

January 8, 1986

U. S. Nuclear Regulatory Commission
Radioisotopes Licensing Section
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Re: Amendment to our NRC Radioactive Materials License #48-24379-01

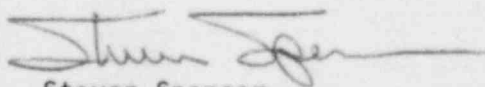
Gentlemen:

We request amendment to our NRC Radioactive Materials License #48-24379-01 for the following:

1. Add: Jonathan G. Reed, M.D. as physician user for Groups I, II, III, IV, I-131 for treatment of thyroid carcinoma, and Xenon-133. Attached are Dr. Reed's Training and Experience Statements. Also attached is Nebraska's Department of Health Radioactive Material License copy granting authorization to Dr. Reed to use radioactive materials.
2. Delete: Dr. Douglas Bricker, as a physician user on our license.
3. See attached sheet for change of calibration services.

We trust the information contained herein is sufficient to grant our request for amendment and look forward to receipt of that document. Enclosed is our check for \$120 to cover amendment processing fee.

Sincerely,


Steven Spencer
Administrator

:amw

Applicant	<i>Jan 14 1986</i>
Check No.	<i>15438 \$120</i>
Amount/Fee Category	<i>75</i>
Type of Fee	<i>and</i>
Date Check Rec'd	<i>1/19/86</i>
Received By	<i>[Signature]</i>

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REG3 LIC30
48-243796-01 PDR

CONTROL NO. 80481

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REGION III

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waupun memorial hospital • 620 west brown street
waupun, wisconsin 53963 • area code 414 324-5581

CALIBRATION OF INSTRUMENTS

a). Survey Meter:

The survey meters will be calibrated at least annually, and after repairs, by any firm that is approved by the NRC for such calibrations. Instruments will be calibrated on at least two points on each scale range. Currently, our calibration service firm is Stan A. Huber Consultants, Inc., of New Lenox, Illinois, whose radiation sources and procedures are on file with the NRC under license #12-17503-01.

The licensee shall perform operational constancy checks on survey instruments before each day's use to ensure proper functioning of the devices. For any infrequently used meters, these reference source operational checks shall be taken at least quarterly, per NRC Regulatory Guide 10.8 (October 1980) Appendix D, Section 1, Item B.

b). Dose Calibrators:

We shall follow the calibration methods and frequencies for dose calibrators as defined in NRC Regulatory Guide 10.8, dated October 1980, Appendix D, Section 2, "Methods for Calibration of Dose Calibrator".

For the linearity test, we will use a vial of Tc99m whose activity is equivalent to the maximum anticipated activity to be assayed. For the accuracy test, Stan A. Huber Consultants, Inc., of New Lenox, Illinois, or other licensed calibration firms, will use the following sources under the authority of their NRC license:

Model NES-356, 200 microcuries of Cs-137 (high energy)

Model NES-352, 1 millicurie of Co-57 (low energy)

Model NES-358, 250 microcuries of Ba-133 (medium energy)

We use a NEN Model NES-356 Cs-137 standard, 200 microcuries, for our day-of-use dose calibrator constancy checks. Records of all tests and checks will be maintained.

We request use of the "Calicheck" (CaliCorp) system or "Lineator" system (Atomic Products) as an alternate method of performing dose calibrator quarterly linearity checks. The product certifications for those devices are on file with the NRC.

RADIOACTIVE MATERIAL LICENSE
supplemental sheet

License Number 05-02-01

Amendment No. 10

Memorial Hospital of Dodge County
450 East 23rd Street
Fremont, NE 68025

In accordance with applications dated June 29, 1984 and August 22, 1984 signed by Vincent J. O'Connor, Jr., President and letters dated July 27, 1984, August 24, 1984, November 8, 1984, November 29, 1984 and December 18, 1984 signed by Raymond J. Grote, Radioactive Material License No. 05-02-01 is amended to read as follows:

6. Radioactive Materials
(element & mass no.)

P. Phosphorus 32

7. Chemical and/or
physical form

P. Colloidal Chromic
Phosphate

8. Maximum quantity licensee
may possess at any one time

P. 300 millicuries

9. Authorized Use:

P. For intracavitary treatment of malignant effusions.

12. Radioactive material listed in Item 6 is authorized for use by, or under the supervision of the following individuals for the materials and uses as indicated:

A. Duane W. Krause, M.D.

A through O.

B. Delete

C. Mark C. Johannsen, M.D.

A and D through O.

D. Jonathan G. Reed, M.D.

A through P.

18. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 6, 7 and 8 of this license in accordance with statements, representations and procedures contained in application dated April 24, 1981, letter dated September 24, 1981, application dated October 8, 1981, letters dated October 18, 1981, December 4, 1981, May 13, 1982, August 10, 1982 and form dated February 6, 1984 signed by Raymond J. Grote and applications dated June 29, 1984 and August 22, 1984 and letters dated July 27, 1984, August 24, 1984, November 8, 1984, November 29, 1984 and December 18, 1984. The Nebraska Regulations for Control of Radiation shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.

FOR THE NEBRASKA DEPARTMENT OF HEALTH:

by

Gregory Wright M.D.
DIRECTOR OF HEALTH

J. Ellen Sammons
DIVISION OF RADIOLOGICAL HEALTH

Date January 4, 1985

NRH-5A (MEDICAL) (7-79)	NEBRASKA DEPARTMENT OF HEALTH APPLICATION FOR MATERIAL LICENSE — MEDICAL	
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INSTRUCTIONS — Complete Items 1 through 26 if this is an initial application or an application for renewal of a license. Use supplemental sheets where necessary. Item 26 must be completed on all applications and signed. Retain one copy. Submit original and one copy of entire application to: Nebraska Department of Health, Division of Radiological Health, 301 Centennial Mall South, P.O. Box 95007, Lincoln, Nebraska 68509. Upon approval of this application, the applicant will receive a Radioactive Materials License. A Radioactive Materials License is issued in accordance with the requirements contained in Nebraska's Regulations for the Control of Radiation and the Nebraska Radiation Control Act.

1.a. NAME AND MAILING ADDRESS OF APPLICANT (institution, firm, clinic, physician, etc.) INCLUDE ZIP CODE Jonathan Reed, M.D. Department of Radiology Memorial Hospital of Dodge County 450 East 23rd Street Fremont, Nebraska 68025 TELEPHONE NO.: AREA CODE (402) 721 1610	1.b. STREET ADDRESS(ES) AT WHICH RADIOACTIVE MATERIAL WILL BE USED (If different from 1.a.) INCLUDE ZIP CODE (Same as 1a)
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2. PERSON TO CONTACT REGARDING THIS APPLICATION Duane W. Krause, M.D. TELEPHONE NO.: AREA CODE (402) 721 3070	3. THIS IS AN APPLICATION FOR: (Check appropriate item) a. <input type="checkbox"/> NEW LICENSE b. <input checked="" type="checkbox"/> AMENDMENT TO LICENSE NO. 05-02-01 c. <input type="checkbox"/> RENEWAL OF LICENSE NO.
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4. INDIVIDUAL USERS (Name individuals who will use or directly supervise use of radioactive material. Complete NRH-5A Supplement A and B for each individual.) Duane W. Krause, M.D. Radioactive Material License #05-02-01 Expiration Date: January 31, 1986	5. RADIATION SAFETY OFFICER (RSO) (Name of person designated as radiation safety officer. If other than individual user, complete resume of training and experience as in Supplement A.) Radiation Safety Officer Duane W. Krause, M.D.
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6.a. RADIOACTIVE MATERIAL FOR MEDICAL USE

RADIOACTIVE MATERIAL LISTED IN:	ITEMS DESIRED "X"	MAXIMUM POSSESSION LIMITS (In millicuries)	ADDITIONAL ITEMS:	MARK ITEMS DESIRED "X"	MAXIMUM POSSESSION LIMITS (In millicuries)
NRCR C. 22(ii) FOR IN VITRO STUDIES			IODINE-131 AS IODIDE FOR TREATMENT OF HYPERTHYROIDISM	X	300 mCi
NRCR PART C, SCHEDULE C, GROUP I	X	AS NEEDED	PHOSPHORUS-32 AS SOLUBLE PHOSPHATE FOR TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA AND BONE METASTASES	X	300 mCi
NRCR PART C, SCHEDULE C, GROUP II	X	AS NEEDED	PHOSPHORUS-32 AS COLLOIDAL CHROMIC PHOSPHATE FOR INTRACAVITARY TREATMENT OF MALIGNANT EFFUSIONS.	X	300 mCi
NRCR PART C, SCHEDULE C, GROUP III	X	6,000 mCi	GOLD-198 AS COLLOID FOR INTRACAVITARY TREATMENT OF MALIGNANT EFFUSIONS.		
NRCR PART C, SCHEDULE C, GROUP IV		AS NEEDED	IODINE-131 AS IODIDE FOR TREATMENT OF THYROID CARCINOMA	X	300 mCi
NRCR PART C, SCHEDULE C, GROUP V		AS NEEDED	XENON-133 AS GAS OR GAS IN SALINE FOR BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES	X	300 mCi
NRCR PART C, SCHEDULE C, GROUP VI					

6.b. RADIOACTIVE MATERIAL FOR USES NOT LISTED IN ITEM 6.a. (Sealed sources up to 3 mCi used for calibration and reference standards are authorized under Section C.26. (c)(4), list below.)

ELEMENT AND MASS NUMBER	CHEMICAL AND/OR PHYSICAL FORM	MAXIMUM NUMBER OF MILLICURIES OF EACH FORM	DESCRIBE PURPOSE OF USE

CONTROL NO. 80481

INFORMATION REQUIRED FOR ITEMS 7 THROUGH 23

For items 7 through 23, check the appropriate box(es) and submit a detailed description of all the requested information. Begin each item on a separate sheet. Identify the item number and the date of the application in the lower right corner of each page. If you indicate that an appendix to the medical licensing guide will be followed, do not submit the pages, but specify the revision number and date of the referenced guide: Guide for the Preparation of Applications for Medical Programs

Rev. _____ Date: _____

7. MEDICAL ISOTOPES COMMITTEE		15. GENERAL RULES FOR THE SAFE USE OF RADIOACTIVE MATERIAL (Check One)	
<input type="checkbox"/>	Names and Specialties Attached; and	<input type="checkbox"/>	Appendix G Rules Followed; or
<input type="checkbox"/>	Duties as in Appendix B; or _____ (Check One)	<input type="checkbox"/>	Equivalent Rules Attached
<input type="checkbox"/>	Equivalent Duties Attached	16. EMERGENCY PROCEDURES (Check One)	
8. TRAINING AND EXPERIENCE		<input type="checkbox"/>	Appendix H Procedures Followed; or
<input type="checkbox"/>	Supplements A & B Attached for Each Individual User; and	<input type="checkbox"/>	Equivalent Procedures Attached
<input type="checkbox"/>	Supplement A Attached for RSO.	17. AREA SURVEY PROCEDURES (Check One)	
9. INSTRUMENTATION (Check One)		<input type="checkbox"/>	Appendix I Procedures Followed; or
<input type="checkbox"/>	Appendix C Form Attached; or	<input type="checkbox"/>	Equivalent Procedures Attached
<input type="checkbox"/>	List by Name and Model Number	18. WASTE DISPOSAL (Check One)	
10. CALIBRATION OF INSTRUMENTS		<input type="checkbox"/>	Appendix J Form Attached; or
<input type="checkbox"/>	Appendix D Procedures Followed for Survey Instruments; or _____ (Check One)	<input type="checkbox"/>	Equivalent Information Attached
<input type="checkbox"/>	Equivalent Procedures Attached; and	19. THERAPEUTIC USE OF RADIOPHARMACEUTICALS (Check One)	
<input type="checkbox"/>	Appendix D Procedures Followed for Dose Calibrator; or _____ (Check One)	<input type="checkbox"/>	Appendix K Procedures Followed; or
<input type="checkbox"/>	Equivalent Procedures Attached	<input type="checkbox"/>	Equivalent Procedures Attached
11. FACILITIES AND EQUIPMENT		20. THERAPEUTIC USE OF SEALED SOURCES	
<input type="checkbox"/>	Description and Diagram Attached	<input type="checkbox"/>	Detailed Information Attached; and
12. PERSONNEL TRAINING PROGRAM		<input type="checkbox"/>	Appendix L Procedures Followed; or _____ (Check One)
<input type="checkbox"/>	Description of Training Attached	<input type="checkbox"/>	Equivalent Procedures Attached
13. PROCEDURES FOR ORDERING AND RECEIVING RADIOACTIVE MATERIAL		21. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE GASES (e.g., Xenon - 133)	
<input type="checkbox"/>	Detailed Information Attached	<input type="checkbox"/>	Detailed Information Attached
14. PROCEDURES FOR SAFELY OPENING PACKAGES CONTAINING RADIOACTIVE MATERIALS (Check One)		22. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE MATERIAL IN ANIMALS	
<input type="checkbox"/>	Appendix F Procedures Followed; or	<input type="checkbox"/>	Detailed Information Attached
<input type="checkbox"/>	Equivalent Procedures Attached	23. PROCEDURES AND PRECAUTIONS FOR USE OF RADIOACTIVE MATERIAL SPECIFIED IN ITEM 6.b	
<input type="checkbox"/>		<input type="checkbox"/>	Detailed Information Attached

TYPE (Check appropriate box)			24. PERSONNEL MONITORING DEVICES	
			SUPPLIER	EXCHANGE
a. WHOLE BODY	<input type="checkbox"/>	FILM		
	<input type="checkbox"/>	TLD		
	<input type="checkbox"/>	OTHER (Specify)		
b. FINGER	<input type="checkbox"/>	FILM		
	<input type="checkbox"/>	TLD		
	<input type="checkbox"/>	OTHER (Specify)		
c. WRIST	<input type="checkbox"/>	FILM		
	<input type="checkbox"/>	TLD		
	<input type="checkbox"/>	OTHER (Specify)		
d. OTHER (Specify)				

25. FOR PRIVATE PRACTICE APPLICANTS ONLY

a. HOSPITAL AGREEING TO ACCEPT PATIENTS CONTAINING RADIOACTIVE MATERIAL

NAME OF HOSPITAL _____

MAILING ADDRESS _____

CITY _____

STATE _____ ZIP CODE _____

b. ATTACH A COPY OF THE AGREEMENT LETTER SIGNED BY THE HOSPITAL ADMINISTRATOR.

c. WHEN REQUESTING THERAPY PROCEDURES, ATTACH A COPY OF RADIATION SAFETY PRECAUTIONS TO BE TAKEN AND LIST AVAILABLE RADIATION DETECTION INSTRUMENTS.

26. CERTIFICATE

(This item must be completed by applicant)

The applicant and any official executing this certificate on behalf of the applicant named in Item 1a certify that this application is prepared in conformity with Nebraska Regulations for Control of Radiation and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

a. APPLICANT OR CERTIFYING OFFICIAL (Signature)

Vincent J. O'Connor, Jr. x

(1) NAME (Type or Print)

President, Memorial Hospital of Dodge County

(2) TITLE

June 29, 1984

b. DATE

NRH - 5A (MEDICAL)
(7-79)

CONTROL NO. 80481

PRECEPTOR STATEMENT

Supplement B must be completed by the applicant physician's preceptor. If more than one preceptor is necessary to document experience, obtain a separate statement from each.

1. APPLICANT PHYSICIAN'S NAME AND ADDRESS

FULL NAME

Jonathan G. Reed, M.D.

STREET ADDRESS

1307 Dakota

CITY

Fremont

STATE

Nebr

ZIP CODE

68025

KEY TO COLUMN C

PERSONAL PARTICIPATION SHOULD CONSIST OF:

1-Supervised examination of patients to determine the suitability for radioisotope diagnosis and/or treatment and recommendation for prescribed dosage.

2-Collaboration in dose calibration and actual administration of dose to the patient including calculation of the radiation dose, related measurements and plotting of data.

3-Adequate period of training to enable physician to manage radioactive patients and follow patients through diagnosis and/or course of treatment.

2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN

ISOTOPE	CONDITIONS DIAGNOSED OR TREATED	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION	COMMENTS (Additional information or comments may be submitted in duplicate on separate sheets.)
A	B	C	D
I-131 or I-125	DIAGNOSIS OF THYROID FUNCTION	42	
	DETERMINATION OF BLOOD AND BLOOD PLASMA VOLUME	--	
	LIVER FUNCTION STUDIES	--	
	FAT ABSORPTION STUDIES	--	
	KIDNEY FUNCTION STUDIES	--	
	IN VITRO STUDIES	--	
OTHER			
I-125	DETECTION OF THROMBOSIS	--	
I-131	THYROID IMAGING	--	
P-32	EYE TUMOR LOCALIZATION	--	
Sr-75	PANCREAS IMAGING	--	
Yb-169	CISTERNOGRAPHY	--	
Xe-133	BLOOD FLOW STUDIES AND PULMONARY FUNCTION STUDIES	--	
OTHER			
Tc-99m	BRAIN IMAGING	32	
	CARDIAC IMAGING	248	
	THYROID IMAGING	79	
	SALIVARY GLAND IMAGING	2	
	BLOOD POOL IMAGING	23	
	PLACENTA LOCALIZATION	--	
	LIVER AND SPLEEN IMAGING	213	
	LUNG IMAGING	139	
	BONE IMAGING	270	
OTHER			

PRECEPTOR STATEMENT (Continued)

2. CLINICAL TRAINING AND EXPERIENCE OF ABOVE NAMED PHYSICIAN (Continued)

ISOTOPE A	CONDITIONS DIAGNOSED OR TREATED B	NUMBER OF CASES INVOLVING PERSONAL PARTICIPATION C	COMMENTS (Additional information or comments may be submitted in duplicate on separate sheets.) D
P-32 (Soluble)	TREATMENT OF POLYCYTHEMIA VERA, LEUKEMIA, AND BONE METASTASES	3	We have no generators at St. Joseph's because all our isotopes are sup- plied from the radiopharmacy by unit dose. However, I have spent time at the radiopharmacy in addi- tion to my formal training hours at Milwaukee County Medical Center and St. Joseph's Hospital
P-32 (Colloidal)	INTRACAVITARY TREATMENT	3	
I-131	TREATMENT OF THYROID CARCINOMA	3	
	TREATMENT OF HYPERTHYROIDISM	40	
Au-198	INTRACAVITARY TREATMENT	---	
Co-60 or Cs-137	INTERSTITIAL TREATMENT	---	
	INTRACAVITARY TREATMENT	---	
I-125 or Ir-192	INTERSTITIAL TREATMENT	---	
Co-60 or Cs-137	TELE THERAPY TREATMENT	---	
Sr-90	TREATMENT OF EYE DISEASE	---	
	RADIOPHARMACEUTICAL PREPARATION	---	
Mo-99/ Tc-99m	GENERATOR	6	
Sn-113/ In-113m	GENERATOR	---	
Tc-99m	REAGENT KITS	3	
Other			

3. DATES AND TOTAL NUMBER OF HOURS RECEIVED IN CLINICAL RADIOISOTOPE TRAINING

July, 1981 to July, 1984
Total Hours = 526

4. THE TRAINING AND EXPERIENCE INDICATED ABOVE WAS OBTAINED UNDER THE SUPERVISION OF:

a. NAME OF SUPERVISOR

John P. Matsis, M.D.

b. NAME OF INSTITUTION

St. Joseph's Hospital

c. MAILING ADDRESS

5000 West Chambers

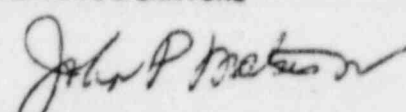
d. CITY

Milwaukee, Wisconsin 53210

5. MATERIALS LICENSE NUMBER(S)

48-00537-03

6. PRECEPTOR'S SIGNATURE

X 

7. PRECEPTOR'S NAME (Please type or print)

John P. Matsis, M.D.

8. DATE

X 11/15/84

TRAINING AND EXPERIENCE AUTHORIZED USER OR RADIATION SAFETY OFFICER

1. NAME OF AUTHORIZED USER OR RADIATION SAFETY OFFICER Jonathon Reed, M.D.	2. THE USING PHYSICIAN IS LICENSED TO DISPENSE DRUGS IN THE PRACTICE OF MEDICINE IN NEBRASKA. YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
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3. CERTIFICATION		
SPECIALTY BOARD A	CATEGORY B	MONTH AND YEAR CERTIFIED C
Radiology		Successfully completed written Boards October, 1983. To take oral Boards June, 1985.

4. TRAINING RECEIVED IN BASIC RADIOISOTOPE HANDLING TECHNIQUES			
FIELD OF TRAINING A	LOCATION AND DATE(S) OF TRAINING B	TYPE AND LENGTH OF TRAINING	
		LECTURE/ LABORATORY COURSES (Hours) C	SUPERVISED LABORATORY EXPERIENCE (Hours) D
a. RADIATION PHYSICS AND INSTRUMENTATION	Milwaukee County Hospital 9-81 to 9-83	64 hours	6 hours
b. RADIATION PROTECTION	Milwaukee County Hospital 9-81 to 9-83	64 hours	
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	Milwaukee County Hospital 9-81 to 9-83	64 hours	
d. RADIATION BIOLOGY	Milwaukee County Hospital 9-81 to 9-83	16 hours	
e. RADIOPHARMACEUTICAL CHEMISTRY	Milwaukee County Hospital 9-81 to 6-82 & 9-82 to 9-83	32 hours	

5. EXPERIENCE WITH RADIATION. (Actual use of Radioisotopes or Equivalent Experience)				
ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
Please see pages 5 and 6 for Preceptor Statement.				
CONTROL NO. 80481				