July 8, 2010

Materials Licensing Branch
U.S. NRC Region III
2443 Warrenville Rd.
Suite 210
Lisle, IL 60532-4352

NRC Representative:

This letter is to request an amendment to U.S. NRC Radioactive Materials License number 24-32517-01. At this time, we wish to:

1. remove Scott Sample, MS, as an authorized medical physicist for Ir-192 high dose rate afterloading services.
2. remove Shalina Gupta-Burt, MD, as an authorized user for all uses of radioactive materials.
3. assign the duties of Radiation Safety Officer to Debabrata Bhaduri, PhD. Dr. Bhaduri was RSO for St. Francis Hospital and Medical Center in Topeka, KS, under KDHE RM license 19-B272-04 from 1984-2004. Attached is a letter accepting the role and responsibilities of the RSO position.
4. add Chris Campen, MS, as an authorized medical physicist for Ir-192 high dose rate afterloading services. Please see the attached form 313A (AMP).

Please direct any questions about this request to myself (see phone number and e-mail address below).

Sincerely,

Brian Wichman, MS
Chief Medical Physicist, RSO
Kansas City Cancer Centers
913-234-0502
brian.wichman@usoncology.com

RECEIVED JUL 13 2010

Memo To: Debabrata Bhaduri, PhD
From: John Hennessy, Executive Director
Subject: Delegation of Authority

You, Debabrata Bhaduri, PhD, have been appointed Radiation Safety Officer and are responsible for ensuring the safe use of radiation. You are responsible for managing the radiation protection program; identifying radiation protection problems; initiating, recommending, or providing corrective actions; verifying implementation of corrective actions; stopping unsafe activities; and ensuring compliance with regulations. You are hereby delegated the authority necessary to meet those responsibilities, including prohibiting the use of licensed material by employees who do not meet the necessary requirements and shutting down operations where justified by radiation safety. You are required to notify management if staff do not cooperate and do not address radiation safety issues. In addition, you are free to raise issues with the regulatory authorities at any time. It is estimated that you will spend 2-5 hours per week conducting radiation protection activities.

I accept the above responsibilities,

Signature of Management Representative

6/10/10
Date

D. Bhaduri
Signature of Radiation Safety Officer

6/10/10
Date

STATE OF KANSAS

RADIOACTIVE MATERIALS LICENSE

Pursuant to the Nuclear Development and Radiation Control Act (L. 1963, Ch. 290) and Kansas Annotated Regulations numbers 28-35-133 through 28-35-363 inclusive, and in reliance on statements and representations made to this agency by the licensee designated below, a license is hereby issued authorizing the licensee to transfer, receive, possess, and use the radioactive material or materials listed below; and to use such materials at the place or places listed below; and to use the material for the purpose or purposes listed below. This license is subject to all applicable rules, regulations, and orders now in effect or placed in effect by the Department of Health and Environment and any conditions specified below.

Amendment No. 28

Licensee		3. License number
1. Name	St. Francis Health Center	19-B272-04
2. Address	1700 West 7th Street Topeka KS 66606	4. Expiration date September 30, 2005
		5. Reference number

6. Radioactive materials (element and mass number)	7. Chemical and/or physical form	8. Maximum quantity licensee may possess at any one time
See Page No. 2	See Page No. 2	See Page No. 2

CONDITIONS

9. Authorized use. (Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.)

A. Any diagnostic procedure listed in Groups I and II, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.

B. Preparation and use of radiopharmaceuticals for any diagnostic procedure listed in Group III, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.

C. and D. Any therapeutic procedure listed in Groups IV and V, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.

A. through D. For preparation and distribution of radiopharmaceuticals including compounding Iodine-131 and redistribution of used and unused Molybdenum-99/Technetium-99m generators to authorized recipients pursuant to Regulation 28-35-181n of the Kansas Radiation Protection Regulations. For preparation and distribution of radiopharmaceuticals and radiochemicals including compounding Iodine-131 and redistribution of used and unused Molybdenum-99/Technetium-99m generators to authorized recipients for non-medical use.

E. Any procedure listed in Group VI, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations **and for distribution to authorized recipients to perform Group VI activities pursuant to Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.**

STATE OF KANSAS

RADIOACTIVE MATERIALS LICENSE

Supplementary Sheet

License number: 19-B272-04

6. Radioactive materials (element and mass number)	7. Chemical and/or physical form	8. Maximum quantity licensee may possess at any one time
A. Any radioactive material listed in Groups I and II, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.	A. Any radiopharmaceutical listed in Groups I and II, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.	A. As necessary for uses authorized in Subitem 9.A.
B. Any radioactive material listed in Group III, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.	B. Any form listed in Group III, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.	B. 24 curies of each radioactive material authorized in Subitem 6.B.
C. Any radioactive material listed in Group IV, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.	C. Any radiopharmaceutical listed in Group IV, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations	C. 500 millicuries of each radioactive material authorized in Subitem 6.C.
D. Any radioactive material listed in Group V, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.	D. Any radiopharmaceutical listed in Group V, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations	D. 1000 millicuries of each radioactive material authorized in Subitem 6.D.
E. Any radioactive material listed in Group VI, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations.	E. Any form listed in Group VI, Schedule D, Regulation 28-35-199a of the Kansas Radiation Protection Regulations	E. 1500 millicuries of each radioactive material authorized in Subitem 6.E.
F. Indium-111	F. Chloride	F. 100 millicuries
G. Iodine-131	G. Monoclonal Anti-B1 Antibody	G. 300 millicuries

RADIOACTIVE MATERIALS LICENSE

Supplementary Sheet License number: 19-B272-04

6. Radioactive materials (element and mass number)	7. Chemical and/or physical form	8. Maximum quantity licensee may possess at any one time
H. Fluorine-18	H. Fluorodeoxyglucose (FDG)	H. 2 curies
I. Gadolinium-153	I. Sealed sources (Gulf Nuclear Model GD-1)	I. No single source to exceed 1.5 curies
J. Strontium-90	J. Sealed source (Bebig Sr0.S03; AEA Technologies SICW series)	J. No single source to exceed 5 millicuries; not to exceed four source trains total
K. Iridium-192	K. Sealed source (Best Industries 81-01)	K. No single source to exceed 33 millicuries; in a three ribbon set not to exceed 6, 10 or 14 sources per ribbon; not to exceed two ribbon sets total
L. Phosphorus-32	L. Sealed source (Guidant GDT P-32 series)	L. No single source to exceed 600 millicuries
M. Iodine-123	M. meta-idobenzylguanidine (MIBG)	M. 30 millicuries
N. Cobalt-57	N. Sealed sources (North American Scientific Model MED3501)	N. No single source to exceed 400 microcuries
O. Cobalt-57	O. Sealed sources (DuPont NES-206, NES-391, NES-8450, NES-8480; Amersham CTR.Q1 series; North American Scientific MED3550, MED3700-MED3749; Isotope Products RV-057, FL series)	O. 75 millicuries total, no single source to exceed 20 millicuries

STATE OF KANSAS

RADIOACTIVE MATERIALS LICENSE

Supplementary Sheet

License number: 19-B272-04

6. Radioactive materials (element and mass number)	7. Chemical and/or physical form	8. Maximum quantity licensee may possess at any one time
P. Strontium-90	P. Sealed sources (Physilalisch-Technische Werkstatten Model PTW-09)	P. No single source to exceed 900 microcuries
Q. Barium-133	Q. Sealed sources (DuPont Model NES-358; North American Scientific Model MED3550)	Q. No single source to exceed 275 microcuries
R. Cesium-137	R. Sealed sources (DuPont Model NES-356; North American Scientific Model MED3550)	R. No single source to exceed 250 microcuries
S. Germanium-68	S. Sealed source (CTI LS series)	S. 31 millicuries total, no single source to exceed 6 millicuries
T. Samarium-153	T. Samarium chloride (DuPont NES-8153)	T. 30 millicuries
U. Yttrium-90	U. Yttrium chloride	U. 110 millicuries
V. Depleted Uranium	V. metal	V. 150 pounds (68 kilograms)

F. To be used in preparation of reagent kits for imaging colorectal, ovarian, prostate or neuroendocrine carcinomas or imaging Non-Hodgkins Lymphoma.

G. For the treatment of non-Hodgkin's lymphoma and other CD20-expressing B-cell malignancies.

H. To be used for diagnostic studies involving imaging and tumor localizations.

I. To be used as a component of a Lunar Radiation Corp. Model DP-3 device for bone mineral analysis.

J. Two source trains to be used in the Novoste Beta-Cath System Model A1000 series transfer devices for intravascular brachytherapy and two source trains to be held in a shipping container for source train replacement.

RADIOACTIVE MATERIALS LICENSE

Supplementary Sheet License number: 19-B272-04

K. One ribbon set to be used in the Cordis Checkmate Catheter System for intravascular brachytherapy and one ribbon set in a shipping container for ribbon set replacement.

L. To be used in a Guidant Galileo Intravascular Brachytherapy (IVB) High Dose Rate Afterloader (HDR) Device for the prevention of arterial restenosis.

M. To be used for neuroendocrine tumor imaging.

N. through T. To be used for instrument calibration and quality control.

U. To be used in the preparation of reagent kits and for instrument calibration and quality control.

V. To be used in industrial products or devices for the purpose of providing a concentrated mass in a small volume of the product or device.

10. Radioactive materials shall only be used at:

511 Northeast 10th Street, Abilene, KS
801 West 4th, Burlington, KS
600 Northwest Washington, Council Grove, KS
100 East Helen, Herington, KS
300 Utah Street, Hiawatha, KS
1110 Columbine, Holton, KS
240 West 18th, Horton, KS
3500 South 4th Street, Leavenworth, KS
120 West 8th Street, Onaga, KS
14th and Oregon, Sabetha, KS
1600 Community Dr., Seneca, KS
634 Mulvane, Suite 201 and 203, Topeka, KS
1700 West 7th Street, Topeka, KS.
5608 South Topeka Boulevard, Unit B, Topeka, KS
711 Genn Dr., Wamego, KS
206 Grand Avenue, St. Mary's, Kansas
221 East 10th Street, Hays, KS

11. The Radiation Safety Officer in this program shall be Debarata Bhaduri, PhD.

12. A. Radioactive material listed in Item 6 above is authorized for use by, or under the supervision of, the following individual(s) for the materials and uses indicated:

Timothy E. Allen, M.D.	Subitems A, B, F, G, H, I and M to V
Phillip Barrett, M.D.	Subitems A, B, F, G, H, I and M to V

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John L. Casteen, M.D.	Subitems A, B, H and M to V Cardiology procedures only
Steven Coon, M.D.	All uses
Thomas J. Doyle, M.D.	Subitems A, B, H and M to V Cardiology procedures only
P.L. Duniven, M.D.	Subitems A, B, F, G, H, I and M to V
David Flatt, M.D.	Subitems A, B, H and M to V Cardiology procedures only
B.A. Franklin, Jr., M.D.	Subitems A, B, F, G, H, I and M to V
Crosby Gernon, M.D.	Subitems A, B, F, G, H, I and M to V
Russell Greene, M.D.	All uses
Alan Gutovitz, M.D.	Subitems A, B, H and M to V Cardiology procedures only
R.C. Harvey, M.D.	Subitems A, B, F, G, H, I and M to V
Johannes Heyns, MB CHB	Subitems A, B, F, G, H, I and M to V
Gilbert Katz, M.D.	Subitems A, B, H and M to V Cardiology procedures only
Judith Kooser, M.D.	All uses
J. Patrick Landes, M.D.	Subitems A, B, F, G, H, I and M to V
W.S. Launey, M.D.	Subitems A to D, F, G, H, I and M to V
Richard Meidinger, M.D.	Subitems A to D, F, G, H, I and M to V
O. Warren Meyer, M.D.	Subitems A, B, H and M to V Cardiology procedures only
Kyle A. Miller, M.D.	Subitems A to D, F, G, H, I and M to V
James W. Owen, M.D.	Subitems A to D, F, G, H, I and M to V
D.C. Peterson, M.D.	Subitems A to D, F, G, H, I and M to V
V.J. Peterson, M.D.	Subitems A to D, F, G, H, I and M to V
Ronald J. Reeb, M.D.	Subitems A to D, F, G, H, I and M to V
Ralph Reymond, M.D.	All uses
Robert Roeder, M.D.	Subitems A, B, H and M to V Cardiology procedures only
Michael Roys, M.D.	Subitems A, B, F, G, H, I and M to V
Thaju Salam, M.D.	Subitems A,B,H, and M to V Cardiology procedures only
Peter E. Schloesser, M.D.	Subitems A to D, F, G, H, I and M to V
Curtis Schworm, M.D.	Subitems A, B, F, G, H, I and M to V
J.W. Snarr, M.D.	Subitems A, B, F, G, H, I and M to V
Terry Wall, M.D.	All uses
James A. Werner, M.D.	Subitems A to C, F, G, H, I and M to V
Kimberly Wherry, M.D.	Subitems A, B, F, G, H, I and M to V

B. Radioactive materials in subitems J, K and L of items 6, 7 and 8 shall be used in the physical presence of an authorized user or a medical physicist.

C. An authorized user shall be available on 24 hour call for emergency consultation to the licensee's clients while services are being performed, and

RADIOACTIVE MATERIALS LICENSE

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D. A Certified Nuclear Medicine Technologist or a qualified registered Radiological Technologist with a minimum of two years of direct supervised experience in Nuclear Medicine shall be physically present at licensee client facilities to perform procedures ordered by the authorized users listed on this license. The Radiological Technologist will demonstrate competency in nuclear medicine procedures, radiation safety, intravenous injections and CPR in accordance with the training guidelines established by the Nuclear Medicine Technologist Certification Board.

13. A. (1) Each sealed source containing radioactive material, other than Hydrogen-3, with a half-life greater than thirty (30) days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, a sealed source received from another person shall not be put into use until tested.

(2) Notwithstanding the periodic leak test required by this condition, any radioactive sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.

(3) The periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within six (6) months prior to the date of use or transfer. Sources in storage shall be physically inventoried every six months and listed in the radioactive materials inventory.

B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcurie and maintained for inspection by the Department.

C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations. A report shall be filed within five (5) days of the test with the Radiation Control Program, Bureau of Air and Radiation, Kansas Department of Health and Environment, Topeka, Kansas, describing the equipment involved, the test results and the corrective action taken.

D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Department, the United States Nuclear Regulatory Commission, or an Agreement State to perform such services.

14. The use of radioactive material in or on humans shall be by a physician.

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15. Sealed sources containing radioactive material shall not be opened.

16. The licensee shall conduct a physical inventory every three (3) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for two years from the date of the inventory for inspection by the Department, and shall include the quantities and kinds of radioactive material, location of sealed sources, and the date of the inventory.

17. A. Licensed material shall be used in accordance with the provisions of K.A.R. 28-35-181m(a)(b),(c) and (d).

B. Licensed material of the types, quantities, and forms specified in K.A.R. 28-35-178h(a) may be used.

18. A. Radiopharmaceuticals dispensed and/or distributed for human use shall be either:

(1) Repackaged from prepared radiopharmaceuticals that are the subject of an FDA-approved "New Drug Application" (NDA) or for which FDA has accepted a "Notice of Claimed Investigational Exemption for a New Drug" (IND), or

(2) Prepared from generators and reagent kits that are the subject of an FDA-approved NDA or for which FDA has accepted an IND, or

(3) PET radiopharmaceuticals for which an NDA or IND is not required and shall fully comply with all USP standards and monographs pertaining to PET drugs.

B. Prepared radiopharmaceuticals for which FDA has accepted an IND and radiopharmaceuticals prepared from generators or reagent kits for which FDA has accepted an IND shall be dispensed and/or distributed:

(1) In accordance with the directions provided by the sponsor of the IND, and

(2) Only to physicians who have been accepted by the sponsor of the IND to participate in clinical evaluation of the drug.

The licensee shall inform, in writing, each physician who participates in an IND evaluation, that the physician is responsible to the sponsor of the IND for use of the drug in accordance with protocols established by the sponsor and for reporting to the sponsor the clinical information obtained through use of the drug.

19. A. The licensee shall perform a test to detect and quantify the activity of Molybdenum-99 contamination in each elution of Technetium-99m from a Molybdenum-99/Technetium-99m generator and in each extraction or separation of Technetium-99m from Molybdenum-99 not contained in a generator.

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B. The licensee shall not distribute for human use Technetium-99m that, at the expiration date and time shown on the package label, contains more than 0.15 microcuries of Molybdenum-99 per millicurie of Technetium-99m or more than five (5) microcurie of Molybdenum-99 per dose of Technetium-99m. The expiration date and time shown on the package label shall be such that the limits above are not exceeded for any single patient dose. The limits for Molybdenum-99 contamination represent maximum values and Molybdenum-99 contamination should be kept as low as reasonably achievable below these limits.

C. The licensee shall establish written procedures for personnel performing tests to detect and quantify Molybdenum-99 contamination. These procedures shall include all necessary calculations and steps to be taken if activities of Molybdenum-99 in excess of the limits specified in Subitem B above are detected.

D. Personnel performing tests to detect and quantify Molybdenum-99 contamination shall be given specific training in performing these tests prior to conducting such tests.

E. (1) The licensee shall maintain for inspection by the Department records of the results of each test performed to detect and quantify Molybdenum-99 contamination and records of training given to personnel performing these tests.

(2) Records described in E(1) above shall be maintained for three (3) years following the performance of the tests and training of personnel.

20. The licensee shall elute generators and process radioactive material with reagent kits in accordance with instructions furnished by the manufacturer on the label attached to or in the leaflet or brochure that accompanies the generator or reagent kit.

21. Reagent kits may be redistributed to persons licensed pursuant to K.A.R. 28-35-181d and K.A.R. 28-35-199a, or under equivalent licenses of Agreement States or the U.S. Nuclear Regulatory Commission, for Group III.

22. Patients containing therapeutic quantities of radiopharmaceuticals shall remain hospitalized until the residual activity is thirty (30) millicuries or less.

23. Patients containing temporary interstitial or brachytherapy implants shall remain hospitalized until surveys made with an appropriate radiation detection instrument indicate all implants have been removed. The results of these surveys shall be recorded and maintained for inspection by the Department.

24. The licensee is authorized to hold radioactive material with a physical half-life of less than 65 days for decay-in-storage before disposal in ordinary trash provided:

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A. Radioactive waste to be disposed of in this manner shall be held for decay a minimum of 10 half-lives.

B. Before disposal as normal waste, radioactive waste shall be surveyed to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.

25. For a period not to exceed sixty (60) days in any calendar year, a visiting physician is authorized to use radioactive material for human use under the terms of this license, provided the visiting physician:

A. Has the prior written permission of the hospital's administrator and its Radiation Safety Committee (Medical Isotopes Committee), and

B. Is specifically named as a user on a United States Nuclear Regulatory Commission and/or an Agreement State license authorizing human use, and

C. Performs only those procedures for which specific authorization has been granted by a United States Nuclear Regulatory Commission and/or an Agreement State license.

The licensee shall maintain for inspection by the Department, copies of written permission specified in Subitems B and C above.

26. Specific requirements for the Cordis Checkmate Intravascular Brachytherapy System:

A. The source ribbons shall not be used after the "use before date."

B. The activity of intravascular brachytherapy sources shall be verified prior to initial use.

27. Specific requirements for the Novoste Beta-Cath Intravascular Brachytherapy System:

A. Prior to each use of the Beta-Cath System on a human subject, a catheter integrity evaluation ("dummy" run) shall be conducted outside of the subject's body to allow the clinician to simulate a clinical procedure with non-radioactive sources.

B. Each intravascular brachytherapy device shall be inspected and serviced at intervals established by the manufacturer. Maintenance and repair shall be performed only by the manufacturer or persons specifically authorized by the Nuclear Regulatory Commission or an Agreement State to perform such services.

RADIOACTIVE MATERIALS LICENSE

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28. Specific requirements for the Guidant Galileo Intravascular Brachytherapy High Dose Rate Afterloader:

A. The licensee shall not cut, splice or alter the source wire in any manner except in emergency situations as determined by properly trained personnel if the source fails to retract to the safe position.

B. The Galileo shall not be used for treatment until QA tests are performed in accordance with the manufacturers instructions.

C. Each intravascular brachytherapy device shall be inspected and serviced at intervals established by the manufacturer. Maintenance and repair shall be performed only by the manufacturer or persons specifically authorized by the Nuclear Regulatory Commission or an Agreement State to perform such services.

D. Radiation surveys made with an appropriate radiation detection instrument shall be performed before and after each procedure to verify the source has returned to safe storage. The results of these surveys shall be recorded and maintained for inspection by the Radiation Control Program, Bureau of Air and Radiation, Kansas Department of Health and Environment.

29. The licensee may transport radioactive material or deliver radioactive material to a carrier for transport, in accordance with the provisions of Kansas Radiation Protection Regulations 28-35-196a, "Preparation of Radioactive Material for Transport".

30. The licensee shall comply with the provisions of Kansas Radiation Protection Regulations, Part 4, "Standards for Protection Against Radiation" and Part 10, "Notices, Instructions and Reports to Workers; Inspections."

31. The licensee shall possess and use radioactive material described in Items 6, 7 and 8 of this license according to the most restrictive of; the Kansas Radiation Protection Regulations, this license or statements, representations, and procedures contained in the following documents:

(a) The letter dated September 12, 2001, signed by Debabrata Bhaduri, Ph.D., Bill Alloy, Doug Druse and Brent Wilkins, with attachment

(b) The letter dated February 5, 2002, signed by Brent D. Wilkins, R.T.(R), CNMT, with attachment.

(c) The electronic mail dated February 28, 2002, from Brent Wilkins, with attachment.

(d) The facsimile dated March 25, 2002, from Brent Wilkins, with attachment.

(e) The letter dated May 7, 2002, signed by Brent D. Wilkins, R.T.(R), CNMT, with attachment.

(f) The electronic mail dated July 15, 2002, from Brent Wilkins.

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(g) The letter dated August 5, 2003, signed by Brent D. Wilkins, R.T.(R), CNMT, with attachment.

(h) The electronic mail dated October 8, 2003, from Brent Wilkins.

(i) **The letter dated January 9, 2004, signed by Brent D. Wilkins, R.T.(R), CNMT, with attachment.**

Date MAR 19 2004

FOR THE STATE DEPARTMENT OF HEALTH AND ENVIRONMENT

By: _____

Thomas A. Conley, CHP
Radiation Control Program

NRC FORM 313A (AMP)
(10-2006)

U.S. NUCLEAR REGULATORY COMMISSION

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION [10 CFR 35.51]

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

Name of Proposed Authorized Medical Physicist

Chris Campen, MS

Requested Authorization(s) (check all that apply)

- ☐ 35.400 Ophthalmic use of strontium-90
- ☐ 35.600 Teletherapy unit(s)
- ☑ 35.600 Remote afterloader unit(s)
- ☐ 35.600 Gamma stereotactic radiosurgery 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. Go to the table in 3.c. 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 Authorized Medical Physicist Seeking Additional Authorization for use(s) checked above**

a. Go to the table in section 3.c. to document training for new device.

b. Skip to and complete Part II Preceptor Attestation

☑ **3. Education, Training, and Experience for Proposed Authorized Medical Physicist**

a. Education: Document master's or doctor's degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university.

Degree	Major Field
MS	Medical Physics
College or University	
University of Wisconsin	

b. Supervised Full-Time Medical Physics Training and Work Experience in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services.

☑ Yes. Completed 1 year of full-time training in medical physics (for areas identified below) under the supervision of Brian Wichman who meets the requirements for an Authorized Medical Physicist.

AND

☑ Yes. Completed 1 year of full-time work experience in medical physics (for areas identified below) under the supervision of Brian Wichman who meets the requirements for an Authorized Medical Physicist.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

b. Supervised Full-Time Medical Physics Training and Work Experience (continued)

If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.

Description of Training/ Experience	Location of Training/License or Permit Number of Training Facility/Medical Devices Used+	Dates of Training*	Dates of Work Experience*
Medical Physics	University of Wisconsin, Madison, WI	08/2007 - 12/2008	
Performing sealed source leak tests and inventories	University of Wisconsin, Madison, WI	08/2007 - 12/2008	
Performing decay corrections	University of Wisconsin, Madison, WI	08/2007 - 12/2008	
Performing full calibration and periodic spot checks of external beam treatment unit(s)	University of Wisconsin, Madison, WI	08/2007 - 12/2008	
Performing full calibration and periodic spot checks of stereotactic radiosurgery unit(s)			
Performing full calibration and periodic spot checks of remote afterloading unit(s)			
Conducting radiation surveys around external beam treatment unit(s), sterotactic radiosurgery unit(s), remote after loading unit(s)	University of Wisconsin, Madison, WI	08/2007 - 12/2008	

Supervising Individual**	License/Permit Number listing supervising individual as an authorized Medical Physicist
Bruce Thomadsen, PhD	Wisconsin 25-1323-01

for the following types of use:

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

\+ Training and work experience must be conducted in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services.

* 1 year of Full-time medical physics training and 1 year of full time work experience cannot be concurrent.

** If the supervising medical physicist is not an authorized medical physicist, the licensee must submit evidence that the supervising medical physicist meets the training and experience requirements in 10 CFR 35.51 and 35.59 for the types of use for which the individual is seeking authorization.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

b. Supervised Full-Time Medical Physics Training and Work Experience (continued)

If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.

Description of Training/ Experience	Location of Training/License or Permit Number of Training Facility/Medical Devices Used+	Dates of Training*	Dates of Work Experience*
Medical Physics	Kansas City Cancer Center, Overland Park, KS, and Kansas City, MO		07/2009 - 07/2010
Performing sealed source leak tests and inventories	Kansas City Cancer Center, Overland Park, KS, and Kansas City, MO		07/2009 - 07/2010
Performing decay corrections	Kansas City Cancer Center, Overland Park, KS, and Kansas City, MO		07/2009 - 07/2010
Performing full calibration and periodic spot checks of external beam treatment unit(s)	Kansas City Cancer Center, Overland Park, KS, and Kansas City, MO		07/2009 - 07/2010
Performing full calibration and periodic spot checks of stereotactic radiosurgery unit(s)			
Performing full calibration and periodic spot checks of remote afterloading unit(s)	Kansas City Cancer Center, Overland Park, KS, and Kansas City, MO		07/2009 - 07/2010
Conducting radiation surveys around external beam treatment unit(s), sterotactic radiosurgery unit(s), remote after loading unit(s)	Kansas City Cancer Center, Overland Park, KS, and Kansas City, MO		07/2009 - 07/2010

Supervising Individual**	License/Permit Number listing supervising individual as an authorized Medical Physicist
Brian Wichman, MS	Kansas 19-C818 NRC 24-32517-01

for the following types of use:

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

\+ Training and work experience must be conducted in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services.

* 1 year of Full-time medical physics training and 1 year of full time work experience cannot be concurrent.

** If the supervising medical physicist is not an authorized medical physicist, the licensee must submit evidence that the supervising medical physicist meets the training and experience requirements in 10 CFR 35.51 and 35.59 for the types of use for which the individual is seeking authorization.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

c. 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
Hands-on device operation	Kansas City Cancer Center 07/2009 - 07/2010		
Safety procedures for the device use	Kansas City Cancer Center 07/2009 - 07/2010 Nucletron Corporation, 07/2009		
Clinical use of the device	Kansas City Cancer Center 07/2009 - 07/2010		
Treatment planning system operation	Kansas City Cancer Center 07/2009 - 07/2010		

Supervising Individual *If training is provided by Supervising Medical Pysicist, (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)*	License/Permit Number listing supervising individual as an authorized Medical Physicist
Brian Wichman, MS	Kansas 19-C818 NRC 24-32517-01

for the following types of use:

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

If Applicable:

Authorization Sought	Device	Training Provided By	Dates of Training
35.400 Ophthalmic Use of strontium-90			

d. Skip to and complete Part II Preceptor Attestation.

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(10-2006)

AUTHORIZED MEDICAL PHYSICIST 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:

1. Board Certification

☐ I attest that _____ has satisfactorily completed the requirements in
Name of Proposed Authorized Medical Physicist

10 CFR 35.51(a)(1) and (a)(2).

OR

2. Education, Training, and Experience

☑ I attest that Chris Campen, MS has satisfactorily completed the 1-year of full-time
Name of Proposed Authorized Medical Physicist

training in medical physics and an additional year of full-time work experience as required by 10 CFR 35.51(b)(1).

AND

Second Section
Complete the following:

☑ I attest that Chris Campen, MS has training for the types of use for which authorization
Name of Proposed Authorized Medical Physicist

is sought that include hands-on device operation, safety procedures, clinical use, and the operation of a treatment planning system.

AND

Third Section
Complete the following:

☑ I attest that Chris Campen, MS has achieved a level of competency sufficient to
Name of Proposed Authorized Medical Physicist

function independently as an Authorized Medical Physicist for the following:

☐ 35.400 Ophthalmic use of strontium-90 ☐ 35.600 Teletherapy unit(s)
☑ 35.600 Remote afterloader unit(s) ☐ 35.600 Gamma stereotactic radiosurgery unit(s)

AND

Fourth Section
Complete the following for preceptor attestation and signature:

☑ I meet the requirements in 10 CFR 35.51, or equivalent Agreement State requirements for Authorized Medical Physicist for the following:

☐ 35.400 Ophthalmic use of strontium-90 ☐ 35.600 Teletherapy unit(s)
☑ 35.600 Remote afterloader unit(s) ☐ 35.600 Gamma stereotactic radiosurgery unit(s)

Name of Preceptor	Signature	Telephone Number	Date
Brian Wichman		913-234-0502	7/8/2010

License/Permit Number/Facility Name
Kansas 19-C818, NRC 24-32517-01 Kansas City Cancer Center

Kansas City Cancer Center - South
1000 E 101st Terrace
Kansas City MO 64131

Materials Licensing Branch
US NRC Region III
2443 Warrenville Rd
Suite 210
Lisle, IL 60532-4352