

## MATERIALS LICENSE

Amendment No. 80

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.

302143

## Licensee

1. Oakwood Hospital and Medical Center
2. 18101 Oakwood Boulevard  
Dearborn, MI 48123-2500

In accordance with letter dated  
December 18, 19963. License Number 21-04515-01 is amended in  
its entirety to read as follows:

4. Expiration Date August 31, 2001

5. Docket or  
Reference No. 030-020516. Byproduct, Source, and/or  
Special Nuclear Material7. Chemical and/or Physical  
Form8. Maximum Amount that Licensee  
May Possess at Any One Time  
Under This LicenseA. Any byproduct  
material identified  
in 10 CFR 35.100A. Any  
radiopharmaceutical  
identified in 10 CFR  
35.100

A. As needed

B. Any byproduct  
material identified  
in 10 CFR 35.200B. Any  
radiopharmaceutical  
identified in 10 CFR  
35.200

B. As needed

C. Any byproduct  
material identified  
in 10 CFR 35.300C. Any  
radiopharmaceutical  
identified in 10 CFR  
35.300C. As needed  
(not to exceed  
1 curie of  
Iodine-131)D. Any byproduct  
material identified  
in 10 CFR 35.400D. 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

F. Iridium-192

F. Sealed sources  
(BYK Mallinckrodt  
Model CI LBV)F. Two sources not to  
exceed 12 curies  
each

G. Cesium-137

G. Sealed sources  
(ORIS/CBI Model  
CSL-15)G. Three sources not  
to exceed 1700  
curies each

090086

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MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License Number

21-04515-01

Docket or Reference Number

030-02051

Amendment No. 80

## 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.
- E. In vitro studies.
- F. One source to be used in a Nucletron Corporation MicroSelectron-HDR remote afterloading brachytherapy unit for interstitial, intracavitary, and bronchial radiotherapy. One source in its shipping container to be in possession of the licensee as necessary for replacement of the source in the irradiation device.
- G. Three sources to be used in an International CIS self shielded blood irradiator, Model IBL-437C for the irradiation of biologic matter excluding materials that are flammable and/or explosive.

CONDITIONS

- 10. Location of Use: 18101 Oakwood Boulevard, Dearborn, Michigan.
- 11. A. Radiation Safety Officer: David S. Yates, M.D.
  - B. The high dose rate afterloading brachytherapy physicist is Taljit S. Sandhu, Ph.D., Barbara G. Orton, M.S., and Lisa A. Langenstein, M.S.
- 12. A. Licensed material listed in Item 6. above is only authorized for use by, or under the supervision of, the following individuals for the materials and uses indicated:

Authorized UsersMaterial and Use

- |                            |  |
|----------------------------|--|
| A. Alan R. Hennessey, M.D. | 10 CFR 35.100, 35.200, 35.300, and 35.400. |
| B. Arthur J. Bady, M.D.    | 10 CFR 35.100, 35.200, 35.300, and 35.400. |
| C. John B. Junker, M.D.    | 10 CFR 35.100, 35.200, and 31.11.          |

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Authorized Users

- D. Choon K. Lee, M.D.
- E. James I. Breckenfeld, M.D.
- F. Jung H. Chang, M.D.
- G. Reza Abghari, M.D.
- H. David S. Yates, M.D.
- I. Kyriakos C. Demetropoulos, M.D.
- J. Jerry W. Drake, M.D.
- K. Sharon Helmer, M.D.
- L. Kenneth D. Bartold, M.D.
- M. Arnold Herskovic, M.D.
- N. Dong Hyuck Kim, M.D.
- O. John H. Finger, M.D.
- P. Eric J. Groskind, M.D.
- Q. Daniel B. Schumaker, M.D.
- R. Sophia Roumanis, M.D.

Material and Use

- 10 CFR 35.400, and iridium-192 in remote afterloading brachytherapy unit.
- 10 CFR 35.100, 35.200, 35.300, (excluding iodine-131 for thyroid carcinoma), and 31.11.
- 10 CFR 35.400, and iridium-192 in remote afterloading brachytherapy unit.
- 10 CFR 35.100, 35.200, 35.300, and 31.11.
- 10 CFR 35.100, 35.200, 35.300 (excluding iodine-131 for treatment of hyperthyroidism and cardiac dysfunction), and 31.11.
- 10 CFR 35.100, 35.200, 35.300, and 31.11.
- 10 CFR 35.100, 35.200, and 35.300.
- 10 CFR 35.100, 35.200 (excluding generators), and 35.300.
- 10 CFR 35.100, 35.200, and 35.300.
- 10 CFR 35.400 and iridium-192 in remote afterloading brachytherapy unit.
- 10 CFR 35.100, 35.200, and 31.11.
- 10 CFR 35.100, 35.200, and 35.300.
- 10 CFR 35.100, 35.200 and 35.300.
- 10 CFR 35.100, 35.200, 35.300, and 31.11.
- 10 CFR 35.100, 35.200, and 35.300.

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Authorized Users

S. T. G. McDonald, M.D.

T. Paul B. Lattin M.D.,

U. Donald J. Conn, M.D.,

Material and Use

10 CFR 35.100, 35.200 and 35.300.

10 CFR 35.400 and iridium-192 in remote afterloading brachytherapy unit.

10 CFR 35.100, 35.200 and 35.300.

B. Licensed material listed in subitem 6.G. shall be used by or under the supervision of Cheryl Starbuck upon completion of training by the vendor at installation in accordance with letters dated April 15, 1996, and May 15, 1996.

13. Notwithstanding the provisions of 10 CFR 35.400(d), the licensee may use iridium-192 seeds encased in nylon ribbon as described in letter dated February 7, 1992, for intracavitary/intraluminal treatment of cancer.

14. 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.

15. A. (1) The source(s) specified in Item 7.G. shall be tested for leakage and/or contamination at intervals not to exceed six months. Any source received from another person which is not accompanied by a certificate indicating that a test was performed within six months before the transfer shall not be put into use until tested.

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

16. A. Access to the room housing the MicroSelectron-HDR irradiation device shall be controlled by a door at each entrance.

B. The entrance to the irradiation room shall be equipped with an electrical interlock system that will cause the source to return to the shielded position immediately upon opening of the entrance door. The interlock system shall be connected in such a manner that the source cannot be placed in the irradiation position until the entrance door is closed and the source "on-off" control is reset at the control panel.

C. Electrical interlocks on the entrance door to the irradiator room shall be tested for proper operation at least once a month. Records of test results shall be maintained for inspection by the Commission.

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- D. In the event of malfunction of the door interlock, the irradiation device shall be locked in the "off" condition and not used, except as may be necessary for repair or replacement of the interlock system, until the interlock system is shown to be functioning properly.
17. Prior to initiation of a treatment program, and subsequent to each source exchange for the MicroSelectron-HDR, 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 source in the shielded position. The maximum radiation levels at 100 centimeters from the surface of the source head shall not exceed 0.25 milliroentgens per hour.
  - (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 Section 20.1201, Title 10, Part 20, Code of Federal Regulations, Chapter 1, "Standard for Protection Against Radiation" (10 CFR 20).
    - (b) That quantities of radiation in unrestricted areas do not exceed the limits specified in Section 20.1301(b) 10 CFR 20.
- B. Records of survey results shall be maintained for inspection by the Commission.
18. 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 MicroSelectron-HDR irradiation device.
  - B. Any maintenance or repair operations on the 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.
19. The licensee may possess 24 curies of iridium-192 (not to exceed 12 curies per source) for use in the Nucletron Corporation MicroSelectron HDR remote afterloading brachytherapy device, provided the individual source activity does not exceed 10 curies at the time of installation, and the source is installed by an authorized individual.

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20. In lieu of 10 CFR 35.404(a), immediately after retracting the source from the patient into its shielded position in the remote afterloading device, a radiation survey shall be made of the patient and the remote afterloading device with a portable radiation detection survey instrument to confirm that the source has been removed from the patient. Records of the survey shall be maintained in lieu of the record required in 10 CFR 35.404(b).
21. In lieu of the source inventory required in 10 CFR 35.406, the licensee shall:
- A. Promptly determine that all sources have returned to the safe, shielded position at the conclusion of each remote afterloading brachytherapy procedure.
  - B. Promptly make a survey of the area of use to confirm that no sources have been misplaced.
  - C. Make a record of the survey including the survey instrument used, dose rate expressed in mrem/hr ( $\mu$ Sieverts/hr), time, date and name of the individual making the survey.
  - D. Retain the record of the survey in lieu of the record required in 10 35.406(d).
22. 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. Application dated May 24, 1995 (excluding the Quality Management Program); and
  - B. Letters dated July 18, 1995, March 27, 1996 (excluding the Quality Management Program), April 15, 1996, May 15, 1996, June 19, 1996, August 5, 1996, and letter dated December 18, 1996 (with attachments).

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date

December 30, 1996

By

Patricia J. Allen  
Nuclear Materials Licensing Branch, Region III

COPY

BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

(FOR LFMS USE)  
INFORMATION FROM LTS

Program Code: 02230  
Status Code: 0  
Fee Category: 7C 3E 2B  
Exp. Date: 20010831  
Fee Comments: 3E ADDED 6/18/96  
Decom Fin Assur Req'd: N

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: OAKWOOD HOSP. & MED. CNTR-DEARBORN  
Received Date: 961219  
Docket No: 3002051  
Control No.: 302143  
License No.: 21-04515-01  
Action Type: Amendment

2. FEE ATTACHED

Amount: *X*

Check No.: *X*

*2 checks -  
5 actions*

Signed  
Date

*S. Hersey*  
*12/23/96*

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

1. Fee Category and Amount:

*(7C) 3E 2B*

*\$440*

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

Amendment ☒

Renewal ☐

License ☐

3. OTHER

Signed  
Date

*SC*  
*12/27/96*

JAN 02 1997

Log	<i>Dec 9 III</i>
Remitter	
Check No.	<i>190441</i>
Amount	<i>(\$1760) \$440</i>
Fee Category	<i>7C</i>
Type of Fee	<i>AMD</i>
Date Check Rec'd	<i>12/27/96</i>
Date Completed	<i>12/27/96</i>
By:	<i>SC</i>

1996 DEC 27 PM 2:05

LAW OFFICES

**DYKEMA GOSSETT**

PROFESSIONAL LIMITED LIABILITY COMPANY

400 RENAISSANCE CENTER

DETROIT, MICHIGAN 48243-1668

TELEPHONE (313) 568-6800

ANN ARBOR, MICHIGAN  
BLOOMFIELD HILLS, MICHIGAN  
CHICAGO, ILLINOIS

GRAND RAPIDS, MICHIGAN  
LANSING, MICHIGAN  
WASHINGTON, D.C.

Telecopier: (313) 568-6915

Steven C. Tyshka

Direct Dial  
(313) 568-6585

December 18, 1996

VIA FEDERAL EXPRESS

Ms. Patty Pelke  
U.S. Nuclear Regulatory Commission  
Materials Licensing Section  
801 Warrenville Road  
Lisle, Illinois 60532

Re: Oakwood System Reorganization

Dear Ms. Pelke:

As we notified you previously, the Oakwood System is undergoing a corporate reorganization scheduled to be effective on January 1, 1997. However, the plans have changed a bit since our previous correspondence to you. Oakwood Hospital Beyer Center - Ypsilanti will not be changing ownership at this time. It will remain owned by Oakwood United Hospitals, Inc. Accordingly, we are not submitting the information needed for a change of ownership under IN 89-25, Rev. 1 for the Beyer facility. Thus, we are enclosing the information requested for the following facilities:

Oakwood Hospital - Annapolis Center  
Oakwood Downriver Medical Center  
Oakwood Hospital - Heritage Center  
Oakwood Hospital and Medical Center  
Oakwood Hospital - Seaway Center

RECEIVED

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REGION III

302143



DYKEMA GOSSETT  
PLLC

Ms. Patty Pelke  
December 18, 1996  
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To reiterate the changes, Oakwood Hospital and Medical Center will change its name to Oakwood Healthcare, Inc. d/b/a Oakwood Healthcare System, and will undergo a change in its governing body. It will become the owner of the remaining facilities through several corporate mechanisms. Oakwood Downriver Medical Center will actually merge into Oakwood Healthcare, Inc. d/b/a Oakwood Healthcare System. The remaining facilities, which are currently owned and operated by Oakwood United Hospitals, Inc., will be leased to Oakwood Healthcare, Inc. d/b/a Oakwood Healthcare System. In addition, Oakwood United Hospitals, Inc. will undergo corporate changes to become a wholly-owned subsidiary of Oakwood Healthcare, Inc., and will change its own governing body.

We have also enclosed the licensure fees for the five facilities with the information provided by Shirley Crutchfield.

Obviously, it is imperative that no gap occur in the licensure of these facilities once the transaction becomes effective. We understand that it will not be possible for the facilities to physically have the new licensure documentation on January 1, or perhaps even for several weeks thereafter. We will need, however, assurance from your office that the facilities are considered fully licensed during the time that it takes to prepare and receive the new licenses.

Thank you for your prompt attention to this matter. If you have any questions, or need additional information, please do not hesitate to call me at the number above, or you may contact Joanne Lax, who is also working on this matter. Joanne can be reached at (313) 568-6794.

Sincerely,

DYKEMA GOSSETT PLLC

*Steven C. Tyshka*  
Steven C. Tyshka

SCT126  
Enclosures

cc: Pam Bem  
Valerie Hendricks



U.S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS  
WASHINGTON, D.C. 20555

INFORMATION NEEDED FOR CHANGE OF OWNERSHIP APPLICATION  
IN 89-25, Rev. 1

The following information is provided for all 5 of the facilities involved in the Oakwood Hospital Reorganization. The responses to the other questions which require specific information from each facility are enclosed.

1. The new name of the licensed organizations will be:

Oakwood Healthcare, Inc. d/b/a Oakwood Healthcare  
System; Oakwood Hospital - Annapolis Center  
Current License No.: 21-11457-02

Oakwood Healthcare, Inc. d/b/a Oakwood Healthcare  
System; Oakwood Downriver Medical Center  
Current License No.: 21-18752-01

Oakwood Healthcare, Inc. d/b/a Oakwood Healthcare  
System; Oakwood Hospital - Heritage Center  
Current License No.: 21-17789-01

Oakwood Healthcare, Inc. d/b/a Oakwood Healthcare  
System; Oakwood Hospital and Medical Center  
Current License No.: 21-04515-01

Oakwood Healthcare, Inc. d/b/a Oakwood Healthcare  
System; Oakwood Hospital - Seaway Center  
Current License No.: 21-16656-01

4. Oakwood United Hospitals, Inc. will retain its current status with regard to Beyer Memorial Hospital (License No. 21-15147-01).

5. The hospitals comprising the Oakwood system will be re-organized effective January 1, 1997. The hospitals involved are:

Oakwood Hospital and Medical Center -- Dearborn

Oakwood Hospital Downriver Center -- Lincoln Park

Oakwood Hospital Heritage Center -- Taylor

Oakwood Hospital Seaway Center -- Trenton

Oakwood Hospital Annapolis Center -- Wayne/ Oakwood  
Hospital Merriman Center -- Westland (consolidated  
state hospital licensure and Medicare certification)

The changes resulting from the re-organization are as follows. Oakwood Hospital and Medical Center will change its name to Oakwood Healthcare, Inc. d/b/a Oakwood Healthcare System, and will undergo a change in its governing body. It will become the owner of the remaining facilities through several corporate mechanisms. Oakwood Hospital Downriver Center -- Lincoln Park will actually merge into Oakwood Healthcare Inc. d/b/a Oakwood Healthcare System. The remaining facilities, which are currently owned and operated by Oakwood United Hospitals, Inc., will be leased to Oakwood Healthcare Inc. d/b/a Oakwood Healthcare System. In addition, Oakwood United Hospitals, Inc. will undergo corporate changes to become a wholly-owned subsidiary of Oakwood Healthcare Inc., and will change its own governing body.

Oakwood Hospital  
Annapolis Center

33155 Annapolis Ave.  
Wayne, Michigan  
48184-2403  
313.467.4000



Oakwood Hospital - Annapolis  
Center

December 13, 1996

US Nuclear Regulatory Commission  
Region III  
Materials Licensing  
801 Warrenville Road  
Lisle, Illinois 60532

Re: Change of Ownership 21-11457-02

Dear Sirs:

We wish to advise you of the change of ownership within our organization concerning our Material's License Number 21-11457-02. The information that follows is presented as requested in NRC Information Notice 89-25 dated 12/7/94.

1. \_\_\_\_\_  
\_\_\_\_\_
2. The contact person for this licensee is Fred Wallon, CNMT, Manager,  
Special Imaging Services. (313)467-4143
3. There will be no change in personnel having control over licensed  
activities.
4. \_\_\_\_\_  
\_\_\_\_\_
5. \_\_\_\_\_  
\_\_\_\_\_
6. There will be no planned changes in organization, location, facility,  
equipment or operating or emergency procedures.
7. There will be no changes in the use, possession, location or storage of  
licensed materials.

21-11457-02

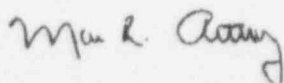
Change of Ownership

2

8. There are no changes that would require a license amendment even without a change in ownership.
9. All surveillance items and records will be current at the time of transfer and maintained at the licensee address.
10. We confirm that all records of decommissioning of the facility, public dose, waste disposal, radioactive material spills will be transferred to the new licensee. We have not and will not bury or incinerate radioactive waste.
11. The facility is as indicated with our license application and is free of radioactive contamination.
12. Responsibility and division of transferor's assets for cleanup at the time of transfer are not applicable. We confirm that the possession limits noted in our Materials License 21-11457-02 will be restricted to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.
13. We confirm that the transferee will abide by all commitments and representations previously made to the NRC by the transferor. Contamination of the facility or open inspection items are not applicable.
14. We confirm that the transferor and transferee agree to the change in ownership or control of licensed activities and materials, the conditions of transfer. There are no open inspection items that could result in enforcement action.
15. We confirm to abide by all constraints, conditions, requirements, representations and commitments in the existing license.

If you have any questions regarding this issue, please contact us.

Sincerely,



Mark R. Anthony, Vice President/Administrator  
Oakwood Hospital-Annapolis Center-Wayne

Oakwood Downriver  
Medical Center

CHANGE OF OWNERSHIP  
PER INFORMATION NOTICE 89-25 REV.1

1. License No. 21-18752-01  
Current Name: Oakwood Hospital Downriver Center  
The new name will be \_\_\_\_\_
2. The license contact name is Tom Kochis 313/3826003 and Mr Moon, M.D., RSO 313/3826777
3. There are no changes in personnel having control over licensed activities.
6. There are no changes planned.
7. There are no changes planned.
8. There are no changes planned.
9. All required records regarding the use and possession of licensed materials will be current at the time of the transfer. The status of compliance will be maintained before, during and after the merger. All of these records are maintained on site. NO records regarding licensed material will be removed from the licensed site.

All required documents and records are currently kept in accordance with the NRC license conditions. These include but are not limited to the annual calibration of survey instruments, semi-annual leak testing of non-exempt sealed radioactive sources, radiation monitoring, and personnel exposure monitoring reports. Radiation monitoring is performed as required by the NRC licensees on a daily basis for acceptable radiation levels and weekly for removable contamination.

10. We confirm that all records concerning the safe and effective decommissioning of the facility, public dose, waste disposal by release to sewers, and radioactive material spills will remain at the licensed site and will be maintained after the transfer. Oakwood Hospital Downriver Center does not bury or incinerate radioactive materials.

Please note: due to the small quantities and short half-lives of the unsealed radioactive materials which we use we are exempt from showing financial assurance for decommissioning. We do not use any unsealed radioactive material with a half-life greater than 60 days.

11. The areas of storage, preparation, handling and administration of radioactive materials are surveyed daily for acceptable radiation levels and weekly for removable contamination. If contamination of these areas is detected during these daily or weekly surveys, decontamination is undertaken and completed at that time. The unsealed radionuclides in use at these locations are all short-lived (i.e. half-lives less than 65 days.



most less than 10 days.) Therefore, radioactive contamination is highly unlikely at this facility. If contamination were present, it would be discovered prior to the transfer. Records will be maintained on site of inventories of sealed sources and spills of radioactive materials.

12. As stated above, long-term decommissioning plans are not applicable to this facility. This facility is not subject to the financial assurance for decommissioning requirements.

13. Oakwood Hospital Downriver Center agrees to abide by all commitments and representations previously made to the NRC by Oakwood Hospital Downriver Center

Oakwood Hospital Downriver Center accepts full responsibility for the site. This facility is exempt from providing financial assurance for decommissioning because of the type of radioactive materials used (i.e. short-lived, unsealed sources in small quantities only). Routine radiation monitoring of the facility ensures that contamination will not be transferred during any subsequent change of ownership.

There are no open inspection items.

14. Since there is no planned change in either the individuals responsible for the licensed activities or the overall Hospital Administration, it is understood that all parties involved are aware and agree to the planned transfer of the license.

15. Oakwood Hospital Downriver Center agrees to abide by all constraints, conditions, requirements, representations, and commitments identified in the existing license.

**COMMITMENT OF NRC LICENSE CONDITIONS FOR  
LICENSE NO.**

We hereby commit, as the management of the future Oakwood Downriver Medical Center to abide by all of the constraints, conditions, requirements, representations, and commitments identified in the existing Nuclear Regulatory Commission license no. 21-18752-01 which is currently known as Oakwood Hospital Downriver Center.

Signed:

Mrs. Koolin / Administrator  
CEO



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

May 6, 1996

OAKWOOD HOSPITAL DOWNRIVER CENTER -  
ATTN: DR. KYUNG-WOONG MOON, M.D.  
Radiation Safety Officer  
LINCOLN PARK  
25750 W. OUTER DRIVE  
LINCOLN PARK, MI 48146

SUBJECT: ONE-TIME EXTENSION OF LICENSE EXPIRATION DATE  
LICENSE NUMBER 21-18752-01, DOCKET NUMBER 3014129

Dear DR. KYUNG-WOONG MOON, M.D.

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 December 31, 2000. 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.

John R. Madera, Division of Nuclear Materials Safety - (708) 829-9834

Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in dark ink, appearing to read "D. A. Cool".

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

(10-89)

## U.S. NUCLEAR REGULATORY COMMISSION

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## MATERIALS LICENSE

Amendment No. 04

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

1. Oakwood Downriver Medical Center

2. 25750 W. Outer Drive  
Lincoln Park, MI 48146In accordance with application dated  
August 1, 19903. License number 21-18752-01 is renewed in  
its entirety to read as follows:

4. Expiration date December 31, 1995

5. Docket or  
Reference No 030-141296. Byproduct, source, and/or  
special nuclear material7. Chemical and/or physical  
form8. Maximum amount that licensee  
may possess at any one time  
under this licenseA. Any byproduct material  
identified in 10 CFR 35.100A. Any radiopharmaceutical  
identified in 10 CFR 35.100

A. As needed

B. Any byproduct material  
identified in 10 CFR 35.200B. Any radiopharmaceutical  
identified in 10 CFR 35.200  
(excluding Xenon-133)

B. As needed

9. Authorized Use:

A. Medical use described in 10 CFR 35.100.

B. Medical use described in 10 CFR 35.200 (excluding Xenon-133).

## CONDITIONS

10. Location of Use: 25750 West Outer Drive, Lincoln Park, Michigan.

11. Radiation Safety Officer: Kyung-Woong Moon, M.D.

12. Authorized Users:

A. Kyung-Woong Moon, M.D., for material in 10 CFR 35.100 and 35.200 (excluding  
Xenon-133).13. The licensee shall maintain records of information important to safe and effective  
decommissioning at the address in Condition 10, per the provisions of  
10 CFR 30.35(g) until this license is terminated by the Commission.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License number

21-18752-01

Docket or Reference number

030-14129

Amendment No. 04

14. Leak tests shall be performed by persons specifically authorized by the Commission or an Agreement State to perform such services.
15. This license is based on the licensee's statements and representations listed below:
- A. Application dated August 1, 1990; and
  - B. Letter dated October 2, 1990.



For the U.S. Nuclear Regulatory Commission

Date: October 15, 1996

By

Robert E. Patterson Jr.

Materials Licensing Section, Region III



Oakwood Hospital  
Heritage Center

70000 Telegraph Rd.  
Taylor, Michigan  
48180-3349  
313.296.6000



DEC 16 96 09:17  
Oakwood Hospital-  
Heritage Center

December 13, 1996

U.S. Nuclear Regulatory Commission  
Region III  
Materials Licensing  
801 Warrenville Road  
Lisle, Illinois 60532

Re: Change of Ownership 21-17789-01

Dear Sirs:

We wish to advise you of the change of ownership within our organization concerning our Material's License Number 21-17789-01. The information that follows is presented as requested in NRC Information Notice 69-25 dated 12/7/94.

2. The contact person for this licensee is Sherrill B. Tedford, Administrative Director, Radiology. (313) 295-5140.
3. There will be no change in personnel having control over licensed activities.
6. There will be no planned changes in organization, location, facility, equipment or operating or emergency procedures.
7. There will be no changes in the use, possession, location or storage of licensed materials.
8. There are no changes that would require a license amendment even without a change of ownership.
9. All surveillance items and records will be current at the time of transfer and maintained at the licensee address.
10. We confirm that all records of decommissioning of the facility, public dose, waste disposal, radioactive material spills will be transferred to the new licensee. We have not and will not bury or incinerate radioactive waste.
11. The facility is as indicated with our license application and is free of radioactive contamination.
12. Responsibility and division of transferor's assets for cleanup at the time of transfer are not applicable. We confirm that the possession limits noted in our Materials License 21-17789-01 will be restricted to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.

Continued:

DEC 16 09:15

- 2 -

December 13, 1996

U.S. Nuclear Regulatory Commission

Re: Change of Ownership 21-17789-01

13. We confirm that the transferee will abide by all commitments and representations previously made to the NRC by the transferor. Contamination of the facility or open inspection items are not applicable.
14. We confirm that the transferor and transferee agree to the change in ownership or control of licensed activities and materials, the conditions of transfer. There are no open inspection items that could result in enforcement action.
15. We confirm to abide by all constraints, conditions, requirements, representations and commitments in the existing license.

If you have any questions regarding this issue, please contact us.

Sincerely,



Thomas Johnson  
Vice President, Administrator

**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**

1. Oakwood United Hospitals, Inc.  
d/b/a Heritage Hospital  
Department of Radiology
2. 10000 Telegraph Rd.  
Taylor, MI 48180

In accordance with letter dated  
September 26, 1994  
3. License number 21-17789-01 is amended in  
its entirety to read as follows:

4. Expiration date May 31, 1999

5. Docket or  
Reference No. 4030-13321

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

B. As needed

C. Any byproduct material  
identified in 10 CFR  
31.11

C. Prepackaged Kits

C. As needed

9. Authorized Use:

A. Medical use described in 10 CFR 35.100.

B. Medical use described in 10 CFR 35.200.

C. In vitro studies.

**CONDITIONS**

10. Licensed material shall be used only at the licensee's facilities located at 10000 Telegraph Rd., Taylor, Michigan.

11. Radiation Safety Officer: Jerry W. Drake, M.D.

MATERIALS LICENSE  
SUPPLEMENTARY SHEET

PAGE 2 OF 3 PAGES

License number

21-17789-01

Docket or Reference number

030-13321

Amendment No. 14

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

Authorized UsersMaterial and Use

- |                                |  |
|--------------------------------|--|
| A. Arthur J. Bady, M.D.        | For material in 10 CFR 35.100, 35.200, and 10 CFR 31.11. |
| B. Thomas G. McDonald, M.D.    | For material in 10 CFR 35.100, 35.200, and 10 CFR 31.11. |
| C. Alan T. Hennessey, M.D.     | For material in 10 CFR 35.100, 35.200, and 10 CFR 31.11. |
| D. Robert A. Songe, M.D.       | For material in 10 CFR 35.100, 35.200, and 10 CFR 31.11. |
| E. James I. Breckenfield, M.D. | For material in 10 CFR 35.100, 35.200, and 10 CFR 31.11. |
| F. Sharon Helmer, M.D.         | For material in 10 CFR 35.100, 35.200, and 31.11.        |
| G. Jerry Drake, M.D.           | For material in 10 CFR 35.100, 35.200, and 31.11.        |
| H. Kenneth Bartold, M.D.       | For material in 10 CFR 35.100, 35.200, and 31.11.        |
| I. David S. Yates, M.D.        | For material in 10 CFR 35.100, 35.200, and 31.11.        |
| J. Doug Hyuck Kim, M.D.        | For material in 10 CFR 35.100, 35.200, and 31.11.        |
| K. James J. Kochkodan, M.D.    | For material in 10 CFR 35.100, 35.200, and 31.11.        |

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

PAGE	3	OF	3	PAGES
License number	21-17789-01			
Docket or Reference number	030-13321			
Amendment No. 14				

13. 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. Application dated April 5, 1994; and
  - B. Letters dated May 12, 1994 and September 26, 1994.



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date 11/17/94

By James Mullins  
Materials Licensing Section, Region III



STATE OF MICHIGAN

DEC 16 96 09:17



JOHN ENGLER, Governor

## DEPARTMENT OF ENVIRONMENTAL QUALITY

HOLLISTER BUILDING, PO BOX 20473, LANSING MI 48209-7573

RUSSELL J. HARDING, Director

REPLY TO:

 DRINKING WATER & RADIOLOGICAL  
 PROTECTION DIVISION  
 3425 N MARTIN L KING JR BLVD  
 PO BOX 20630  
 LANSING MI 48209-6130

May 28, 1996

Correction:

 TO: ~~Cheryl Tedford, Administrator~~  
~~Heritage Hospital~~  
 10000 Telegraph Road  
 Taylor, Michigan 48180

 Sherrill Tedford, Administrative  
 Director, Radiology  
 Oakwood Hospital-Heritage Center

Pursuant to a recent communication with your office, we are enclosing the following document(s):

- ☒ Form RH-20 (Radioactive Material Registration). Please complete and return. *Receipted copy will be returned to you.*
- ☐ Form RH-837 (Companies Providing Accredited Personnel Monitoring Services).
- ☐ Form RH-852 (Plan Review Sheet).
- ☐ Form RH-864 (Radioactive Material's Temporary Job Site Notification).
- ☐ Form RH-876 (Radiation Safety for Lead Paint Analyzers).
- ☐ Form RH-1000 (*Ionizing Radiation Rules*).
- ☐ Companies Having Registered Lead-in-Paint Analyzers.
- ☐ Companies Providing Radiation Survey Meters For Field Use.
- ☐ Cleanup and Disposal Guidelines for Sites Contaminated with Radium-226.
- ☐ RHN-94-1 (Potential Radium Contamination From Aircraft Instruments, Instrument Faces (Dials), and Instrument Pointers).
- ☐ RHN-95-1 (Potential for Thallium-201 Contamination of Treadmills and Rooms Used for Thallium Cardiac Stress Tests).

If you have any questions, please call 517-335-8204.

By authority: Part 135, Act 368 P.A. 1978, as amended.

DEC 18 09:17



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

May 6, 1996

OAKWOOD UNITED HOSPITALS, INC.  
ATTN: DR. JERRY W. DRAKE, M.D.  
Radiation Safety Officer  
D/B/A HERITAGE HOSPITAL / DEPT OF RADIOLOGY  
10000 TELEGRAPH RD.  
TAYLOR, MI 48180

SUBJECT: ONE-TIME EXTENSION OF LICENSE EXPIRATION DATE  
LICENSE NUMBER 21-17789-01. DOCKET NUMBER 3013321

Dear DR. JERRY W. DRAKE, M.D.

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 May 31, 2004. 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.

John R. Madera, Division of Nuclear Materials Safety - (708) 829-9834

Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in dark ink, appearing to read "D. Cool", followed by a horizontal line.

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

**CHANGE OF OWNERSHIP  
PER INFORMATION NOTICE 89-25 REV.1**

License No. 21-04515-01

Current Name: OAKWOOD HOSPITAL AND MEDICAL CENTER- DEARBORN

2. The license contact name is SAME.
3. There are no changes in personnel having control over licensed activities.
6. There are no changes planned.
7. There are no changes planned.
8. There are no changes planned.
9. All required records regarding the use and possession of licensed materials will be current at the time of the transfer. The status of compliance will be maintained before, during and after the merger. All of these records are maintained on site. NO records regarding licensed material will be removed from the licensed site.

All required documents and records are currently kept in accordance with the NRC license conditions. These include but are not limited to the annual calibration of survey instruments, semi-annual leaktesting of non-exempt sealed radioactive sources, radiation monitoring, and personnel exposure monitoring reports. Radiation monitoring is performed as required by the NRC licensees on a daily basis for acceptable radiation levels and weekly for removable contamination.

10. We confirm that all records concerning the safe and effective decommissioning of the facility, public dose, waste disposal by release to sewers, and radioactive material spills will remain at the licensed site and will be maintained after the transfer. OAKWOOD HOSPITAL AND MEDICAL CENTER-DEARBORN does not bury or incinerate radioactive materials.

Please note: due to the small quantities and short half-lives of the unsealed radioactive materials which we use we are exempt from showing financial assurance for decommissioning. We do not use any unsealed radioactive material with a half-life greater than 60 days.

11. The areas of storage, preparation, handling and administration of radioactive materials are surveyed daily for acceptable radiation levels and weekly for removable contamination. If contamination of these areas is detected during these daily or weekly surveys, decontamination is undertaken and completed at that time. The unsealed radionuclides in use at these locations are all short-lived (i.e. half-lives less than 65 days, most less than 10 days.) Therefore, radioactive contamination is highly unlikely at this facility. If contamination were present, it would be discovered prior to the transfer. Records will be maintained on site of inventories of sealed sources and spills of radioactive materials.

12. As stated above, long-term decommissioning plans are not applicable to this facility. This facility is not subject to the financial assurance for decommissioning requirements.
13. OAKWOOD HOSPITAL AND MEDICAL CENTER- DEARBORN agrees to abide by all commitments and representations previously made to the NRC by OAKWOOD HOSPITAL AND MEDICAL CENTER- DEARBORN.

OAKWOOD HOSPITAL AND MEDICAL CENTER- DEARBORN accepts responsibility for the site. This facility is exempt from providing financial assurance for decommissioning because of the type of radioactive materials used (i.e. short-lived, unsealed sources in small quantities only). Routine radiation monitoring of the facility ensures that contamination will not be transferred during any subsequent change of ownership.

There are no open inspection items.

14. Since there is no planned change in either the individuals responsible for the licensed activities or the overall Hospital Administration, it is understood that all parties involved are aware and agree to the planned transfer of the license.
15. OAKWOOD HOSPITAL AND MEDICAL CENTER- DEARBORN agrees to abide by all constraints, conditions, requirements, representations, and commitments identified in the existing license.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION III  
801 WARRENVILLE ROAD  
LISLE, ILLINOIS 60532-4351

RECEIVED OCT 22 1996

→ 10/28/96  
*[Signature]*

OCT 18 1996

Loretta L. Lee  
Senior Vice President,  
Acute Care  
Oakwood Hospital and Medical  
Center - Dearborn  
18101 Oakwood Boulevard  
Dearborn, MI 48123-2500

Dear Ms. Lee:

It has come to our attention through your consultant, Tracy King, that Amendment Number 79 to License Number 21-04515-01 issued on August 22, 1996 contain errors.

Enclosed is a corrected copy reflecting the areas noted to be in error. Specifically, the following 4 changes were made to your NRC license: (1) the amendment No. was changed from 78 to 79; (2) Subitems 6.G., 7.G., 8.G. and 9.G. were added to your NRC license authorizing the use of your International CIS self shielded blood irradiator; (3) License Condition No. 12.B. was added to your NRC license authorizing the use of the blood irradiator by or under the supervision of Cheryl Starbuck and (4) letters dated April 15, 1996, and May 15, 1996 were added to License Condition 22.B. These letters were provided to the NRC in support of your request for the blood irradiator. We apologize for any inconvenience this may have caused you.

Sincerely,

*[Signature]*  
James R. Mullauer, M.H.S.  
Health Physicist

Nuclear Materials Licensing Branch

License No.: 21-04515-01  
Docket No.: 030-02051

Enclosure: Corrected Copy of  
Amendment No. 79

## MATERIALS LICENSE

Amendment No. 79  
CORRECTED COPY

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.

<p>Licensee</p> <p>1. Oakwood Hospital and Medical Center - Dearborn</p> <p>2. 18101 Oakwood Boulevard Dearborn, MI 48123-2500</p>	<p>In accordance with application dated May 24, 1995</p> <p>3. License Number 21-04515-01 is renewed in its entirety to read as follows:</p> <p>4. Expiration Date August 31, 2001</p> <p>5. Docket or Reference No. 030-02051</p>	
<p>6. Byproduct, Source, and/or Special Nuclear Material</p> <p>A. Any byproduct material identified in 10 CFR 35.100</p> <p>B. Any byproduct material identified in 10 CFR 35.200</p> <p>C. Any byproduct material identified in 10 CFR 35.300</p> <p>D. Any byproduct material identified in 10 CFR 35.400</p> <p>E. Any byproduct material identified in 10 CFR 31.11</p> <p>F. Iridium-192</p> <p>G. Cesium-137</p>	<p>7. Chemical and/or Physical Form</p> <p>A. Any radiopharmaceutical identified in 10 CFR 35.100</p> <p>B. Any radiopharmaceutical identified in 10 CFR 35.200</p> <p>C. Any radiopharmaceutical identified in 10 CFR 35.300</p> <p>D. Any brachytherapy source identified in 10 CFR 35.400</p> <p>E. Prepackaged Kits</p> <p>F. Sealed sources (BYK Mallinckrodt Model CI LBV)</p> <p>G. Sealed sources (ORIS/CBI Model CSL-15)</p>	<p>8. Maximum Amount that Licensee May Possess at Any One Time Under This License</p> <p>A. As needed</p> <p>B. As needed</p> <p>C. As needed (not to exceed 1 curie of Iodine-131)</p> <p>D. As needed</p> <p>E. As needed</p> <p>F. Two sources not to exceed 12 curies each</p> <p>G. Three sources not to exceed 1700 curies each</p>



**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

21-04515-01

Docket or Reference Number

030-02051

Amendment No. 79

CORRECTED COPY

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.
- E. In vitro studies.
- F. One source to be used in a Nucletron Corporation MicroSelectron-HDR remote afterloading brachytherapy unit for interstitial, intracavitary, and bronchial radiotherapy. One source in its shipping container to be in possession of the licensee as necessary for replacement of the source in the irradiation device.
- G. Three sources to be used in an International CIS self shielded blood irradiator, Model IBL-437C for the irradiation of biologic matter excluding materials that are flammable and/or explosive.

CONDITIONS

- 10. Location of Use: 18101 Oakwood Boulevard, Dearborn, Michigan.
- 11. A. Radiation Safety Officer: David S. Yates, M.D.
- B. The high dose rate afterloading brachytherapy physicist is Taljit S. Sandhu, Ph.D., Barbara G. Orton, M.S., and Lisa A. Langenstein, M.S.
- 12. A. Licensed material listed in Item 6. above is only authorized for use by, or under the supervision of, the following individuals for the materials and uses indicated:

Authorized Users

Material and Use

- |                            |  |
|----------------------------|--|
| A. Alan R. Hennessey, M.D. | 10 CFR 35.100, 35.200, 35.300, and 35.400. |
| B. Arthur J. Bady, M.D.    | 10 CFR 35.100, 35.200, 35.300, and 35.400. |
| C. John B. Junker, M.D.    | 10 CFR 35.100, 35.200, and 31.11.          |

MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License Number

21-04515-01

Docket or Reference Number

030-02051

Amendment No. 79

CORRECTED COPY

Authorized UsersMaterial and Use

D. Choon K. Lee, M.D.	10 CFR 35.400, and iridium-192 in remote afterloading brachytherapy unit.
E. James I. Breckenfeld, M.D.	10 CFR 35.100, 35.200, 35.300, (excluding iodine-131 for thyroid carcinoma), and 31.11.
F. Jung H. Chang, M.D.	10 CFR 35.400, and iridium-192 in remote afterloading brachytherapy unit.
G. Reza Abghari, M.D.	10 CFR 35.100, 35.200, 35.300, and 31.11.
H. David S. Yates, M.D.	10 CFR 35.100, 35.200, 35.300 (excluding iodine-131 for treatment of hyperthyroidism and cardiac dysfunction), and 31.11.
I. Kyriakos C. Demetropoulos, M.D.	10 CFR 35.100, 35.200, 35.300, and 31.11.
J. Jerry W. Drake, M.D.	10 CFR 35.100, 35.200, and 35.300.
K. Sharon Helmer, M.D.	10 CFR 35.100, 35.200 (excluding generators), and 35.300.
L. Kenneth D. Bartold, M.D.	10 CFR 35.100, 35.200, and 35.300.
M. Arnold Herskovic, M.D.	10 CFR 35.400 and iridium-192 in remote afterloading brachytherapy unit.
N. Dong Hyuck Kim, M.D.	10 CFR 35.100, 35.200, and 31.11.
O. John H. Finger, M.D.	10 CFR 35.100, 35.200, and 35.300.
P. Eric J. Groskind, M.D.	10 CFR 35.100, 35.200 and 35.300.
Q. Daniel B. Schumaker, M.D.	10 CFR 35.100, 35.200, 35.300, and 31.11.
R. Sophia Roumanis, M.D.	10 CFR 35.100, 35.200, and 35.300.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number  
21-04515-01

Docket or Reference Number  
030-02051

Amendment No. 79

CORRECTED COPY

Authorized Users

Material and Use

S. T. G. McDonald, M.D.

10 CFR 35.100, 35.200 and 35.300.

T. Paul B. Lattin M.D.,

10 CFR 35.400 and iridium-192 in remote afterloading brachytherapy unit.

U. Donald J. Conn, M.D.,

10 CFR 35.100, 35.200 and 35.300.

B. Licensed material listed in subitem 6.G. shall be used by or under the supervision of Cheryl Starbuck upon completion of training by the vendor at installation in accordance with letters dated April 15, 1996, and May 15, 1996.

13. Notwithstanding the provisions of 10 CFR 35.400(d), the licensee may use iridium-192 seeds encased in nylon ribbon as described in letter dated February 7, 1992, for intracavitary/intraluminal treatment of cancer.

14. 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.

15. A. (1) The source(s) specified in Item 7.G. shall be tested for leakage and/or contamination at intervals not to exceed six months. Any source received from another person which is not accompanied by a certificate indicating that a test was performed within six months before the transfer shall not be put into use until tested.

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

16. A. Access to the room housing the MicroSelectron-HDR irradiation device shall be controlled by a door at each entrance.

B. The entrance to the irradiation room shall be equipped with an electrical interlock system that will cause the source to return to the shielded position immediately upon opening of the entrance door. The interlock system shall be connected in such a manner that the source cannot be placed in the irradiation position until the entrance door is closed and the source "on-off" control is reset at the control panel.

C. Electrical interlocks on the entrance door to the irradiator room shall be tested for proper operation at least once a month. Records of test results shall be maintained for inspection by the Commission.

MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License Number  
21-04515-01

Docket or Reference Number  
030-02051

Amendment No. 79

CORRECTED COPY

- D. In the event of malfunction of the door interlock, the irradiation device shall be locked in the "off" condition and not used, except as may be necessary for repair or replacement of the interlock system, until the interlock system is shown to be functioning properly.
17. Prior to initiation of a treatment program, and subsequent to each source exchange for the MicroSelectron-HDR, 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 source in the shielded position. The maximum radiation levels at 100 centimeters from the surface of the source head shall not exceed 0.25 milliroentgens per hour.
  - (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 Section 20.1201, Title 10, Part 20, Code of Federal Regulations, Chapter 1, "Standard for Protection Against Radiation" (10 CFR 20).
    - (b) That quantities of radiation in unrestricted areas do not exceed the limits specified in Section 20.1301(b) 10 CFR 20.
- B. Records of survey results shall be maintained for inspection by the Commission.
18. 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 MicroSelectron-HDR irradiation device.
- B. Any maintenance or repair operations on the 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.
19. The licensee may possess 24 curies of iridium-192 (not to exceed 12 curies per source) for use in the Nucletron Corporation MicroSelectron HDR remote afterloading brachytherapy device, provided the individual source activity does not exceed 10 curies at the time of installation, and the source is installed by an authorized individual.

MATERIALS LICENSE  
SUPPLEMENTARY SHEET

License Number  
21-04515-01

Docket or Reference Number  
030-02051

Amendment No. 79

CORRECTED COPY

20. In lieu of 10 CFR 35.404(a), immediately after retracting the source from the patient into its shielded position in the remote afterloading device, a radiation survey shall be made of the patient and the remote afterloading device with a portable radiation detection survey instrument to confirm that the source has been removed from the patient. Records of the survey shall be maintained in lieu of the record required in 10 CFR 35.404(b).
21. In lieu of the source inventory required in 10 CFR 35.406, the licensee shall:
- A. Promptly determine that all sources have returned to the safe, shielded position at the conclusion of each remote afterloading brachytherapy procedure.
  - B. Promptly make a survey of the area of use to confirm that no sources have been misplaced.
  - C. Make a record of the survey including the survey instrument used, dose rate expressed in mrem/hr ( $\mu$ Sieverts/hr), time, date and name of the individual making the survey.
  - D. Retain the record of the survey in lieu of the record required in 10 CFR 35.406(d).
22. 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. Application dated May 24, 1995 (excluding the Quality Management Program); and
  - B. Letters dated July 18, 1995, March 27, 1996 (excluding the Quality Management Program), April 15, 1996, May 15, 1996, June 19, 1996 and August 5, 1996.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date 10/17/96

By James Bullen  
Nuclear Materials Licensing Branch, Region III



Oakwood Hospital  
Seaway Center

5450 Fort Street  
Trenton, Michigan  
48163-4625  
313.671.3000



December 13, 1996

US Nuclear Regulatory Commission  
Region III  
Materials Licensing  
801 Warrenville Road  
Lisle, Illinois 60532

Re: Change of Ownership 21-16656-01

Dear Sirs:

We wish to advise you of the change of ownership within our organization concerning our Material's License Number 21-16656-01. The information that follows is presented as requested in NRC information Notice 89-25 dated 12/7/94.

2. The contact person for this license is Fran Cassell, Director Diagnostic Imaging. (313) 671-3877.
3. There will be no change in personnel having control over licensed activities.
6. There will be no planned changes in organization, location, facility, equipment or operating or emergency procedures.
7. There will be no change in the use, possession, location or storage of licensed materials.
8. There are no changes that would require a license amendment even without a change in ownership.



21-16656-01

Change of Ownership

2

9. All surveillance items and records will be current at the time of transfer and maintained at the licensee address.
10. We confirm that all records of decommissioning of the facility, public dose, waste disposal, radioactive material spills will be transferred to the new licensee. We have not and will not bury or incinerate radioactive waste.
11. The facility is as indicated with our license application and is free of radioactive contamination.
12. Responsibility and division of transferor's assets for cleanup at the time of transfer are not applicable. We confirm that the possession limits noted in our Materials License 21-16656-01 will be restricted to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.
13. We confirm that the transferee will abide by all commitments and representations previously made to the NRC by the transferor. Contamination of the facility or open inspection items are not applicable.
14. We confirm that the transferor and transferee agree to the change in ownership or control of licensed activities and materials, the conditions of transfer. There are no open inspection items that could result in enforcement action.
15. We confirm to abide by all constraints, conditions, requirements, representations and commitments in the existing license.

If you have any questions regarding this issue, please contact us.

Sincerely,

*Edward E. Freepinger / Kay*

Administration



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

May 6, 1996

OAKWOOD UNITED HOSPITALS-SEAWAY  
ATTN: DR. SCHUNK, HERBERT, M.D.  
Radiation Safety Officer

5450 FORT STREET  
TRENTON, MI 48183

SUBJECT: ONE-TIME EXTENSION OF LICENSE EXPIRATION DATE  
LICENSE NUMBER 21-16656-01, DOCKET NUMBER 3011427

Dear DR. SCHUNK, HERBERT, M.D.

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 June 30, 2001. 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.

John R. Madera, Division of Nuclear Materials Safety - (708) 829-9834

Thank you for your cooperation in this matter.

Sincerely,

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

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

NRC FORM 374  
(10-88)

U.S. NUCLEAR REGULATORY COMMISSION

PAGE 1 OF 2 PAGES

## MATERIALS LICENSE

Amendment No. 07

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 April 15, 1992	
1. Oakwood United Hospitals-Seaway		3. License number 21-16656-01 is amended in its entirety to read as follows:	
2. 5450 Fort Street Trenton, MI 48183		4. Expiration date June 30, 1996	
6. Byproduct, source, and/or special nuclear material		5. Docket or Reference No 030-11427	
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 (excluding generators)	B. As needed	
C. Any byproduct material identified in 10 CFR 31.11	F. Prepackaged kits	F. As needed	
9. Authorized Use:			
A. Medical use described in 10 CFR 35.100.			
B. Medical use described in 10 CFR 35.200 (excluding generators).			
C. In vitro studies.			

## CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 5450 Fort Street, Trenton, Michigan.
11. Radiation Safety Officer: Herbert Schunk, M.D.

NRC Form 374A  
(5-84)

## U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE  
SUPPLEMENTARY SHEET

PAGE 2 OF 2 PAGES

License number

21-16656-01

Docket or Reference number

030-11427

Amendment No. 07

## 12. Authorized Users:

- A. Herbert Schunk, M.D., for material in 10 CFR 35.100, 35.200 (excluding generators) and 31.11.
- B. Chang Y. Han, M.D., for material in 10 CFR 35.100, 35.200 (excluding generators) and 31.11.
- C. Tai S. Kang, M.D., for material in 10 CFR 35.100, 35.200 (excluding generator) and 31.11.

13. The licensee shall maintain records of information important to safe and effective decommissioning at the address specified in Condition 10. of this license per the provisions of 10 CFR 30.35(d) until this license is terminated by the Commission.

14. This license is based on the licensee's statements and representations listed below:

- A. Application dated March 1, 1991; and
- B. Letter dated April 15, 1992



For the U. S. Nuclear Regulatory Commission

Date: JUN 04 1992

By

*Loren J. Hunter*  
Materials Licensing Section, Region III

Michigan Dept. of Public Health  
Application Division of Radiological Health  
To: 3500 N. Logan, P.O. Box 30035  
Lansing, MI 48909

## Michigan Department of Public Health

Radioactive Material

## REGISTRATION FORM

If currently registered,  
please provide current  
x-ray or radioactive  
material registration no.

004500-01-L01

FORM RH-20 (1/85)

By Authority of Part 135 of Act 368 P.A. 1978. Radioactive Material Registration will not be acknowledged by this Department by return of a receipted copy of this form unless form is properly completed, signed and returned to the address above.

1. REGISTRANT NAME & MAILING ADDRESS  
(The individual or legal entity to whom receipted registration is to be returned)

Name

SEAWAY HOSPITAL

Street

5450 FORT STREET

City

TRENTON

State

MI

Zip

48183

2. FACILITY NAME & ADDRESS  
(Location of radioactive sources.  
If same as Registrant write SAME.)

Other facilities  
See N 1201

Name

SAME

Street

City

State

Zip

3. RADIATION PROTECTION SUPERVISOR (RPS)

Name

HERBERT SCHUNK, M.D.

Street

DIRECTOR OF RADIOLOGY - SEAWAY HOSPITAL

City

5450 FORT STREET

State

MI

Zip

48183

4. RPS SIGNATURE

x *Herbert Schunk M.D.*

1/2/90

Date

(313) 671-3800

Telephone

5. RADIOACTIVE MATERIAL

Nuclide

Sealed  
or  
UnsealedMaximum Quantity  
on Hand  
(curies)Date of  
Measurement  
(Sealed Source)Est. Quantity  
Used Annually  
(Unsealed or case-leaked)

Thallium-201

Unsealed

0.040

NA

5.0

Gallium-67

Unsealed

0.030

NA

1.5

Indium-111

Unsealed

0.030

NA

1.5

Iodine-123

Unsealed

0.020

NA

2.5

Cobalt-57

Sealed

0.040

NA

NA

NRC Materials License

21-16656-01 attached

for reference to

Byproduct Material used

USE ADDITIONAL PAGES IF NECESSARY

MDPH USE ONLY

Comp

X

C State

I State

Registration No.

011851-03-L01

County

82 - WAYNE

Sheet No.

18

1 Initial

2 Change

X 3 Amend

114 Renewal

115 Delete

RECEIVED

Michigan Department of Public Health

KWC JAN 08 1990

BUREAU OF ENVIRONMENTAL &  
OCCUPATIONAL HEALTH - DRH  
Not Fill in This Space

\* If radium-226 for brachytherapy, indicate if case-leased.

REGISTRATION DOES NOT IMPLY APPROVAL OF THE INSTALLATION BY THE MICHIGAN DEPARTMENT OF PUBLIC HEALTH



GENERAL ACCOUNT

190441

*Oakwood Hospital*

18101 OAKWOOD BOULEVARD • DEARBORN, MICHIGAN 48124

74 04786

724

OAKWOOD HOSPITAL CORPORATION

PAY TO THE ORDER OF

OAKWOOD  
HOSPITAL

CHECK NO. 190441

DATE 12/16/96

AMOUNT

\$ 1,760.00

U.S. Nuclear Regulatory Commission 990218

COMERICA BANK



⑈00190441⑈ ⑆072404786⑆ 2176950786⑈

DATE AND INVOICE NUMBER	VENDOR NUMBER	INVOICE	DISCOUNT MEMO ONLY	DEDUCTIONS	BALANCE DUE
		Nuclear Regulatory Licensure: Downriver Center Heritage Center Oakwood Hospital & Medical Center Seaway Center			
<i>Oakwood Hospital</i>				DISCOUNT	
OAKWOOD HOSPITAL CORPORATION DEARBORN, MICHIGAN 48124				NET AMOUNT	



GENERAL ACCOUNT

190498

*Oakwood Hospital*

18101 OAKWOOD BOULEVARD • DEARBORN, MICHIGAN 48124

74 04786  
724

OAKWOOD HOSPITAL CORPORATION

PAY TO THE ORDER OF

OAKWOOD  
HOSPITAL

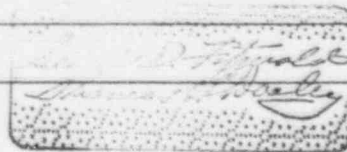
NO. CHECK NO.

DATE

AMOUNT

U.S. Nuclear Regulatory Commission 990218 190498 12/16/96 \$440.00

COMERICA BANK



⑈00190498⑈ ⑆072404786⑆ 2176950786⑈

DATE AND INVOICE NUMBER	VENDOR NUMBER	INVOICE	DISCOUNT MEMO ONLY	DEDUCTIONS	BALANCE DUE
Nuclear Regulatory Licensure - Annapolis					
<i>Oakwood Hospital</i>				DISCOUNT	
OAKWOOD HOSPITAL CORPORATION				NET AMOUNT	
DEARBORN, MICHIGAN 48124					

JAN 02 1997

Oakwood Hospital and Medical Center  
ATTN: Loretta Lee, Senior Vice President,  
Acute Care  
18101 Oakwood Blvd.  
Dearborn, MI 48123-2500

Dear Ms. Lee:

Enclosed is Amendment No. 80 to your NRC Material License No. 21-04515-01  
in accordance with your request.

Please note that this amendment reflects the changes that have occurred as a result of the  
ownership change at your institution.

Please review the enclosed document carefully and be sure that you understand all  
conditions. If there are any errors or questions, please notify the U.S. Nuclear Regulatory  
Commission, Region III office at (630) 829-9887 so that we can provide appropriate  
corrections and answers.

Sincerely,

Patricia Pelke  
Nuclear Materials Licensing Branch

License No. 21-04515-01  
Docket No. 030-02051

Enclosure: Amendment No. 80

DOCUMENT NAME: M:\03002051.cl6

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

OFFICE	DNMS/RIII								
NAME	PELKE:sjd								
DATE	12/10/96								

OFFICIAL RECORD COPY

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