



## Pre-Licensing Screening

### Applicant Information:

Control No. 471078

Name: Sioux Valley Clinic	Type of Request: Amend Program Code(s):	
Location: SD	License No.: 40-26865-01	Docket No.: 030-29708

### 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 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)

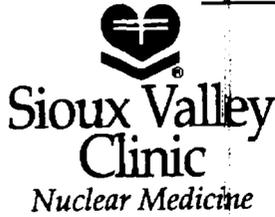
Radionuclide	Risk Significant Quantity (TBq <sup>1</sup> )	Risk Significant Quantity (Ci <sup>1</sup> )	Radionuclide	Risk Significant Quantity (TBq <sup>1</sup> )	Risk Significant Quantity (Ci <sup>1</sup> )
Am-241	0.6	16	Pm-147	400	11,000
Am-241/Be	0.6	16	Pu-238	0.6	16
Cf-252	0.2	5.4	Pu-239/Be	0.6	16
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. <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 Not Applicable (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:

*[Handwritten Signature]* 8/18/06  
 License Reviewer and Date



1201 S EUCLID AVE STE 401  
SIOUX FALLS SD 57105-0403  
Phone: (605) 328-8970  
[www.siouxvalley.org](http://www.siouxvalley.org)

*RJC*

August 9, 2006

**Via FAX 1.817.860.8263**

U.S. Nuclear Regulatory Commission Region IV  
Nuclear Materials Licensing Branch  
Attn: Roberto J. Torres  
611 Ryan Plaza Drive, Suite #400  
Arlington, TX 76011

Dear Mr. Torres:

We request an amendment to our NRC Materials License #40-26865-01 to modify our authorized user (AUs) list, change Radiation Safety Officer and add an area of use. We request removal of Dr. Julie A. McKay as an AU, as she no longer practices at our location. There are two new experienced AUs to be added to our license. Both AUs are listed as AUs on NRC Materials License #40-12378-01. Their names and requested authorizations are:

<b>Authorized User</b>	<b>Material and Use</b>
Fred Clinton Lovrien, M.D.	35.100; 35.200; 35.300
David C. Hickey, M.D.	35.100; 35.200; 35.300; 31.11

These proposed Authorized Users are experienced Authorized Users, covered under 10CFR35.57(b)(1), and are exempt from the training requirements of Subparts D through H for which they are already listed as authorized. As we no longer have a device for 35.500 medical uses (as listed in License Item 9.D.), we request that Item 9.D. be authorized only for storage and for transfer to another licensee such as a manufacturer or source broker for disposal. The only 35.500 source in our inventory is over ten years old and has not been used in over 5 years. We request to be exempted from a requirement for 35.500 Authorized User training, as we have no present intent to medically use radioactive materials under 35.500.

We request a change in Radiation Safety Officer for Sioux Valley Clinic Nuclear Medicine from Dr. Schultz to Dr. Fred C. Lovrien effective August 11, 2006. Dr. Fred C. Lovrien is already a Radiation Safety Officer on NRC Materials License #40-12378-01 and, as such, will not require submission of preceptorship documentation under 10CFR35.57(a)(2). We request that Dr. Schultz be removed as an authorized user. effective on his retirement date of August 12, 2006.

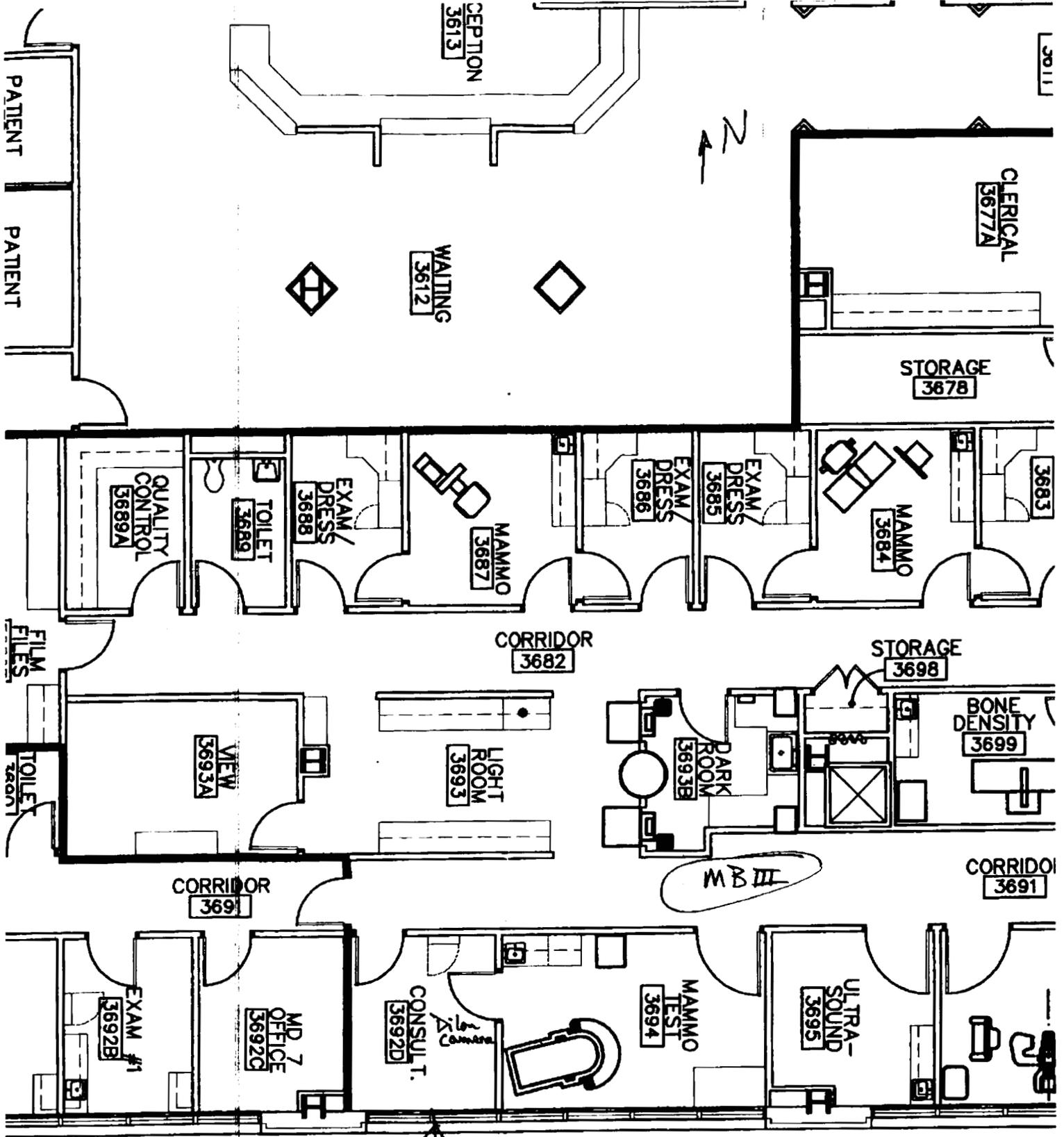
We also attach a map of a new area of use in a physically connected medical office building in space controlled by Sioux Valley Clinic. This area will only be used for 35.100 and 35.200 uses, as a remote camera room and injection area. All radioactive materials will be received and assayed in the existing hot lab listed in Item 10 of our license. The address of the new area of use is Sioux Valley Clinic; Breast and Bone Health Institute; 1500 W. 22<sup>nd</sup> Street, Suite 302; Sioux Falls, SD 57105. We will begin day-of-use and weekly removable contamination surveys in this new area of use immediately. Under 35.14, we will begin use of the remote camera room for imaging and localization studies, possibly to include routine injection of Tc99m radiopharmaceuticals. There will be no storage or receipt of radioactive materials in this new area of use. There will be no other authorized uses under 35.300 or 31.11 in the new area of use.

Thank you for your attention to this matter. Do not hesitate to contact me if there are any questions at 605-328-8974.

Sincerely,



Darin Berg  
Manager for Sioux Valley Clinic -- Nuclear Medicine



Exterior (overhang)

1/8" = 1' scale

SCHEMATIC

Sioux Valley Clinic  
 Breast & Bone Health  
 Institute  
 1500 W. 22nd St.  
 Suite 302  
 Sioux Falls, SD  
 57105

AUG 21 2006  
DATE

This is to acknowledge the receipt of your letter/application dated 08-09-2006, and to inform you that the initial processing, which includes an acceptance review, has been performed.

There were no administrative omissions. Your application will be assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card:

The action you requested is normally processed in 90 days.

A copy of your action has been forwarded to the NRC Office of the Chief Financial Officer, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 471078.

When you call to inquire about this action, please refer to this mail control number.

You may call me at 817/860-8103.

Sincerely,

*Colleen Murnahan*  
Licensing Assistant

(FOR LFMS USE)  
INFORMATION FROM LTS

Program Code: 02120  
Status Code: 0  
Fee Category: 7C  
Exp. Date: 20090131  
Fee Comments:  
Decom Fin Assur Regd: N

BETWEEN:  
License Fee Management Branch, ARM  
and  
Regional Licensing Sections

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED  
Applicant/Licensee: SIOUX VALLEY CLINIC  
Received Date: 20060809  
Docket No.: 30229708  
Control No.: 471078  
License No.: 40-26865-01  
Action Type: Amendment

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

3. COMMENTS  
Signed \_\_\_\_\_  
Date 8-16-06

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 \_\_\_\_\_