

# ACCEPTANCE REVIEW MEMO (ARM)

**Licensee:** Brookings Hospital & Brookview Manor      **License No.:** 40-19823-01  
**Docket No.:** 030-19289      **Mail Control No.:** 471532  
**Type of Action:** Amend      **Date of Requested Action:** 10-03-07  
**Reviewer Assigned:** Roberto Torres      **ARM reviewer(s):** Torres

| Response | Deficiencies Noted During Acceptance Review  |
|----------|--|
|          | [ ] Open ended possession limits. Limit possession. Submit inventory.<br>[ ] Submit copies of most recent leak test results.<br>[ ] Add - delete IC license condition. Add IC paragraph in cover letter.<br>[ ] Split license from cover letter. Add SUNSI marking to license.<br>[ ] Ask the licensee if they have any type-amount of EPAct Material. |
| 11/9/07  | Provide T&E documentation. <i>Dr. Swanson is listed as RSO for Avera McKennan</i><br><i>40-16571-01 for 35.100 through 35.400 uses</i>   |

**Reviewer's Initials:** RTT      **Date:** 11-9-07

Yes    No    Unrestricted release Group 2 or >: Transfer memo to FCDB within 10 days.  
 Yes    No    Decommissioning notification should be completed within 30 days.  
 Yes    No    Termination request < 90 days from date of expiration  
 Yes    No    Expedite (medical emergency, no RSO, location of use/storage not on license, RAM in possession not on license, other)  
 Yes    No    TAR needed to complete action.

**Branch Chief's and/or Sr. HP's Initials:** \_\_\_\_\_      **Date:** \_\_\_\_\_

**SUNSI Screening according to RIS 2005-31**

Yes    No    **Non-Publicly Available, Sensitive** if any item below is checked

General guidance:

- \_\_\_\_\_ RAM = or > than Category 3 (Table 1, RIS 2005-31), use Unity Rule
- \_\_\_\_\_ Exact location of RAM (whether = or > than Category 3 or not)
- \_\_\_\_\_ Design of structure and/or equipment (site specific)
- \_\_\_\_\_ Information on nearby facilities
- \_\_\_\_\_ Detailed design drawings and/or performance information
- \_\_\_\_\_ Emergency planning and/or fire protection systems

Specific guidance for medical, industrial and academic (above Category 3):

- \_\_\_\_\_ RAM quantities and inventory
- \_\_\_\_\_ Manufacturer's name and model number of sealed sources & devices
- \_\_\_\_\_ Site drawings with exact location of RAM, description of facility
- \_\_\_\_\_ RAM security program information (locks, alarms, etc.)
- \_\_\_\_\_ Emergency Plan specifics (routes to/from RAM, response to security events)
- \_\_\_\_\_ Vulnerability/security assessment/accident-safety analysis/risk assess
- \_\_\_\_\_ Mailing lists related to security response

**Branch Chief's and/or Sr. HP's Initials:** RTT      **Date:** OCT 12 2007

## Pre-Licensing Screening

### Applicant Information:

Control No. 471532

|  |   |
|--|---|
| Name: Brookings Hospital & Brookview Manor | Type of Request: Amend<br>Program Code(s): 02120    |
| Location: SD                               | License No.: 40-19823-01      Docket No.: 030-19289 |

### STEP 1—Radioactive Materials and Quantities Requested:

|   |              |
|---|--------------|
| <b>Instructions for Step 1: Complete Step 1 for all applications.</b> If all your responses in Step 1 are "No" then do not complete Step 2 (Screening Criteria). Sign and date the completed step-sheet and add it as the sensitive and non-publicly available OAR in ADAMS. If a "yes" response is indicated for any item in Step 1, also complete Step 2. If the type of use is subject to a Security Order or the requirements for increased controls, complete Step 3 (Item A or Item B) without delay.   | Yes or<br>No |
| A. The request is from a new applicant.   | No           |
| B. NUREG-1556, Volume 20, Section 4.9 indicates a licensing site visit is needed for the requested type of use, e.g., (1) Type A broad scope license, (2) panoramic irradiator containing > 10000 curies, (3) manufacturers or distributors using unsealed radioactive material or significant quantities of sealed material, (4) radioactive waste brokers, (5) radioactive waste incinerators, (6) commercial nuclear laundries, and (7) any other application that in the judgement of the reviewer and cognizant supervisor involves complex technical issues, complex safety questions, or unprecedented issues that warrant a site visit. | No           |
| C. The applicant requested certain radionuclides and quantities that equal or exceed the Risk Significant Quantity (TBq) values in the table, below, that have been "highlighted" by the reviewer   | No           |

### Table of Risk Significant Quantities

(Category 2 Quantities, IAEA Safety Guide No. RS-G-1.9, Categorization of Radioactive Sources, August 2005)

| Radionuclide | Risk Significant Quantity (TBq <sup>1</sup> ) | Risk Significant Quantity (Ci <sup>1</sup> ) | Radionuclide        | Risk Significant Quantity (TBq <sup>1</sup> ) | Risk Significant Quantity (Ci <sup>1</sup> ) |
|--------------|---|--|---------------------|---|--|
| Am-241       | 0.6   | 16   | Pm-147              | 400   | 11,000                                       |
| Am-241/Be    | 0.6   | 16   | Pu-238              | 0.6   | 16   |
| Cf-252       | 0.2   | 5.4  | Pu-239/Be           | 0.6   | 16   |
| Cm-244       | 0.5   | 14   | Ra-226 <sup>2</sup> | 0.4   | 11   |
| Co-60        | 0.3   | 8.1  | Se-75               | 2   | 54   |
| Cs-137       | 1   | 27   | Sr-90 (Y-90)        | 10  | 270  |
| Gd-153       | 10  | 270  | Tm-170              | 200   | 5,400  |
| Ir-192       | 0.8   | 22   | Yb-169              | 3   | 81   |

<sup>1</sup> The primary values are TBq. The curie (Ci) values are for informational purposes only.

<sup>2</sup> The Atomic Energy Act, as amended by the Energy Policy Act of 2005, authorizes NRC to regulate Ra-226 and NRC is in the process of amending its regulations for discrete sources of Ra-226.

|  |                                       |
|--|---------------------------------------|
| Calculations of the Total Activity or the Unity Rule are attached to document whether or not the screening criteria in Step 2 were also completed to evaluate the application.<br><b>NOTE—If an amendment of an existing license is being requested, the calculations will include the previously authorized quantities for the radionuclide(s).</b> | Yes, No, or<br>Not Applicable<br>(NA) |
| Total Activity—multiple activities are requested for a single radionuclide and the sum of the activities equals or exceeds the quantity of concern for the radionuclide  | —                                     |
| Unity Rule—multiple radionuclides are requested and the sum of the ratios equals or exceeds unity, e.g., [(total activity for radionuclide A) ÷ (risk significant quantity for radionuclide A)] + [(total activity for radionuclide B) ÷ (risk significant quantity for radionuclide B)] ≥ 1.0.  | —                                     |

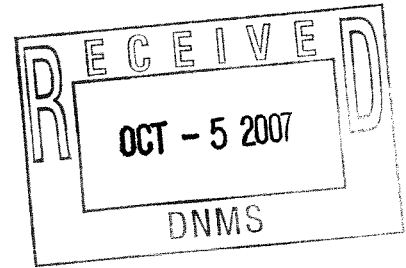
### Signature and Date for Step 1:

  
 \_\_\_\_\_  
 License Reviewer and Date

OCT 12 2007



October 3, 2007



U.S. Nuclear Regulatory Commission  
Nuclear Materials Licensing Station  
Region IV  
611 Ryan Plaza Drive Suite 400  
Arlington, TX 70611-8064

RE: License #40-19823-01  
Docket #030-19289

Dear Sir/Madam:

I am writing this letter in regard to License Number 40-19823-01 Docket 030-19289 for the Brookings Health System.

The following changes need to be made:

1. Under conditions number 11, please remove Dr. Steven Olson as the current Radiation Safety Officer.
2. Under conditions number 11, please add Dr. David Swanson as our new Radiation Safety Officer. Dr. David Swanson is Board Certified and an authorized user at both Brookings Hospital, in Brookings and Avera McKennan Hospital in Sioux Falls.

Should you have additional questions regarding this change, please call.

Sincerely,

  
Vern Carda  
CEO

C: Steven Olson, MD  
David Swanson, MD

BETWEEN: : (FOR LFMS USE)  
 : INFORMATION FROM LTS  
 : -----  
 :  
 License Fee Management Branch, ARM : Program Code: 02120  
 and : Status Code: 0  
 Regional Licensing Sections : Fee Category: 7C  
 : Exp. Date: 20130831  
 : Fee Comments: CODE 14  
 : Decom Fin Assur Reqd: N  
 : .....

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED  
 Applicant/Licensee: BROOKINGS HOSP. & BROOKVIEW MANOR  
 Received Date: 20071005  
 Docket No: 3019289  
 Control No.: 471532  
 License No.: 40-19823-01  
 Action Type: Amendment

2. FEE ATTACHED  
 Amount: \_\_\_\_\_  
 Check No.:       /      

3. COMMENTS  
 Signed Colleen Murnahan  
 Date 10-11-07

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /\_/)

1. Fee Category and Amount: \_\_\_\_\_  
 2. Correct Fee Paid. Application may be processed for:  
 Amendment \_\_\_\_\_  
 Renewal \_\_\_\_\_  
 License \_\_\_\_\_  
 3. OTHER \_\_\_\_\_  
 \_\_\_\_\_

Signed \_\_\_\_\_  
 Date \_\_\_\_\_