

Cook, Jackie

From: Dave and Carole Switzer [switz@mcn.net]
Sent: Thursday, March 24, 2011 4:48 PM
To: Murnahan, Colleen
Cc: Cook, Jackie
Subject: Closeout of Billings MRI License 25-29315-01
Attachments: Letter to NRC Closeout of Billings MRI.pdf; Swipe Test Closeout of the Billings MRI.pdf

Dear Colleen and Jackie:

Operations have ceased and all radioactive materials have been removed to licensees or registrants. Survey and swipes show Billings MRI to be free of any contamination. Please close this license. See the attached letter and attached document.

Thank you.

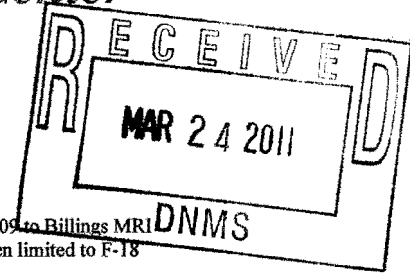
Sincerely,

David Wm. Switzer

Billings
MRI
Center

March 17, 2011

Nuclear Materials Licensing Branch
U.S. Nuclear Regulatory Commission, Region IV
612 E. Lamar Boulevard
Arlington, Texas 76011-4125



Dear Licensing Branch:

This request is made in regard to USNRC License 25-29315-01 issued on June 3, 2009 to Billings MRI located at 1041 North 29th Street, Billings, MT 59101. Use under the license has been limited to F-18 radiopharmaceuticals intended for PET scanning.

On February 28, 2011 operations ceased for PET/CT imaging at the Billings MRI. The scanner used a Ge-68 reference source for calibration of the PET scanner. A 1 μ Ci Cs-137 calibration source was possessed to use as a reference for the swipe counter on board the PET trailer, and a 250 μ Ci Cs-137 source as reference for calibration of the dose calibrator. On March 6, 2011 swipes were made of all likely locations where residual radioactivity could have been retained and swipes were made of the spent Ge-68 source and the active Ge-68 scanner reference source. No indication of any residual removable radioactivity above 0.005 μ Ci was found and no Geiger survey instrument reading above twice background level of 0.015 mR could be found in the areas swiped.

The PET scanner suite was a leased trailer which is to be removed and returned to service at another PET scanning site. The Cs-137 dose calibration source has been returned to the Billings Clinic, USNRC licensee number 25-01051-01. The exempt quantity 1.08 μ Ci Cs-137 swipe counter check source has been transferred to Minnesota Department of Health Registration Number 47-1510 to be used as a check source for an ionization survey instrument. The spent Ge-68 and the active Ge-68 source in use at the time of closing were shipped for disposal to the supplier, Eckert & Ziegler Isotope Products, 1800 North Keystone Street, Burbank, CA 91504. No radioactive material of any form above naturally occurring levels is known to exist in the Billings MRI facility.

Records from the operation show that procedures were conducted in a safe and residual contamination free manner. Personnel dosimeters for all personnel have readings that are consistent with the PET scanner operation and well below any level of concern. Records of the daily surveys and weekly swipes show that the operation was within the requirements of good practice and within the regulatory requirements.

The personnel dosimetry, dose calibrator, radiation safety, health physics, and patient scanning records of this operation are to be held with the Billings Clinic. There were no instances of any kind which were found to preclude the closeout of this license. Radioactive material operations at the Billings MRI facility have ceased and will not be resumed. Please closeout this license.

Thank you so much for your response in this matter.

Sincerely,

A handwritten signature in cursive script that reads "David William Switzer".

David William Switzer, MS, DABR – RSO

1041 North 29th Street, Billings, Montana 59101

406-255-6530

A joint venture of Saint Vincent Healthcare and the Billings Clinic

574817

Date: 3/7/2011
 Site: Billings MRI
 Activity: PET/CT scanner
 License Number: 25-29315-01

Equipment used: Captus 3000, sr. no. IL551
 Pulse Height Analysis Ludlum 14C # 219848 with 44-9 probe # PR-227802
 Survey: bat ck = 1.8, bkg = 0.015 mR/hr, ck source = 0.7 mR/hr

Full Spectrum Count, 180 seconds count, efficiency reported 65%, trigger level - 5.4 net removable
 Location of swipe (10 X 10 cm area)

	cpm	activity	nCi	spectral analysis Energy (keV)	Net cpm above bkg spectrum	Removable Act. above spect bkg	nCi
1	479.0	NA	NA	24.1	7.333	0.198	NA
2	474.0	0.000	NA	NA	NA	NA	NA
3	478.0	0.000	NA	NA	NA	NA	NA
4	506.3	0.019	NA	NA	NA	NA	NA
5	514.3	0.024	NA	NA	NA	NA	NA
6	505.3	0.018	NA	NA	NA	NA	NA
7	503.7	0.017	NA	NA	NA	NA	NA
8	502.7	0.016	NA	NA	NA	NA	NA
9	522.3	0.030	149.1	9.000	0.243	NA	NA
10	485.7	0.005	NA	NA	NA	NA	NA
11	503.3	0.017	NA	NA	NA	NA	NA
12	499.0	0.014	NA	NA	NA	NA	NA
13	508.0	0.020	234.2	9.333	0.252	NA	NA
14	477.3	0.000	NA	NA	NA	NA	NA
15	508.0	0.020	NA	NA	NA	NA	NA
16	507.7	0.020	NA	NA	NA	NA	NA
17	507.7	0.020	NA	NA	NA	NA	NA
18	497.0	0.012	NA	NA	NA	NA	NA
19	510.0	0.021	NA	NA	NA	NA	NA
20	521.7	0.030	NA	NA	NA	NA	NA
21	518.3	0.027	NA	NA	NA	NA	NA
22	515.7	0.025	NA	NA	NA	NA	NA
23	503.3	0.017	NA	NA	NA	NA	NA
	510.0	0.021	NA	NA	NA	NA	NA
	517.3	0.027	NA	NA	NA	NA	NA
	495.3	0.011	NA	NA	NA	NA	NA

24	Shielded holding well, east (rear)	507.7	0.020	NA	NA	NA	NA	NA
25	Counter surface, dose assay area, hot lab counter (rt)	503.3	0.017	NA	NA	NA	NA	NA
26	Counter surface, dose assay area, hot lab counter (lt)	512.0	0.023	NA	NA	NA	NA	NA
27	Source, G1-644 1357-95, Ge-68, 1 Jun 09, 1.49 mCi, 55Mbpq	511.3	0.022	NA	NA	NA	NA	NA
28	Source, E1-109 1216-79, Ge-68, 1 Jun 07, 1.49 mCi, 55Mbpq	501.0	0.015	NA	NA	NA	NA	NA
29	Upper storage level in hot lab, lower rt cabinet	514.7	0.025	NA	NA	NA	NA	NA
30	Lower storage level in hot lab, lower rt cabinet	508.0	0.020	NA	NA	NA	NA	NA
31	Door handle to the PET office (NRROC)	480.7	0.001	NA	NA	NA	NA	NA
32	Men's toilet (NRROC)	515.7	0.025	NA	NA	NA	NA	NA
33	Pt waiting (NRROC)	500.0	0.015	NA	NA	NA	NA	NA
34	PET toilet (NRROC)	490.0	0.008	NA	NA	NA	NA	NA
35	PET office floor (NRROC)	514.0	0.024	NA	NA	NA	NA	NA
36	Floor PET toilet (NRROC)	522.0	0.030	NA	NA	NA	NA	NA
37	control swipe	474.0	0.000	NA	NA	NA	NA	NA
38	Conventional Simulator Floor (NRROC)	487.7	0.006	71.3	8.333	0.225	0.225	0.225
39	Women's toilet (NRROC)	509.3	0.021	NA	NA	NA	NA	NA
40	Floor at door of PET toilet (NRROC)	506.3	0.019	20.2/85.6	6.667/8.000	0.180/0.216	0.180/0.216	0.180/0.216
41	Outside of package for 2009 source	528.3	0.034	125.1	2.000	0.054	0.054	0.054
42	Outside of package for 2007 source	536.7	0.040	NA	NA	NA	NA	NA

Each of the above swipe locations was surveyed by the Geiger Survey instrument noted above. Each of the swipe locations was surveyed and found to be less than 2 X the background level of 0.03 mR/hr.

Analysis:

The radioactive materials used at this location have been a Cs-137 constancy check source for the dose calibrator, the Ge-68 calibration sources for the PET system, and a 1.08 uCi Cs-137 calibration source for the swipe counter at the PET trailer.

No peaks are observable by computer or eye in the energy range of radioactive materials used in the activities of this license. The computer analysis of the spectrum obtained from 5 of the swipes show removable activity but activity at 5% or less of the allowable removable values.

With due consideration and with review and approval by the USNRC, these swipes show that the facilities are free of contamination at the 0.005 uCi level and that the Billings MRI facility may be returned to normal usages.

David William Switzer
 David William Switzer, MS, DABR

APR - 5 2011

DATE

This is to acknowledge the receipt of your letter/application dated 3/17/11, and to inform you that the initial processing, which includes an administrative 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 other 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 within 90 days.

- A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 574817.
When calling to inquire about this action, please refer to this mail control number.
You may call me at (817) 860-8103.

Sincerely,

Carol L. Heice
Licensing Assistant

BETWEEN:

Accounts Receivable/Payable
and
Regional Licensing Branches

[FOR ARPB USE]
INFORMATION FROM LTS ...

Program Code: 02121
Status Code: Pending Termination
Fee Category: 7C
Exp. Date:
Fee Comments:
Decom Fin Assur Req: N

License Fee Worksheet - License Fee Transmittal

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: BILLINGS MRI
Received Date: 03/24/2011
Docket Number: 3037902
Mail Control Number: 574817
License Number: 25-29315-01
Action Type: Termination

2. FEE ATTACHED

Amount: _____

Check No.: _____

3. COMMENTS

Signed: Colleen Murnahan

Date: 4-01-2011

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: _____