____

<input type="checkbox"/> Yes	<input type="checkbox"/> No	Request for unrestricted release Group 2 or >. Consult with Bravo Branch.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Termination request < 90 days from date of expiration
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Expedite (medical emergency, no RSO, location of use/storage not on license, RAM in possession not on license, other)
<input type="checkbox"/> Yes	<input type="checkbox"/> No	TAR needed to complete action.

Branch Chief's and/or HP's Initials: _____ **Date:** _____

SUNSI Screening according to RIS 2005-31

Yes No **Sensitive and Non-Publicly Available if any item below is checked**

General guidance:

- _____ RAM = or > than Category 3 (Table 1, RIS 2005-31), use Unity Rule
- _____ Exact location of RAM (whether = or > than Category 3 or not)
- _____ Design of structure and/or equipment (site specific)
- _____ Information on nearby facilities
- _____ Detailed design drawings and/or performance information
- _____ Emergency planning and/or fire protection systems

Specific guidance for medical, industrial and academic (above Category 3):

- _____ RAM quantities and inventory
- _____ Manufacturer's name and model number of sealed sources & devices
- _____ Site drawings with exact location of RAM, description of facility
- _____ RAM security program information (locks, alarms, etc.)
- _____ Emergency Plan specifics (routes to/from RAM, response to security events)
- _____ Vulnerability/security assessment/accident-safety analysis/risk assess
- _____ Mailing lists related to security response

APR 16 2008

Branch Chief's and/or HP's Initials: ATR **Date:** _____

Checklist to Ensure That Radioactive Material Will Be Used as Intended

Applicant Information:

Control No. 471767

Name: Medical X-Ray Center, P.C.	Type of Request: Amend Program Code(s): 02230	
Location: SD	License No.: 40-27480-01	Docket No.: 030-333335

STEP 1, ITEM A - INITIAL SCREENING

Instructions for Step 1: Complete Step 1 for all applications. If Step 1, Items A and B, are "YES" then do not complete Step 2. Sign and date the completed form and add it to ADAMS as Non-Sensitive and Non-Publicly Available. If a "NO" response is indicated for Item A or Item B, add the completed form to ADAMS as Sensitive and Non-Publicly Available, and complete Step 2 (Additional Screening). If the type of use is subject to a Security Order, complete Step 3, Item A, without delay. If the additional requirements for increased controls will be applied or voided, complete Step 3, Item B, without delay.	YES or NO
A. The applicant is a known entity or a licensee transferring control to a known entity. This determination has been made using the screening criteria in Worksheet A below.	Yes

Worksheet A

Instructions for Worksheet A: Answer each of the 6 questions below by placing a "Yes", "No", or "NA" response in the column on the right. Best practices for a reviewer are provided after each of the questions. If the answer to any of the 6 questions is "Yes" then indicate "Yes" in Step 1, Item A, above. If the answers to all of the 6 questions is "No" then indicate "No" in Step 1, Item A, above. NOTE - If the reviewer has personal knowledge of the applicant's veracity, this can be taken into account in responding to any questions. For example, if the applicant's management and/or RSO have been associated with a current or previous NRC or Agreement State license, then the applicant may be considered as a known entity.	YES, NO, or NA
1. Does the applicant have a current Agreement State or NRC license? The reviewer should 1) confirm that a valid license/registration/authorization exists for the applicant; and 2) compare the current license to the application to verify that the application represents a reasonable expansion of the licensee's operation (i.e., medical facility adding a gamma knife or an Agreement State licensee obtaining an NRC license in order to work in NRC jurisdiction without filing reciprocity).	Yes
2. Does the applicant have a current Agreement State or NRC license at another location and the new application represents the addition of a new facility within the scope of the licensee's core business? The reviewer should contact the appropriate licensing authority to confirm that a valid license/registration/authorization exists for the applicant and the corporate office of the licensee to verify that it has knowledge of and approves of the new application.	
3. Does the applicant have a current State or Federal government license, registration, authorization, etc., for other operations within the scope of its proposed license activities? (e.g., a company authorized by a State for mining that is now requesting authorization to use fixed gauges). The reviewer should contact the appropriate government office to confirm that the license, registration, authorization, etc., is valid; and the applicant's corporate office to confirm that it has knowledge of and approves of the new application to possess radioactive materials.	
4. Is the applicant a local, State or Federal government agency? The reviewer should contact the local, State or Federal government office to confirm that the applicant is a government entity.	
5. Does the application only involve the relocation of an existing licensee, or its mailing address, to another State? This includes new licenses created from existing licenses listing locations in multiple States, in preparation for transfer of licenses to States that will shortly sign an Agreement with the NRC.	
6. Is the application only the result of a licensee failing to submit a renewal application in a timely manner?	

STEP 1, ITEM B - INITIAL SCREENING CONTINUED

B. The applicant is requesting certain radionuclides and quantities that are less than the Risk Significant Quantity (TBq) values in Worksheet B, below, as ~~highlighted~~ by the reviewer, or is currently subject to a security order or additional requirements for increased controls. If "Yes", there is no need to proceed further. NA

Worksheet B - Risk Significant Quantities

(Category 2 Quantities, IAEA Safety Guide No. RS-G-1.9, Categorization of Radioactive Sources, August 2005)

Radionuclide	Risk Significant Quantity (TBq)	Risk Significant Quantity (Ci) ¹	Radionuclide	Risk Significant Quantity (TBq) ¹	Risk Significant Quantity (Ci) ¹
Am-241	0.6	16	Pm-147	400	11,000
Am-241/Be	0.6	16	Pu-238	0.6	16
Cf-252	0.2	5.4	Pu-239/Be	0.6	16
Cm-244	0.5	14	Ra-226 ²	0.4	11
Co-60	0.3	8.1	Se-75	2	54
Cs-137	1	27	Sr-90 (Y-90)	10	270
Gd-153	10	270	Tm-170	200	5,400
Ir-192	0.8	22	Yb-169	3	81

¹ The primary values are TBq. The curie (Ci) values are for informational purposes only.
² The Atomic Energy Act, as amended by the Energy Policy Act of 2005, authorizes NRC to regulate Ra-226 and NRC is in the process of amending its regulations for discrete sources of Ra-226.

Calculations of the Total Activity or the Unity Rule were completed. NOTE--If an amendment of an existing license is being requested, the calculations will include the previously authorized quantities for the radionuclide(s).	Yes, No, or Not Applicable (NA)
Total Activity--multiple activities are requested for a single radionuclide and the sum of the activities is less than the Risk Significant Quantity (TBq) for the radionuclide.	
Unity Rule--multiple radionuclides are requested and the sum of the ratios is less than 1.0, e.g., [(total activity for radionuclide A) ÷ (risk significant quantity for radionuclide A)] + [(total activity for radionuclide B) ÷ (risk significant quantity for radionuclide B)] < 1.0.	

Signature and Date for Step 1:

 APR 16 2008
 License Reviewer and Date

4-18-08
DATE

This is to acknowledge the receipt of your letter/application dated 3-26-08 and to inform you that the initial processing, which includes an administrative review, has been performed.

There were no administrative omissions. Your application will be assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card:

The action you requested is normally processed within 90 days.

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 471767.
When calling to inquire about this action, please refer to this mail control number.
You may call me at 817-860-8103.

Sincerely,

Celleen Murnahan

Licensing Assistant

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

: (FOR LFMS USE)
: INFORMATION FROM LTS
: -----
: Program Code: 02230
: Status Code: 0
: Fee Category: 7C
: Exp. Date: 20150131
: Fee Comments:
: Decom Fin Assur Reqd: N
:

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: MEDICAL X-RAY CENTER, P.C.
Received Date: 20080331
Docket No: 3033335
Control No.: 471767
License No.: 40-27480-01
Action Type: Amendment

2. FEE ATTACHED

Amount: _____
Check No.: _____

3. COMMENTS

Signed Colleen Murnahan
Date 4-15-08

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /_/_)

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:

Amendment _____
Renewal _____
License _____

3. OTHER _____

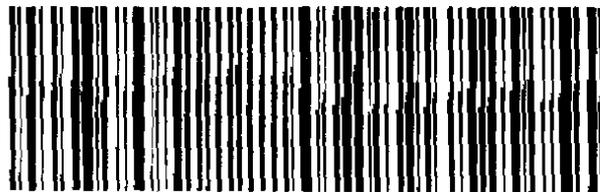
Signed _____
Date _____

FedEx
TRK# 8544 2544 7120
0215

THU - 27 MAR A1
PRIORITY OVERNIGHT

XH FWHA

76011
TX-US
DFW



Emp# 241228 26MAR08 (SDA)

Express

B2

100

FedEx US Airbill
Express

FedEx
Tracking
Number

8544 2544 7120

Recipient's Copy

1 From This portion can be removed for Recipient's records.

Date 3-26-08 FedEx Tracking Number 854425447120

Sender's Name CHARLES CARLIER

Company MEDICAL X-RAY CENTER

Address 1417 S MINNESOTA AVE

City BLOOMINGTON State SD ZIP 57105-1784

2 Your Internal Billing Reference

3 To Recipient's Name WILSON ENGINEERING COMPANY RECEIVING DEPT. Phone 605 952 9400

Company WILSON ENGINEERING COMPANY RECEIVING DEPT.

Recipient's Address 611 RYAN KARA DRIVE SUITE 400

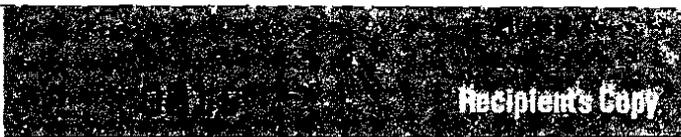
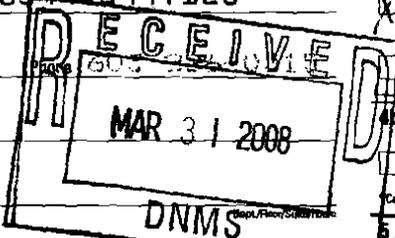
Address

City BLOOMINGTON State TX ZIP 76011-8064

0321654984



8544 2544 7120



4a Express Package Service To add SATURDAY Delivery, see Section 6. Packages up to 150 lbs. ** To most locations.

FedEx Priority Overnight Next business morning.
 FedEx Standard Overnight Next business afternoon.
 FedEx First Overnight Earliest next business morning (delivery to select locations).
 FedEx 2Day Second business day.
 FedEx Express Saver Third business day.
FedEx Envelope rate not available. Minimum charge: One-pound rate.

4b Express Freight Service To add SATURDAY Delivery, see Section 6. Packages over 150 lbs. ** To most locations.

FedEx 1Day Freight* Next business day.
 FedEx 2Day Freight Second business day.
 FedEx 3Day Freight Third business day.
Call for Confirmation: _____

5 Packaging Declared value limit \$500

FedEx Envelope* FedEx Pak* Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak. FedEx Box FedEx Tube Other

6 Special Handling Include FedEx address in Section 3.

SATURDAY Delivery Available ONLY for FedEx Priority Overnight, FedEx 2Day, FedEx 1Day Freight, and FedEx 2Day Freight to select ZIP codes.
 HOLD Weekday at FedEx Location Not available for FedEx First Overnight. Freight to select ZIP codes.
 HOLD Saturday at FedEx Location Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.
 No Yes (see attached Shipper's Declaration) Yes Shipper's Declaration not required. Dry Ice Dry Ice, 6, UN 1845 Cargo Aircraft Only

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below. Obtain Receipt Acct. No.

Sender Acct. No. in Section 1 will be billed. Recipient Third Party Credit Card Cash/Check



Total Packages 1 Total Weight 1.71 Total Charges

*Der. liability is limited to \$100 unless you declare a higher value. See the FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

No Signature Required Package may be left with. Direct Signature Anyone at recipient's address may sign for delivery. Indirect Signature If no one is available at address.

NO POUCH NEEDED. See back for peel and stick application instructions.

RECIPIENT: PEEL HERE

RECIPIENT: PEEL HERE