

OFFICIAL RECORD COPY

## MATERIALS LICENSE

Amendment No. 01

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, 36, 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

1. Henrico Doctors' Hospital

2. 1602 Skipwith Road  
Richmond, Virginia 23229

In accordance with letter dated July 22, 1996

3. License Number 45-16231-02

is amended in its entirety to read as follows:

4. Expiration Date September 30, 2001 (Extended)

5. Docket or  
Reference No. 030-321866. Byproduct, Source, and/or  
Special Nuclear Material7. Chemical and/or Physical  
Form8. Maximum Amount that Licensee  
May Possess at Any One Time  
Under This License

A. Cobalt 60

A. Teletherapy sealed source  
(Neutron Products, Inc.  
Model NPTT)

A. 9,000 curies

B. Uranium (depleted in the  
isotope Uranium 235)

B. Metal

B. 150 kilograms

## 9. Authorized Use:

A. Source to be stored in a Siemens Gammatron S 180K teletherapy unit incident to disposal.

B. For possession and use in a Siemens Gammatron S 180K teletherapy unit as shielding and in teletherapy source storage containers as shielding.

## CONDITIONS

10. Licensed material shall be stored only at 7603 Forest Avenue, Suite 106, Richmond, Virginia.

11. Radiation Safety Officer: Jo Anne Walker, M.D.

030009

12. Teletherapy Physicist: Alfred Strash, Ph.D.

13. Authorized User: Conrado C. Gonzalez, M.D., for storage only.

9702030071 961106  
PDR ADOCK 03032186  
C PDR

ML 20

MATERIALS LICENSE  
SUPPLEMENTARY SHEETLicense Number 45-16231-02  
Docket or Reference Number 030-32186  
Amendment No. 01

(Continued)

## CONDITIONS

14. Sealed sources containing licensed material shall not be opened or removed from the teletherapy device by the licensee.
15. The licensee shall maintain records of information important to safe and effective decommissioning at the location specified in Condition 10 above in accordance with the provisions of 10 CFR 30.35(g) until this license is terminated by the Commission.
16. Except as specifically provided otherwise in this license and in 10 CFR 35.31, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents including any enclosures, listed below. The 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 March 28, 1991.
- B. Letter dated August 28, 1991.
- C. Letter dated July 22, 1996 [Request to delete RSO and Authorized User; Change medical physicist; Place teletherapy unit in extended source storage (Unit not in use); Commitment to inventory and leak test teletherapy unit; and Extension of expiration date in accordance with 10 CFR 30.36].
- D. Letter dated 7, 1996 [Facsimile requesting new RSO; Additional information regarding medical physicist's training and experience].

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

EARL G. WRIGHT

Date

NOV 10 1996

11/13/96

NMLICENSE\45-16231-02.A01

By

*Earl G. Wright*Region II, Division of Nuclear Materials Safety  
101 Marietta Street, N.W., Suite 2900  
Atlanta, GA 30323-0199



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W., SUITE 2900  
ATLANTA, GEORGIA 30323-0198

INFORMATION FOR NRC MATERIAL LICENSEES

Please find enclosed:

- ☒ Your NRC material license
- ☐ Amendment to your NRC material license
- ☐ Amendment renewing your NRC material license
- ☐ Amendment terminating your NRC material license
- ☐ Notice for Radiographer Quality Assurance Approval Program

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify this office (ATTN: Ms. Diane Heim at (404) 331-4673) so that we can provide appropriate corrections and answers.

Please be advised that your license expires at the end of the day in the month and year stated in the license. Unless your license has been terminated, you must conduct your program involving byproduct 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 19, "Notice, Instructions and Reports to Workers; Inspections," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Not possess and use materials authorized in Items 6, 7, and 8, on the license until:
  - a. you have constructed the facilities and obtained the equipment described in the license application and supporting documentation; and
  - b. you have notified the U. S. Nuclear Regulatory Commission, Region II, ATTN: Materials Licensing/Inspection Branch, in writing, that activities authorized by the license will be initiated;
  - c. you have submitted & certified implementation of a Quality Management Program (10 CFR 35.32) for radiotherapy, or for administering > 30 uCi of I-125 or I-131.
3. Notify NRC, in writing, within 30 days:
  - a. when an authorized user, Radiation Safety Officer, or Teletherapy Physicist permanently discontinues performance of duties under the license or has a name change; or
  - b. when the licensee's mailing address changes (no fee is required if the location of byproduct material remains the same).
4. In accordance with 10 CFR 30.36(b) and/or license condition, notify NRC, promptly, in writing, and request termination of the license:
  - a. when you decide to terminate all activities involving materials authorized under the license; or
  - b. if you decide not to complete the facility, acquire equipment, or possess and use authorized material.

5. Request and obtain a license amendment before you:

- a. receive or use byproduct material for a clinical procedure permitted under Part 35 but not permitted by your license issued pursuant to this part.
- b. permit anyone, not authorized under 10 CFR 35, Subpart J, to work as an authorized user under a license for medical use of byproduct material.
- c. permit anyone, not authorized under 10 CFR 35, Subpart J, to work as a Radiation Safety Officer, Teletherapy Physicist, or Nuclear Pharmacist, under a license for medical use of byproduct material.
- d. order byproduct material in excess of the amount, or a different radionuclide or form, other than authorized on the license;
- e. add or change the areas of use or address (or addresses) of use identified in the license application or on the license; or
- f. change ownership of your organization.

6. Submit a complete renewal application with proper fee or termination request at least 30 days before the expiration date of your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of byproduct material after your license expires is a violation of NRC regulations. Transfer of licensed materials must be consistent with 10 CFR 30.41, 40.51 or 70.42, as applicable. A license will not normally be renewed, except on a case-by-case basis, in instances where licensed material has never been possessed or used.

In addition, please note that NRC Form 313 requires the applicant, by his/her signature, to verify that the applicant understands that all statements contained in the application are true and correct to the best of the applicant's knowledge. The signatory for the application should be the licensee or certifying official rather than a consultant.

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, or imposition of a Civil Penalty, or an order suspending, modifying or revoking your license as specified in the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, (7/95). Since serious consequences to employees and the public can result from failure to comply with NRC requirements, prompt and vigorous enforcement action will be taken against those who do not achieve the necessary attention to detail and standard of compliance expected of licensees.

Thank you for your cooperation.

Enclosures:

1. NRC License
2. Category Marked Below for:
  - ☐ New licenses: NUREG-1600 (7/95); 19; 20; 30; 40 or 70, as appropriate; 71; 170; NRC Form 3, Agreement State list; and NRC Form 313.
  - ☐ New radiography licenses: Parts 34; 150.
  - ☐ New medical and teletherapy licenses: Part 35.
  - ☐ Amendments and renewals: NRC Form 313.

5. Request and obtain a license amendment before you:

- a. receive or use byproduct material for a clinical procedure permitted under Part 35 but not permitted by your license issued pursuant to this part.
- b. permit anyone, not authorized under 10 CFR 35, Subpart J, to work as an authorized user under a license for medical use of byproduct material.
- c. permit anyone, not authorized under 10 CFR 35, Subpart J, to work as a Radiation Safety Officer, Teletherapy Physicist, or Nuclear Pharmacist, under a license for medical use of byproduct material.
- d. order byproduct material in excess of the amount, or a different radionuclide or form, other than authorized on the license;
- e. add or change the areas of use or address (or addresses) of use identified in the license application or on the license; or
- f. change ownership of your organization.

6. Submit a complete renewal application with proper fee or termination request at least 30 days before the expiration date of your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of byproduct material after your license expires is a violation of NRC regulations. Transfer of licensed materials must be consistent with 10 CFR 30.41, 40.51 or 70.42, as applicable. A license will not normally be renewed, except on a case-by-case basis, in instances where licensed material has never been possessed or used.

In addition, please note that NRC Form 313 requires the applicant, by his/her signature, to verify that the applicant understands that all statements contained in the application are true and correct to the best of the applicant's knowledge. The signatory for the application should be the licensee or certifying official rather than a consultant.

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, or imposition of a Civil Penalty, or an order suspending, modifying or revoking your license as specified in the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, (7/95). Since serious consequences to employees and the public can result from failure to comply with NRC requirements, prompt and vigorous enforcement action will be taken against those who do not achieve the necessary attention to detail and standard of compliance expected of licensees.

Thank you for your cooperation.

Enclosures:

1. NRC License
2. Category Marked Below for:
  - ☐ New licenses: NUREG-1600 (7/95); 19; 20; 30; 40 or 70, as appropriate; 71; 170; NRC Form 3, Agreement State list; and NRC Form 313.
  - ☐ New radiography licenses: Parts 34; 150.
  - ☐ New medical and teletherapy licenses: Part 35.
  - ☐ Amendments and renewals: NRC Form 313.



**COLUMBIA/HCA** A New Commitment To Healthcare...Together  
Healthcare Corporation  
HENRICO DOCTORS' HOSPITAL

October 7, 1996

U.S. Nuclear Regulatory Commission, Region II  
Materials Licensing Section  
101 Marietta Street NW, Suite 2900  
Atlanta, GA 30323

Dear Sir:

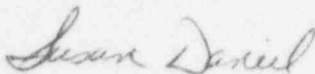
RE: Amendment to License No. 45-16231-02 (Teletherapy)

In reference to our previous letter dated July 22, 1996, in addition to placing our teletherapy unit in extended source storage and naming Dr. Alfred Strash as person responsible for maintaining control over the stored source, we would like to name Dr. Jo Anne Walker as Radiation Safety Officer due to the retirement of Dr. Arthur W. Burke, Jr.

Please add this to our previous requested Amendment dated July 22, 1996.

If you have any questions regarding this request, please call Melanie Dempsey in Radiation Oncology at (804) 287-4340.

Sincerely,



Susan W. Daniel  
Office Manager - Radiation Oncology HDH

## MATERIALS LICENSE

Amendment No. 3

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, 36, 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 May 29, 1995	
1. Richmond Radiation Oncology Center, Inc.		3. License Number	45-25187-01
2. 5711 Staples Mill Road Richmond, Virginia 23228		is amended in its entirety to read as follows:	
		4. Expiration Date	June 30, 1997
		5. Docket or Reference No.	030-32638
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. (1) Phosphorus 32 (2) Strontium 89	A. Any radiopharmaceutical identified in 10 CFR 35.300	A. As needed	
B. Iridium 192	B. Sealed sources registered pursuant to 10 CFR 32.210 or an equivalent Agreement State Regulation	B. 2 sources, 1 source not to exceed 444 terabecquerels (TBq) (12 curies (Ci)), and 1 source not to exceed 370 TBq (10 Ci)	
9. Authorized Use:			
A. Medical use identified in 10 CFR 35.300.			
B. One source to be used in a Nucletron Model MicroSelectron-HDR No. 80.0 remote afterloading brachytherapy device for interstitial, intraluminal, and intracavitary radiotherapy in humans. The source activity may not exceed 370 TBq (10 Ci) at the time of installation. One source in its shipping container for source replacement.			

## CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 5711 Staples Mill Road, Richmond, Virginia, except that, licensed material identified in Subitem 6.B shall be used only in the Linear Accelerator Room at the northwest corner of the Richmond Radiation Oncology Center.
11. A. The Radiation Protection Officer for this license is Marcus A. Gilbert, M.Sc.
- B. The Medical Physicist for this license is Marcus A. Gilbert, M.Sc.

(1-54)

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

45-25187-01

Docket or Reference Number

030-32638

Amendment No. 3

**CONDITIONS**

Continued-

12. Authorized user(s):

- |                             |                                                                                                                |
|-----------------------------|----------------------------------------------------------------------------------------------------------------|
| A. Wilson B. Sprengle, M.D. | Medical uses for materials identified in 10 CFR 35.300 and for interstitial or intracavity treatment of cancer |
| B. Judy Ling Chin, M.D.     | Medical uses for materials identified in 10 CFR 35.300 and for interstitial or intracavity treatment of cancer |
| C. Thomas J. Eichler, M.D.  | Medical uses for materials identified in 10 CFR 35.300 and for interstitial or intracavity treatment of cancer |
| D. George A. Trivette, M.D. | Medical uses for materials identified in 10 CFR 35.300 and for interstitial or intracavity treatment of cancer |
| E. Jo Anne Walker, M.D.     | Medical uses for materials identified in 10 CFR 35.300 and for interstitial or intracavity treatment of cancer |
| F. Marcus A. Gilbert, M.Sc. | Non-medical uses                                                                                               |

13. The licensee shall perform a radiation survey, in accordance with 10 CFR 35.404(a), immediately after completion of the therapy treatment, and before removal of the patient from the room. The survey shall be documented in accordance with 10 CFR 35.404(b). The survey instrument shall be capable of measuring dose rates of 1 millirem per hour to at least 1000 millirem per hour.

14. The sealed source(s) specified in Item 7, shall be tested for leakage and/or contamination as required by 10 CFR 35.59.

15. The following shall be performed only by persons specifically authorized by the Commission or an Agreement State to perform such services:

- A. Installation and replacement of sources contained in the Nucletron Model MicroSelectron-HDR No. 80.0 irradiation device.
- B. Any maintenance or repair operations in the Nucletron Model MicroSelectron-HDR No. 80.0 irradiator involving work on the source head, the source driving unit, or other mechanism that could expose the source, reduce the shielding around the source, or compromise the safety of the unit and result in increased radiation levels.

16. A. Iridium 192 in the Nucletron Model MicroSelectron-HDR No. 80.0 remote afterloading brachytherapy device shall be used in accordance with the provisions of 10 CFR 35.610, 35.615, and 35.620; except that throughout these regulations the words "teletherapy," "primary beam of radiation" and "beam" shall be replaced with the words "Nucletron Model MicroSelectron-HDR No. 80.0 unit."

B. With respect to the use of the Nucletron Model MicroSelectron-HDR No. 80.0, the licensee shall apply for and receive a license amendment prior to relocating the Nucletron Model MicroSelectron-HDR No. 80.0, making any change in the treatment room shielding, or allowing an individual not listed on this license to perform the duties of the medical physicist.



MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License Number

45-25187-01

Docket or Reference Number

030-32638

Amendment No. 3

## CONDITIONS

16.(Cont.)

- C. Once in each calendar month, the licensee shall perform a check of the following items of the Nucletron Model MicroSelectron-HDR No. 80.0:
- (i) Timer constancy and timer linearity over the range of use
  - (ii) Timer on-off error
  - (iii) Electrical interlocks at each treatment room entrance
  - (iv) Condition indicator lights on the unit, the control console and in the facility
  - (v) Viewing systems
  - (vi) Proper operation of the treatment room doors from inside and outside the room
- D. The licensee shall arrange for the prompt repair of any system in 15.C., that is not operating properly and shall not use the unit following door interlock malfunction until the interlock system has been repaired.
- E. The licensee shall retain records of the checks in 15.C. and the repairs performed as a result of 15.D. for three years. The records shall contain the date of the check, failure and/or repair, the signature of the individual performing the check, and the source serial number.
- F. No other radiation-producing system shall be in operation in the treatment room at the same time the Nucletron Model MicroSelectron-HDR No. 80.0 is operated.
- G. Keys for the Nucletron Model MicroSelectron-HDR No. 80.0 shall be restricted such that only authorized operators may have access.
17. The licensee shall maintain records of information important to safe and effective decommissioning at Richmond Radiation Oncology Center, 5711 Staples Mill Road, Richmond, Virginia pursuant to the provisions of 10 CFR 30.35(g) until this license is terminated by the Commission.
18. Prior to initiation of a treatment program, and subsequent to each source exchange for the Nucletron Model MicroSelectron-HDR No. 80.0 afterloading brachytherapy unit, radiation surveys and tests shall be performed in accordance with the following:
- A. A radiation survey shall be made of:
- (1) The irradiator source housing, with the sources in the shielded position. The maximum radiation levels at 10 centimeters from the surface of the main source safe shall not exceed 1 milliroentgen.
  - (2) All areas adjacent to the treatment room with the source in the "irradiation" position. The survey shall clearly establish:
    - (a) That radiation levels in restricted areas are not likely to cause personnel exposure in excess of the limits specified in 10 CFR 20.101.
    - (b) That quantities of radiation in unrestricted areas do not exceed the limits specified in 10 CFR 20.105(b).
    - (c) The intensity of the primary beam at a specified distance from the source.
- B. Records of the survey results shall be maintained for inspection by the Commission for the duration of the license.

MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License Number

45-25187-01

Docket or Reference Number

030-32638

Amendment No. 3

## CONDITIONS

Continued -

19. 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 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. Applications dated:

- January 6, 1992
- December 20, 1993 (request to add P-32 and Sr-89 for medical uses identified in 10 CFR 35.300)

## B. Letters dated:

- |                    |                                                                       |
|--------------------|-----------------------------------------------------------------------|
| (1) April 28, 1992 | [Added information]                                                   |
| (2) March 15, 1993 | [Add authorized users, change treatment room]                         |
| (3) May 4, 1993    | [Added emergency plan information, training, and attending personnel] |
| (4) May 29, 1995   | [Increase Ir-192 possession to 12 Ci and add authorized users]        |

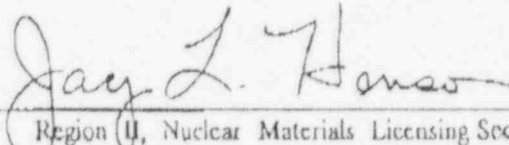
FOR THE U.S. NUCLEAR REGULATORY COMMISSION

JAY L. HENSON

Date

AUG 16 1995

By



Region II, Nuclear Materials Licensing Section  
101 Marietta Street N.W., Suite 2900  
Atlanta, GA 30323

## Attachment A

### Description of efforts made to dispose of the sources

April 1996	Neutron Products	obtained quotations to remove/dispose of Co60 unit and source
May 1996	J&P Enterprises International	notified of availability of unit
	Rad Serv, Inc.	notified of availability of unit
	Edward L. Chaney, PhD	" " " "
	UNC-CH physicist	
	Xray Equipment	" " " "
	JM Company	" " " "
	Jackson Radiographics	" " " "
	Star Imaging, Inc.	" " " "
June 1996	Dr. Selvaraj	Contacted me regarding purchasing the unit Faxed pertinent information to him 6/28/96

# NEUTRON PRODUCTS inc

22301 Mt. Ephraim Road  
P.O. Box 68  
Dickerson, Maryland 20842 USA  
301-349-5001 FAX: 301-349-5007

April 9, 1996

Ms. Susan Daniel  
Henrico Doctors Hospital  
Oncology Center of Virginia  
7603 Forrest Avenue, Suite 106  
Richmond, Virginia 23229

Via Fax: (804) 287-4314

\*\*\* Original will be sent via U.S. Mail \*\*\*

Dear Ms. Daniel:

In response to our telephone conversation, Neutron Products would be pleased to remove and dispose of the teletherapy unit and contained cobalt-60 source for a lot price of \$18,900.

The price includes:

- removal of the Siemens Gammatron-S teletherapy unit, and contained cobalt-60 teletherapy source, in accordance with all applicable regulations;
- removal by Neutron Products' personnel licensed under Maryland License MD-31-025-03;
- all shipping, cask use charges, and standard rigging; and,
- coordination of the removal schedule with you.

While Neutron Products will be responsible for damages caused by us to the hospital's facility while we are removing the unit, we accept no responsibility for refurbishing the teletherapy room after removal of the unit.

The hospital will provide clear title to both the unit and source, in addition to as much notice as possible of the desired schedule for removal.

Payment terms are 50% with the placement of the order, with the balance payable at the time of removal.

This offer remains valid for 60 days from the date of this letter.

Ms. Susan Daniel  
Henrico Doctors Hospital  
Page 2

If our offer is acceptable, please indicate by returning a signed copy of this letter or a purchase order referencing this letter.

If you have any questions, please do not hesitate to call me.

Sincerely,

NEUTRON PRODUCTS, INC.



Edmond J. DeRosa  
Technical Representative  
Teletherapy Sales and Services

Enclosures (with original)

EJD/tfm

ACCEPTED BY: \_\_\_\_\_

Date: \_\_\_\_\_

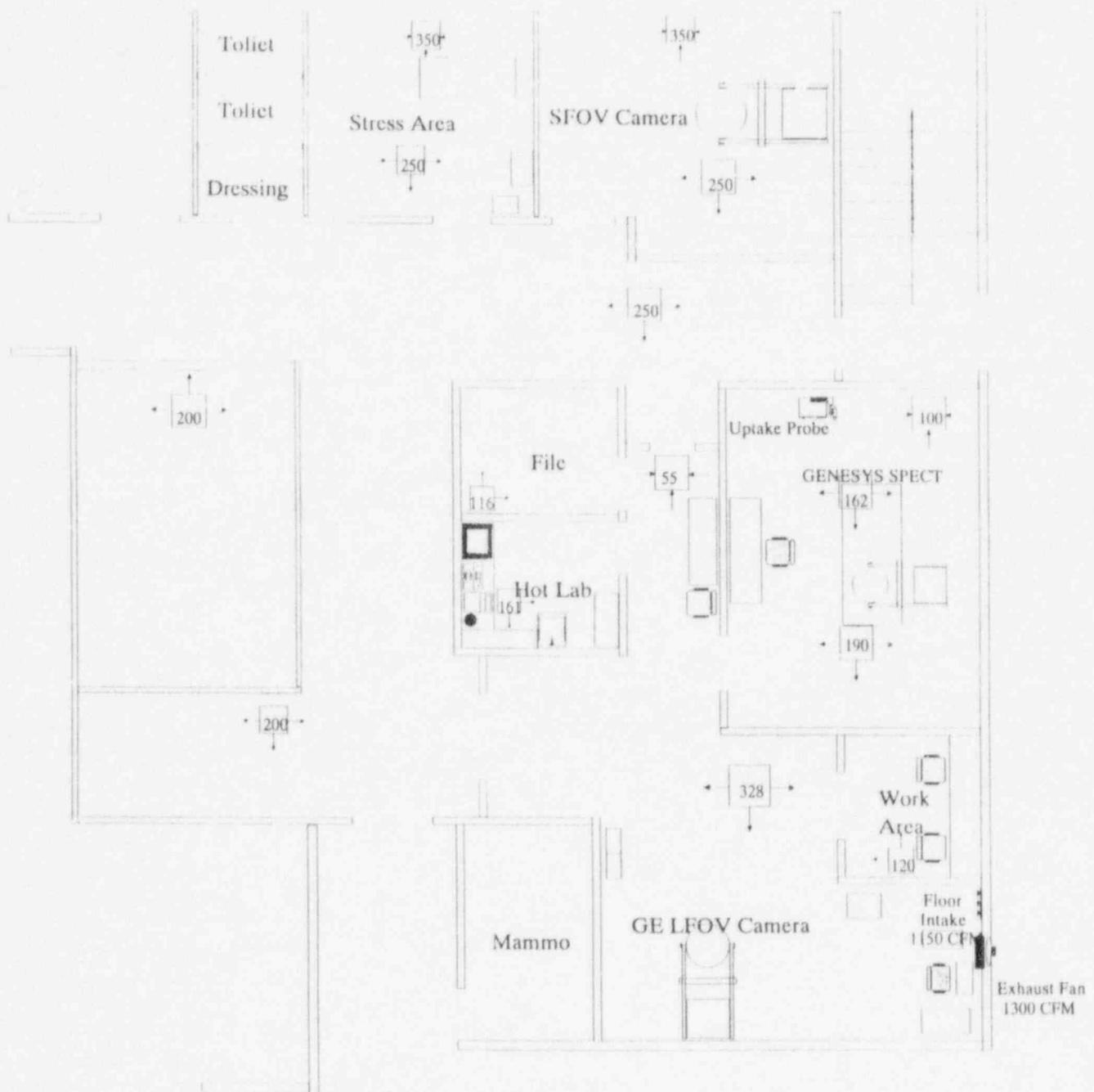
**NEUTRON PRODUCTS inc**

22301 Mt. Ephraim Road • P.O. Box 68 • Dickerson, Maryland 20842 USA • 301/349-5001  
FAX: 301/349-5007



# NUCLEAR MEDICINE

## Henrico Doctors' Hospital



DWB  
8/3/91

## RESUME

ALFRED M. STRASH, Ph.D.

### PERSONAL INFORMATION

Home: 13811 Grey Friars Lane  
Midlothian, Virginia 23113  
(804) 794-8783 or 379-2607

### EDUCATION

Ph.D. Clarkson College of Technology, 1969  
M.S. Clarkson College of Technology, 1966  
B.A. University of Buffalo, 1963

### PROFESSIONAL EXPERIENCE

- Radiological Physics Consultant, Richmond, Virginia, 1975-present.
- Associate Professor of Radiology, Medical College of Virginia, Richmond, Virginia 1976-1985.
- Assistant Professor of Radiology, Medical College of Virginia, Richmond, Virginia 1971-1976.
- Director of Radiation Safety Office, VCU University/MCV, Richmond, Virginia, 1971-1975.
- Postdoctoral Research and Teaching Fellow, Macalester College, Physics Department, Saint Paul, Minnesota, 1970-1971.
- Postdoctoral Fellow, Argonne National Laboratory, Radiological Physics Division, Argonne, Illinois, 1969-1970.
- AEC Fellow, Clarkson College of Technology, Potsdam, New York, 1967-1969.
- AEC Fellow, U.S. Atomic Energy Commission Health and Safety Laboratory, New York, New York, 1966.
- Nuclear Laboratory Instructor, Clarkson College of Technology, Potsdam, New York, 1963-1966.
- NSF Fellow, University of Buffalo, Physics Department, 1963.

AREAS OF SPECIALIZATION

Radiological Physics, Nuclear Physics, Atomic Spectroscopy, Gamma-Ray Spectroscopy and Dosimetry, Applied Mathematics, Medical Nuclear Physics, Medical Applications of Computers.

SOCIETIES AND CITATIONS

American Association of Physicists in Medicine  
American Association of Physicists in Medicine (Mid-Atlantic Chapter)  
American College of Radiology  
American College of Radiology (Virginia Chapter)  
Health Physics Society  
Health Physics Society (Virginia Chapter)

PROFESSIONAL CERTIFICATION

American Board of Radiology: Diagnostic Radiological Physics  
(December 9, 1977)  
Medical Nuclear Physics  
(December 14, 1978)  
Therapeutic Radiological Physics  
(December 14, 1978)  
American Board of Health Physics (September 26, 1978)



**nucletron - Oldelft**

*This certifies that*

*Alfred M. Strash, Ph.D.*

*has successfully completed the*

**Brachytherapy Training Course**

**given the 19th through the 23rd day of August, 1996**

**at Nucletron-Oldelft Corporation  
Columbia, MD**

Mr. Tim H. Anderson  
Instructor, Training & Customer Support

Ms. Margaret Peterson  
Instructor, Training & Customer Support

Ms. Cecilia T. Nydegger  
Instructor, Training & Customer Support

Nucletron-Oldelft Corporation 7080 Columbia Gateway Drive Columbia, MD 21046-2133

```

:      (FOR LFMS USE)
:      INFORMATION FROM LTS
:      -----
:
:  Program Code: 02300
:  Status Code: 0
:  Fee Category: 7A
:  Exp. Date: 20010930
:  Fee Comments:
:  Decom Fin Assur Req'd: N
:
:  .....
```

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

```

: Status Code: 0

```

: Fee Category: 7A

: Exp. Date: 20010930

: Fee Comments:

```

: Decom Fin Assur Read: N

```

A. REGION II

Applicant/Licensee: HENRICO DOCTORS' HOSPITAL

Received Date: 960910

Docket No: 3032186

Control No.: 257193

License No.: 45-16231-02

Action Type: Amendment

Amount: 440.00

Check No.:

RECEIVED IN FEES-NOS

Signed DIANE HEIN

Date 9/11/96

B. LICENSE FEE MANAGEMENT BRANCH (check when milestone 03 is entered ☒)

1. Fee Category and Amount: 7A

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

Amerindien (

Renewal

## License

3. OTHER

Signed  
Date

Log Sep 4 JJ  
Remitter  
Check No. 7059363 7351860  
Amount \$380 (\$440 applied) + \$30  
Fee Category 7A  
Type of Fee amd  
Date Check Rec'd. 9/10/97  
Date Completed 11/4/96  
By: Lane

Sep 11 '96 10:45 P.02

Fax: 404-331-7437

USNRC Mat'l Lic/Insp



# COLUMBIA/HCA

A New Commitment To Healthcare... Together

Healthcare Corporation

HENRICO DOCTORS' HOSPITAL

July 22, 1996

U.S. Nuclear Regulatory Commission, Region II  
Materials Licensing Section  
101 Marietta Street N.W., Suite 2900  
Atlanta, Georgia 30323

Dear Sir:

**RE: Amendment to License No. 45-16231-02 (Teletherapy)**

Henrico Doctors' Hospital would like to amend Materials License No. 45-16231-02. Please find enclosed a check for \$440.00 to cover the fees specified in 10 CFR 170.31.

Dr. Burke terminated his relationship with the hospital as of the end of July and should no longer be listed as an Authorized User or RSO.

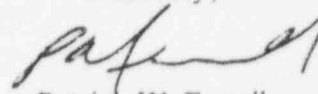
We would like to place our teletherapy unit (Siemens Gammatron S 180K, Model NPTT, Serial No. T-1179, activity on 7/1/96, 3,029 Ci, and its depleted Uranium shield) in *extended source storage*. We presently trying to sell the unit but also obtained quotes for removal and disposal (see attached). We have ceased using the unit as of July 20, 1996, and will not operate the unit again prior to disposition and license termination. The unit will be housed in its present location until disposition.

Larry Thomson, the Teletherapy Physicist named on the license, will be terminating his contract with the hospital at the end of August. We would like to name Dr. Alfred Strash as person responsible for maintaining control over the store sources (see attached resume).

The unit will be inventoried annually and leak tested every three years as long as it is in extended storage at our facility. It will also be leak tested prior to transfer to an authorized recipient. Since the department will continue to operate the HDR unit under license No. 45-16231-02 and an accelerator, our overall radiation safety program will remain the same.

If you have any questions regarding this request, please contact the Ms. Melanie Dempsey in Radation Oncology at (804) 287-4340.

Sincerely,



Patrick W. Farrell  
CEO

**Attachment A**

**Description of efforts made to dispose of the sources**

April 1996	Neutron Products	obtained quotations to remove/dispose of Co60 unit and source
May 1996	J&P Enterprises International	notified of availability of unit
	Rad Serv, Inc.	notified of availability of unit
	Edward L. Chaney, PhD	" "
	UNC-CH physicist	" "
	Xray Equipment	" "
	JM Company	" "
	Jackson Radiographics	" "
	Star Imaging, Inc.	" "
June 1996	Dr. Selvaraj	Contacted me regarding purchasing the unit Faxed pertinent information to him 6/28/96

## RESUME

ALFRED M. STRASH, Ph.D.

### PERSONAL INFORMATION

Home: 13811 Grey Friars Lane  
Midlothian, Virginia 23113  
(804) 794-8783 or 379-2607

### EDUCATION

Ph.D. Clarkson College of Technology, 1969  
M.S. Clarkson College of Technology, 1966  
B.A. University of Buffalo, 1963

### PROFESSIONAL EXPERIENCE

- Radiological Physics Consultant, Richmond, Virginia, 1975-present.
- Associate Professor of Radiology, Medical College of Virginia, Richmond, Virginia 1976-1985.
- Assistant Professor of Radiology, Medical College of Virginia, Richmond, Virginia 1971-1976.
- Director of Radiation Safety Office, VCU University/MCV, Richmond, Virginia, 1971-1975.
- Postdoctoral Research and Teaching Fellow, Macalester College, Physics Department, Saint Paul, Minnesota, 1970-1971.
- Postdoctoral Fellow, Argonne National Laboratory, Radiological Physics Division, Argonne, Illinois, 1969-1970.
- AEC Fellow, Clarkson College of Technology, Potsdam, New York, 1967-1969.
- AEC Fellow, U.S. Atomic Energy Commission Health and Safety Laboratory, New York, New York, 1966.
- Nuclear Laboratory Instructor, Clarkson College of Technology, Potsdam, New York, 1963-1966.
- NSF Fellow, University of Buffalo, Physics Department, 1963.

AREAS OF SPECIALIZATION

Radiological Physics, Nuclear Physics, Atomic Spectroscopy, Gamma-Ray Spectroscopy and Dosimetry, Applied Mathematics, Medical Nuclear Physics, Medical Applications of Computers.

SOCIETIES AND CITATIONS

American Association of Physicists in Medicine  
American Association of Physicists in Medicine (Mid-Atlantic Chapter)  
American College of Radiology  
American College of Radiology (Virginia Chapter)  
Health Physics Society  
Health Physics Society (Virginia Chapter)

PROFESSIONAL CERTIFICATION

American Board of Radiology: Diagnostic Radiological Physics  
(December 9, 1977)  
Medical Nuclear Physics  
(December 14, 1978)  
Therapeutic Radiological Physics  
(December 14, 1978)  
American Board of Health Physics (September 26, 1978)

## LICENSE FEE REQUIREMENTS

LICENSE FEE AND DEBT COLLECTION BRANCH  
DIVISION OF ACCOUNTING AND FINANCE  
OFFICE OF THE CONTROLLER  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, DC 20555-0001HENRICO DOCTORS' HOSPITAL  
ATTN: MELANIE DEMPSEY  
RADIATION ONCOLOGY  
1602 SKIPWITH ROAD  
RICHMOND, VA 23229

## TYPE OF ACTION

- ☐ NEW LICENSE  
☐ RENEWAL OF LICENSE  
☒ AMENDMENT TO LICENSE

REQUESTED DATE

7-22-96

LICENSE NUMBER

45-16231-01 AND 45-16231-02

CONTROL NUMBER

257192 &amp; 257193 ATN: RITA MESSIER, T9E10

## I. APPLICATION FEE DUE

Your request for a licensing action is subject to the fee(s) in the category(ies) noted below in accordance with Section 170.31 of the enclosed Federal Register notice. Payment of the fee is required prior to the issuance of the license, renewal, or amendment.

FEE CATEGORY	APPLICATION	RENEWAL	AMENDMENT
7A	\$	\$	\$ 470.00
7C	\$	\$	\$ 44
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$

FEE(s) DUE	\$	910.00
PAYMENT RECEIVED	\$	880.00
AMOUNT DUE	\$	30.00

☐ Your request was received without the prescribed application fee.

☒ We received your Check No. 7054463 in the amount of \$ 30.00. Payment of the additional fee noted above is required.

☐ Your request will increase the scope of your license program. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(d)(2).

☐ Your license expired prior to the receipt of your application for renewal. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(a).

MAKE PAYMENT OF THE FEE(S) TO THE U.S. NUCLEAR REGULATORY COMMISSION AND MAIL THE PAYMENT TO THE ADDRESS LISTED AT THE TOP OF THIS FORM. IF WE DO NOT RECEIVE A REPLY FROM YOU WITHIN 30 CALENDAR DAYS FROM THE DATE LISTED BELOW, WE SHALL ASSUME THAT YOU DO NOT WISH TO PURSUE YOUR APPLICATION AND WILL VOID THIS ACTION.

SIGNATURE -- LICENSE FEE ANALYST

RITA MESSIER

LFDCB

REMessier

9/11/96

LFDCB

## II. FEE NOT REQUIRED

☐ Enclosed is Check No. \_\_\_\_\_ which accompanied your request. The fee is not required because:

☐ We received your Check No. \_\_\_\_\_ in payment of the fee.

☐ The Licensing staff has informed us that your request is to be considered as a continuation of your request dated \_\_\_\_\_, Control No. \_\_\_\_\_.

☐ Your request was combined, prior to review, with your \_\_\_\_\_ request, Control No. \_\_\_\_\_.

## III. CHECK RETURNED

☐ Enclosed is Check No. \_\_\_\_\_ which was returned to us by the bank for:

- ☐ INSUFFICIENT FUNDS  
☐ ACCOUNT CLOSED  
☐ OTHER

MAIL THE REPLACEMENT CHECK TO THE ADDRESS LISTED AT THE TOP OF THIS FORM AND REFERENCE THE ABOVE CONTROL NUMBER.

## IV. LICENSE ISSUED WITHOUT THE REQUIRED FEE

☐ License No. \_\_\_\_\_, Amendment No. \_\_\_\_\_, issued on \_\_\_\_\_ was issued without the required fee being collected. The fee required is noted in Section I of this form.

☐ The scope of your licensed program was increased. Therefore, your request is subject to the application fee(s) noted in Section I of this form. Refer to Section 170.31 and Footnote 1(d)(2).

☐ Because of the urgency of your request, the license was issued without remittance of the prescribed fee noted in Section I of this form.

Distribution:

OC/DAF RF

DATE

Pending Fee File

OC/DAF/SF(LF-3.2.7)

LFARB R/F (2)

Region II

9-11-96