

MATERIALS LICENSE

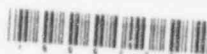
Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 39, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee		In accordance with letter dated November 20, 1996	
1. Deaconess Hospital		3. License number 35-21106-01 is amended in its entirety to read as follows:	
2. 5501 North Portland Oklahoma City, Oklahoma 73112-2097		4. Expiration date February 28, 2005	
		5. Docket or Reference No 030-19776	
6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license	
A. Any byproduct material identified in 10 CFR 35.100	A. Any radiopharmaceutical identified in 10 CFR 35.100	A. As needed	
B. Any byproduct material identified in 10 CFR 35.200	B. Any radiopharmaceutical identified in 10 CFR 35.200 (except aerosols)	B. As needed	
C. Any byproduct material identified in 10 CFR 35.300	C. Any radiopharmaceutical identified in 10 CFR 35.300	C. As needed	
D. Any byproduct material identified in 10 CFR 35.400	D. Any brachytherapy source identified in 10 CFR 35.400	D. As needed	
E. Any byproduct material identified in 10 CFR 31.11	E. Prepackaged Kits	E. As needed	

9. Authorized use

- A. Medical use described in 10 CFR 35.100.
- B. Medical use described in 10 CFR 35.200.
- C. Medical use described in 10 CFR 35.300.
- D. Medical use described in 10 CFR 35.400 and, for cesium-137, calibration of licensee's survey meters and personnel dosimeters.
- E. In vitro studies.

230030

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PDR ADOCK 03019776
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MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

35-21106-01

Docket or Reference Number

030-19776

Amendment No. 08

CONDITIONS

10. Location of use: 5501 North Portland, Oklahoma City, Oklahoma.
11. Radiation Safety Officer: Xiaolin Shi, M.S.
12. Authorized Users:
 - A. Richard B. Price, M.D., for material identified in 10 CFR 35.100, 35.200, 35.300, and 31.11.
 - B. Harold Davidson, M.D., for material identified in 10 CFR 35.100, 35.200, 35.300, and 31.11.
 - C. Gary G. Roberts, M.D., for material identified in 10 CFR 35.100, 35.200, 35.300, and 31.11.
 - D. William R. Albracht, M.D., for material identified in 10 CFR 35.100, 35.200, 35.300, and 31.11.
 - E. Jay A. Harolds, M.D., for material identified in 10 CFR 35.100, 35.200, 35.300, and 31.11.
 - F. Roger B. Collins, M.D., for material identified in 10 CFR 35.100, 35.200, 35.300, and 31.11.
 - G. Ralf Taupmann, M.D., for material identified in 10 CFR 35.100, 35.200, 35.300, and 31.11.
 - H. Carol Yates, M.D., for material identified in 10 CFR 35.100, 35.200, 35.300, and 31.11.
 - I. Georgianne Snowden, M.D., for material identified in 10 CFR 35.100, 35.200, 35.300, and 31.11.
 - J. G. Ben Carter, M.D., for material identified in 10 CFR 35.100, 35.200, 35.300, and 31.11.
 - K. John R. Owen, M.D., for material identified in 10 CFR 35.100, 35.200, 35.300, and 31.11.
 - L. John A. Owen, M.D., for material identified in 10 CFR 35.100, 35.200, and 31.11.
 - M. Francis P. Cassidy, Jr., M.D., for material identified in 10 CFR 35.100, 35.200, and 31.11.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

35-21106-01

Docket or Reference Number

030-19776

Amendment No. 08

12. (Continued)

- N. Walter J. Milton, M.D., for material identified in 10 CFR 35.100, 35.200, 35.300, and 31.11.
- O. John R. Taylor, M.D., for material identified in 10 CFR 35.300, 35.400, and 31.11.
- P. Santosh Prabhu, M.D., for material identified in 10 CFR 35.200 for cardiovascular clinical procedures.
- Q. Clinton A. Medbery, III, M.D., for material identified in 35.300, 35.400, and 31.11.
- R. Astrid E. Morrison, M.D., for material identified in 35.300, 35.400, and 35.11.

13. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.

14. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below, except for minor changes in the medical use radiation safety procedures as provided in 10 CFR 35.31. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

- A. Application dated June 25, 1993
- B. Letter dated August 5, 1994
- C. Facsimile dated October 28, 1994, excluding Quality Management Program
- D. Letter dated December 27, 1994
- E. Letter dated February 2, 1995
- F. Facsimile dated February 9, 1995
- G. Letter dated November 20, 1996

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date FEB 25 1997

By

Vivian H. Campbell

Vivian H. Campbell
Nuclear Materials Licensing Branch
Region IV
Arlington, Texas 76011

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

35-21106-01

Docket or Reference Number

030-19776

Amendment No. 08

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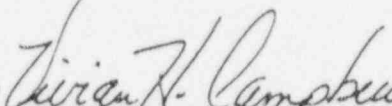
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FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date FEB 25 1997

By



Vivian H. Campbell
Nuclear Materials Licensing Branch
Region IV
Arlington, Texas 76011



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

February 25, 1997

Deaconess Hospital
ATTN: Paul Dougherty
5501 North Portland
Oklahoma City, Oklahoma 73112-2097

SUBJECT: LICENSE AMENDMENT

Please find enclosed License No. 35-21106-01. You should review this license carefully and be sure that you understand all conditions. If you have any questions, you may contact the reviewer who signed your license at 817-860-8143.

NRC expects licensees to conduct their programs with meticulous attention to detail and a high standard of compliance. Because of the serious consequences to employees and the public which can result from failure to comply with NRC requirements, you must conduct your program involving radioactive materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers: Inspection and Investigations," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Possess radioactive material only in the quantity and form indicated in your license.
3. Use radioactive material only for the purpose(s) indicated in your license.
4. Notify NRC in writing of any change in mailing address (no fee required if the location of radioactive material remains the same).
5. Request and obtain written NRC consent before transferring your license or any right thereunder, either voluntarily or involuntarily, directly or indirectly, through transfer of control of your license to any person or entity. A transfer of control of your license includes not only a total change of ownership, but also a change in the controlling interest in your company whether it is a corporation, partnership, or other entity. In addition, appropriate license amendments must be requested and obtained for any other planned changes in your facility or program that are contrary to your license or contrary to representations made in your license application, as well as supplemental correspondence thereto, which are incorporated into your license. A license fee may be charged for the amendments if you are not in a fee-exempt category.

6. Maintain in a single document decommissioning records that have been certified for completeness and accuracy listing all the following items applicable to the license:
 - Onsite areas designated or formerly designated as restricted areas as defined in 10 CFR 20.3(a)(14) or 20.1003.
 - Onsite areas, other than restricted areas, where radioactive materials in quantities greater than amounts listed in Appendix C to 10 CFR 20.1001-20.2401 have been used, possessed, or stored.
 - Onsite areas, other than restricted areas, where spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site have occurred that required reporting pursuant to 10 CFR 30.50(b)(1) or (b)(4), including areas where subsequent cleanup procedures have removed the contamination.
 - Specific locations and radionuclide contents of previous and current burial areas within the site, excluding radioactive material with half-lives of 10 days or less, depleted uranium used only for shielding or as penetrators in unused munitions, or sealed sources authorized for use at temporary job sites.
 - Location and description of all contaminated equipment involved in licensed operations that is to remain onsite after license termination.
7. Submit a complete renewal application with proper fee, or termination request at least 30 days before the expiration date on your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of radioactive material after your license expires is a violation of NRC regulations.
8. Request termination of your license if you plan to permanently discontinue activities involving radioactive material.

You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation; imposition of a civil penalty; or an order suspending, modifying, or revoking your license as specified in the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), 60 FR 34381, June 30, 1995.

Deaconess Hospital

-3-

Thank you for your cooperation.

Sincerely,

Original Signed By
Vivian H. Campbell

Vivian H. Campbell
Senior Health Physicist
Nuclear Materials Licensing Branch

Docket: 030-19776
License: 35-21106-01
Control: 466257

Enclosures: As stated

FEB 25 1997

Deaconess Hospital

-4-

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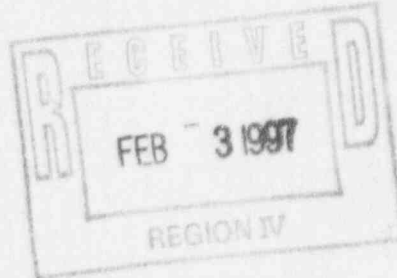
To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

RIV:WMLB	N	RIV:					
VII:Campbell	<i>MB</i>						
2/25/97							

OFFICIAL RECORD COPY

Deaconess Hospital

January 30, 1997



Ms. Vivian H. Campbell
Senior Health Physicist
Nuclear Materials Licensing Branch
Nuclear Regulatory Commission (NRC), Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, Texas 76011-8064

PAUL C. DOUGHERTY, FACHE

ADMINISTRATOR

**SUBJECT: SUPPLEMENTARY MATERIALS FOR AMENDMENT TO NRC
LICENSE (APPLIED ON NOVEMBER 20, 1996)**

License #: 35-211106-01
Docket #: 030-19776
Control #: 466257

5501 N. PORTLAND

OKLAHOMA CITY

Dear Ms. Campbell:

OKLAHOMA

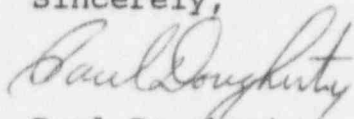
Enclosed are two copies of our quality management program (QMP) and written directive in conventional brachytherapy as required by NRC in application for authorization to use 10 CFR 35.400 material. Please keep us informed should you have any questions about our application for license amendment.

73112-2099

405.946.5581

Thank you for your attention in this matter.

Sincerely,



Paul Dougherty
Administrator

sdg

Enclosures: QMP
Written Directive

466257

**Deaconess Hospital
Oklahoma City, Oklahoma**

**Department of Radiation Oncology
Quality Management Program**



Policies and Procedures for Conventional Brachytherapy

The following policies and procedures commit this facility to a good practice in the administration of radiation dose to patients with conventional brachytherapy (other than high-dose-rate remote afterloading) hereafter understood as brachytherapy. Elements of the policies and procedures will be based on: a) record keeping system, b) radiation dose administration procedures which insure conformity to a written directive from an authorized physician hereafter understood as an authorized user c) post-administration procedures to confirm that the patient, radiation dose, treatment site and route agree with the written directive or procedure manual, and d) a regular systematic review of the Quality Management Program (QMP) to verify compliance with all aspects of the program and 10 CFR 35.32 & 33.

I. Records (i.e., written directives for a specific patient and other written instructions or records) relating to the medical use will be legible and written clearly, precisely, and in a manner to minimize the likelihood of misunderstanding. These records will include the authorized user written directive for each patient, administered dosages, the misadministration and recordable events, and periodic reviews of the QMP.

A. The Written Directive means an order in writing for a specific patient, dated and signed by an authorized user prior to the administration of a radiation dose and containing the following information:

1. Prior to implantation: the radioisotope, number of sources, and source strengths
2. After implantation but prior to completion of the procedure: the radioisotope, treatment site, and total source strength and exposure time (or equivalently, the total dose)

B. Records of the QMP

1. Review will be maintained in the radiation safety committee meeting minutes.
2. Review includes the results of the review of 100% of the written directives, misadministrations, recordable events, and inappropriate administrations or unintended deviations from the written directives
3. Written directives will be maintained for a period of three (3) years.
4. Reports of misadministrations, recordable events, unintended deviations and reviews and actions regarding misadministrations and recordable events will be maintained for a period of five (5) years.
5. Records of acceptance testing of each brachytherapy treatment planning or dose calculating computer that could be used for dose calculations, and checking computer generated dose calculations

II. Specific elements for administration of any brachytherapy radioisotopes

- A. Before writing a directive, the authorized user will personally review the patient's case to establish that the medical use is indicated for the patient.
- B. Before administration of any radiation dose, the authorized user will personally make, date and sign a written directive as identified in I. A. above.
- C. Oral revisions to the written directive must be followed with a revised written directive which is signed and dated within 48 hours of the oral revision.
- D. If the patient's condition requires emergency treatment, an oral directive will be acceptable provided that the oral directive is documented immediately in the patient's record and a written directive is prepared within 24 hours of the oral directive.
- E. After development of final plan of the treatment and related calculations for each patient, an authorized user or qualified physicist will date and sign a written record which certifies treatment plan is in accordance with the respective written directive.
- F. Any modification in the written directive will be made by an authorized user prior to completion of each dosage. It will be recorded in writing in an appropriate record, and will be dated and signed.
- G. All workers involved in medical use will request clarification from an authorized user or a physician under the supervision of an authorized user if any element of a written directive, and other written instruction or record is unclear, ambiguous, or apparently erroneous.
- H. All workers will stop the medical use on a patient and seek guidance if there is an apparent discrepancy in records, observations, or physical measurements that may result in a misadministration or recordable event.
- I. Before each administration of a radiation dose, the identity of the patient will be verified by more than one method as the individual named in the written directive; and the radioisotope, route of administration, number of appropriate sources and strengths, treatment site and total dose will be verified to agree with the written directive by a qualified worker.

III. Post-administration verification procedures

- A. Source or applicator positions verification will be made by appropriate radiographs.
- B. Computer calculation of dose or dose rate distributions and treatment time for delivery of the dose specified in the written directive will be completed and checked (for source position, number of sources, source strength and dose distribution) prior to implant removal. Checking will be performed by the authorized user or a qualified person under supervision of the authorized user who whenever possible did not make the original calculation.

- C. The authorized user will sign/initial and date above calculation record prior to completion of the implant.
- D. Effective measures will be used to ensure that sources will not move or dislodge while implanted. In the event of an unintended deviation from the written directive, the medical procedure will be evaluated by the authorized user to determine what corrective measures, if any, are required.
- E. After administering a brachytherapy treatment, an authorized user will date and sign a written record which certifies the dosage administered or treatment plan was completed in accordance with the respective written directive or note the lack of agreement between the administered dosage or treatment plan and written directive, thus accomplishing an immediate review of 100% of written directives.

IV. QMP review to evaluate patient administrations, all recordable events, all misadministrations and all unintended deviations

- A. Reviews will be conducted at least annually and reported to Radiation Safety Committee.
- B. The purpose of review will be:
 - 1. to verify compliance with all aspects of the QMP by reviewing 100% of written directives, 100% of misadministrations and recordable events for cause and to establish corrective actions, if any, and by reviewing 100% of unintended deviations from the written directives to determine cause and trend, if any
 - 2. to review frequency and causes of all unsatisfactory administrations and unintended deviations for trends and possible corrective actions
 - 3. if necessary, to make modifications to assure that byproduct materials are administered as directed by the authorized user.
- C. As needed, modifications will be made to increase the efficiency of the QMP program without reducing the program's effectiveness. Modifications will be approved by the Radiation Safety Committee and a copy of the modified QMP will be furnished to the U.S. Nuclear Regulatory Commission regional office within 30 days of the modification.

Maiden A. Lee
Manager, Department of Radiation Oncology

1-30-97
Date

Xiaolin Shi
Radiation Safety Officer

01-30-97
Date

Paul Dougherty
Hospital Administration

1/30/97
Date

**Deaconess Hospital
Oklahoma City, Oklahoma**

**Department of Radiation Oncology
Quality Management Program**



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3. Written directives will be maintained for a period of three (3) years.
4. Reports of misadministrations, recordable events, unintended deviations and reviews and actions regarding misadministrations and recordable events will be maintained for a period of five (5) years.
5. Records of acceptance testing of each brachytherapy treatment planning or dose calculating computer that could be used for dose calculations, and checking computer generated dose calculations

II. Specific elements for administration of any brachytherapy radioisotopes

466257

- A. Before writing a directive, the authorized user will personally review the patient's case to establish that the medical use is indicated for the patient.
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- C. Oral revisions to the written directive must be followed with a revised written directive which is signed and dated within 48 hours of the oral revision.
- D. If the patient's condition requires emergency treatment, an oral directive will be acceptable provided that the oral directive is documented immediately in the patient's record and a written directive is prepared within 24 hours of the oral directive.
- E. After development of final plan of the treatment and related calculations for each patient, an authorized user or qualified physicist will date and sign a written record which certifies treatment plan is in accordance with the respective written directive.
- F. Any modification in the written directive will be made by an authorized user prior to completion of each dosage. It will be recorded in writing in an appropriate record, and will be dated and signed.
- G. All workers involved in medical use will request clarification from an authorized user or a physician under the supervision of an authorized user if any element of a written directive, and other written instruction or record is unclear, ambiguous, or apparently erroneous.
- H. All workers will stop the medical use on a patient and seek guidance if there is an apparent discrepancy in records, observations, or physical measurements that may result in a misadministration or recordable event.
- I. Before each administration of a radiation dose, the identity of the patient will be verified by more than one method as the individual named in the written directive; and the radioisotope, route of administration, number of appropriate sources and strengths, treatment site and total dose will be verified to agree with the written directive by a qualified worker.

III. Post-administration verification procedures

- A. Source or applicator positions verification will be made by appropriate radiographs.
- B. Computer calculation of dose or dose rate distributions and treatment time for delivery of the dose specified in the written directive will be completed and checked (for source position, number of sources, source strength and dose distribution) prior to implant removal. Checking will be performed by the authorized user or a qualified person under supervision of the authorized user who whenever possible did not make the original calculation.

- C. The authorized user will sign/initial and date above calculation record prior to completion of the implant.
- D. Effective measures will be used to ensure that sources will not move or dislodge while implanted. In the event of an unintended deviation from the written directive, the medical procedure will be evaluated by the authorized user to determine what corrective measures, if any, are required.
- E. After administering a brachytherapy treatment, an authorized user will date and sign a written record which certifies the dosage administered or treatment plan was completed in accordance with the respective written directive or note the lack of agreement between the administered dosage or treatment plan and written directive, thus accomplishing an immediate review of 100% of written directives.

IV. QMP review to evaluate patient administrations, all recordable events, all misadministrations and all unintended deviations

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 2. to review frequency and causes of all unsatisfactory administrations and unintended deviations for trends and possible corrective actions
 3. if necessary, to make modifications to assure that byproduct materials are administered as directed by the authorized user.
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Maudie L. Lee
Manager, Department of Radiation Oncology

1-30-97
Date

Liavlin Shi
Radiation Safety Officer

01-30-97
Date

Paul Dougherty
Hospital Administration

1/30/97
Date

H6251

DEACONESS HOSPITAL RADIATION ONCOLOGY
BRACHYTHERAPY

PHYSICIAN WRITTEN DIRECTIVE

Patient Name _____, Medical Record No. _____
Birth Date _____, other _____
Treatment Plan: _____
Diagnosis _____, Site of Therapy _____
Radiation Dose to be delivered _____ cGy, Radionuclide _____
Number of Sources _____

Authorized User (Sign prior to treatment)

Date _____ / _____ / _____
Time _____ AM
PM

Modification of Treatment Plan: _____

Authorized User _____

Date _____ / _____ / _____
Time _____ AM
PM

Patient Verification (2 of 4 must be verified)

(1) Name: _____, (2) Medical Record No. _____

(3) Date of Birth: ____/____/____, (4) Other _____

Person Administering Implant: _____

Sign at time of administration _____

Source of Documentation and Rx Time: Radionuclide _____

Number of sources _____

See signed computer plan for complete documentation

Sign Prior to administration _____

Total cGy per hour _____, Planned Rx Time _____ hrs, Total Dose _____ cGy

Authorized User/Medical Physicist _____

Date/Time _____

Source Implantation: Treatment Site _____, Radionuclide _____

Total Source Strength _____

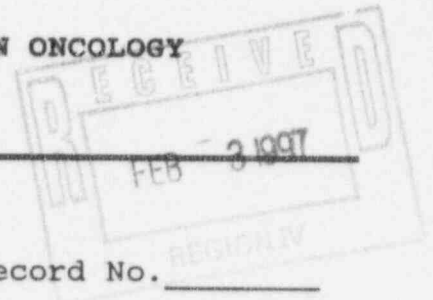
Exposure Time _____ Total Dose _____ cGy

I certify that the above radiation dose administration is in
accordance with the written directive.

Authorized user: _____, Date ____/____/____, Time _____ AM
PM



DEACONESS HOSPITAL RADIATION ONCOLOGY
BRACHYTHERAPY



PHYSICIAN WRITTEN DIRECTIVE

Patient Name _____, Medical Record No. _____
Birth Date _____, other _____
Treatment Plan:
Diagnosis _____, Site of Therapy _____
Radiation Dose to be delivered _____ cGy, Radionuclide _____
Number of Sources _____

Authorized User (Sign prior to treatment) _____ Date _____ / _____ Time _____ AM
Modification of Treatment Plan: _____ PM

Authorized User _____ Date _____ / _____ Time _____ AM
PM

Patient Verification (2 of 4 must be verified)
(1) Name: _____, (2) Medical Record No. _____
(3) Date of Birth: ____/____/____, (4) Other _____
Person Administering Implant: _____
Sign at time of administration _____

Source of Documentation and Rx Time: Radionuclide _____,
Number of sources _____
See signed computer plan for complete documentation
Sign Prior to administration

Total cGy per hour _____, Planned Rx Time _____ hrs, Total Dose _____ cGy
Authorized User/Medical Physicist _____ Date/Time _____

Source Implantation: Treatment Site _____, Radionuclide _____
Total Source Strength _____

Exposure Time _____ Total Dose _____ cGy

I certify that the above radiation dose administration is in
accordance with the written directive.

Authorized user: _____, Date ____/____/____, Time _____ AM
PM

46657



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

JAN 3 1987

January 3, 1997

Deaconess Hospital
ATTN: Paul Dougherty
Administrator
5501 North Portland
Oklahoma City, Oklahoma 73112-2097

SUBJECT: AUTHORIZATION TO USE 10 CFR 35.400 MATERIAL

We have reviewed your letter dated November 20, 1996, requesting an amendment to your byproduct material license. Before further action can be taken, we shall need the following additional information.

We have reviewed your current quality management program and it does not include procedures for using 10 CFR 35.400 material. A QMP must include policies and procedures for each modality of use that requires a written directive pursuant to 10 CFR 35.32(a). Please provide your QMP for your brachytherapy program. We have enclosed a checklist to assist you in preparation of your QMP. Please address each objective.

To continue review of your application, we request that you submit your response to this letter within 30 calendar days from the date of this letter. Please reply in duplicate and refer to the license, docket, and control number specified below. If you have questions or require clarification on any of the information stated above, we encourage you to contact us at (817) 860-8100.

Sincerely,

A handwritten signature in cursive script, reading "Vivian H. Campbell", is written over the typed name.

Vivian H. Campbell
Senior Health Physicist
Nuclear Materials Licensing Branch

Docket: 030-19776
License: 35-21106-01
Control: 466257

Enclosure(s):
Checklist for Brachytherapy QMP

JAN 3 1987

Deaconess Hospital

-2-

DOCUMENT NAME: G:\Deaconess.def

To receive a copy of this document, indicate in the box "C" - Copy without attachment/enclosure "E" - Copy with attachment/enclosure "N" - No Copy

RIV:NMLB	N					
VHCampbell	<i>mtz</i>					
1 / 3 /97						

OFFICIAL RECORD COPY

BRACHYTHERAPY
(OTHER THAN HDR REMOTE AFTERLOADING)

2. Objective I

An authorized user will date and sign
a written directive for each specific patient
prior to administration [35.32(a)(1)].

The written directive contains the following [35.2]:

1. Prior to implantation:
radioisotope,
number of sources,
source strengths
2. After implantation & prior to completion of
procedure:
radioisotope,
treatment site,
total source strength & exposure
time (or total dose)

3. Objective 2

The licensee will verify the patient's identity
by more than one method prior to administration.
[35.32(a)(2)]

4. Objective 3

Procedures are implemented to verify that final
plans of treatment and related calculations are in
accordance with written directives. [35.32(a)(3)]

Examples of acceptable procedures (one or more
procedures may apply):

- a. Performing acceptance testing (based on licensee's
specific needs & applications) on each treatment
planning or dose calculating computer program
that could be used for dose calculations.
- b. A plan of treatment is prepared for each
patient.

- c. Check of dose calculations by an authorized user or a qualified person under supervision of an authorized user who whenever possible did not make the original calculations
- d. Verification of dummy sources or fixed geometry applicators prior to inserting sealed sources.
- e. Method used for verifying source strength prior to administration.

5. Objective 4

The licensee has procedures to ensure, prior to administration, that each administration is in accordance with the written directive.

Examples of acceptable procedures (one or more procedures may apply):

- a. Person administering therapy treatment confirms the prescribed radioisotope, treatment site, number of sources, source strength and exposure time, or total dose.
- b. Prompt record by the authorized user, of the number of sources, source strength, the actual loading sequence of sources implanted (location of each sealed source in a tube, tandem, or cylinder) and signing or initialing the patient's chart or appropriate record.
- c. Ensure that source(s) will not move or dislodge while implanted.

6. Objective 5

The licensee has procedures that describe the method(s) used to identify and evaluate any unintended deviations from a written directive.

The licensee has procedures that describe the corrective action(s) that will be taken after the deviation has been identified. [35.32(a)(5)]

(FOR LFMS USE)
INFORMATION FROM LTS

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

Program Code: 02120
Status Code: 0
Fee Category: 7C
Exp. Date: 20050228
Fee Comments: CODE 21
Decom Fin Assur Req'd: N

LICENSE FEE TRANSMITTAL

A. REGION IV

1. APPLICATION ATTACHED

Applicant/Licensee: DEACONESS HOSPITAL
Received Date: 961202
Docket No.: 3019276
Control No.: 466257
License No.: 35-21106-01
Action Type: Amendment

2. FEE ATTACHED

Amount: \$440.10
Check No.: 179995

3. COMMENTS

Signed
Date

Biffie Myszyński
12/3/96

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

1. Fee Category and Amount: 7C \$440

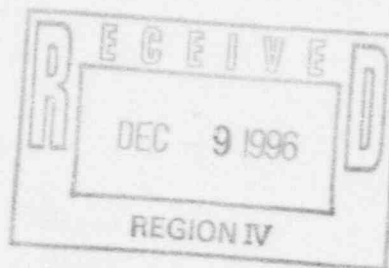
2. Correct Fee Paid. Application may be processed for:

Amendment ✓
Renewal
License

3. OTHER

Signed
Date

Rita Messier
12/5/96



Log	<u>Dec 1 IV</u>
Remitter	<u> </u>
Check No.	<u>179995</u>
Amount	<u>\$440</u>
Fee Category	<u>7C</u>
Type of Fee	<u>Amnd</u>
Date Check Rec'd.	<u> </u>
Date Completed	<u>12/5/96</u>
By:	<u>Rem</u>



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 23, 1996

DEACONESS HOSPITAL
ATTN: Mr. XIAOLIN SHI, M.S.
Radiation Safety Officer

5501 NORTH PORTLAND
OKLAHOMA CITY, OK 73112-2097

SUBJECT: ONE-TIME EXTENSION OF LICENSE EXPIRATION DATE
LICENSE NUMBER 35-21106-01, DOCKET NUMBER 3019776

Dear Mr. XIAOLIN SHI, M.S.

On January 16, 1996, the Nuclear Regulatory Commission (NRC) amended its regulations in 10 CFR 30, 40, and 70 to extend the expiration date of certain byproduct, source, and special nuclear material licenses by five years (61 FR 1109). The above referenced license was extended by this rulemaking and will now expire on February 28, 2005. Your license will not be amended to show this extended date until the next routine licensing action. Until then, you may provide copies of this letter to vendors and other interested parties as evidence that the license has been extended as a result of the rule.

The extended license authorizes the same activities and contains the same limitations as it previously did. There will be no change in the frequency that the NRC inspects activities authorized by this license.

The amended rules state that in the case of licensees who are granted extensions and who have a currently pending renewal application for that extended license, the application will be considered withdrawn by the licensee and any renewal fees paid by the licensee for that application will be refunded. This will apply to licenses with expiration dates after July 1, 1995, for which renewal applications and the appropriate fees have been submitted and the renewal is still pending. Refunds will be mailed to licensees under separate cover.

All licensees, including those whose renewal applications were withdrawn by this rulemaking, who wish to change their radiation safety programs must request amendment of their licenses to reflect these changes. Amendment requests must include the correct amendment fee since the NRC cannot apply pending renewal refund balances toward amendment fees.

If you have any questions regarding this letter, please contact the individual below.

Arlington, TX: Billie Gruszynski, (817) 860-8120
Walnut Creek, CA: Beth Prange, (510) 975-0250

Thank you for your cooperation in this matter.

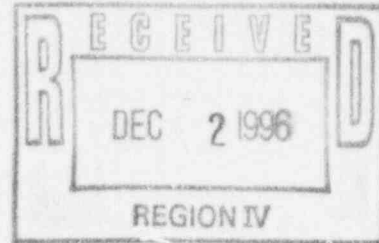
Sincerely,

A handwritten signature in black ink, appearing to read "Cool", written over a horizontal line.

Donald A. Cool, Director
Division of Industrial and Medical Nuclear Safety
Office of Nuclear Materials Safety and Safeguards

Deaconess Hospital

November 20, 1996



Ms. Jacqueline D. Burks
Health Physicist
Nuclear Materials Licensing Branch
U.S. Nuclear Regulatory Commission (NRC)
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011

PAUL C. DOUGHERTY, FACHE
ADMINISTRATOR

Subject: Amendment to NRC License #: 35-21106-01
Docket #: 030-19776

5501 N. PORTLAND

OKLAHOMA CITY

OKLAHOMA

73112-2099

405-946-5581

Dear Ms. Burks:

This is a request to amend our NRC license to:

1. Include any byproduct material identified in 10 CFR 35.400 to our institution.
2. Include Dr. John R. Taylor, MD, as our authorized user for material identified in 10 CFR 35.400. Dr. Taylor is currently an authorized user at our institution for materials identified in 10 CFR 35.300 and 31.11.
3. Include Drs. Clinton A. Medbery, III, MD, and Astrid E. Morrison, MD, as our authorized users for materials identified in 10 CFR 35.400, 35.300, and 31.11.

Drs. Taylor, Medbery, and Morrison are certified by the American Board of Radiology in therapeutic radiology. Their training and experience in therapeutic radiology are provided through Columbia-Presbyterian Hospital's license application (License #: 35-12091-01, Docket #: 02912).

In addition to our current quality management program, we will follow the Regulation 10 CFR Part 35, Subpart G-Sources for Brachytherapy. We will establish and implement the model procedure for radiation safety during implant therapy that was published in Appendix Q and Appendix X (June

Deaconess Hospital

1992) to Regulatory Guide 10.8, Revision 2. We will establish and implement the model procedure for keeping an inventory of implant sources that was published in Appendix M. 4 to Regulatory Guide 10.8, Revision 2.

A qualified radiation therapy physicist will be directly involved in the activities in brachytherapy dosimetry and radiation protection. We will also purchase the necessary safety equipment for radiation protection and safety transportation of brachytherapy sources within our institution.

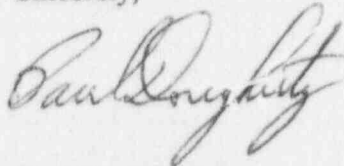
PAUL C. DOUGHERTY, FACHE
ADMINISTRATOR

A check for \$440.00 is attached for the license amendment fee as specified for category 10 CFR 170.31 (7C).

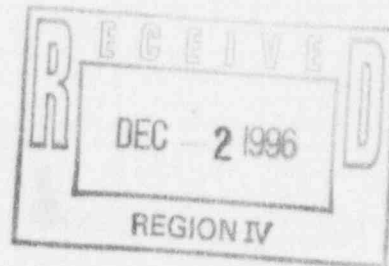
Please let us know if any other information is required.

5501 N. PORTLAND
OKLAHOMA CITY
OKLAHOMA
73112-2099
405. 946. 5581

Sincerely,



Paul Dougherty
Administrator



enclosure