

1521 Gull Road
Kalamazoo, MI 49048
(269) 226.7000

August 25, 2014

BORGESS
Medical Center

UNITED STATES NUCLEAR REGULATORY COMMISSION
Region III, Materials Licensing Section
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

Re: Amendment to License No. 21-12275-02, Borgess Medical Center

Please amend our license as follows:

Remove the 363 Fremont, Suite 101, Battle Creek, MI address of use. A close out survey and diagram of the radioactive use areas is enclosed.

Thank you for your cooperation in this matter. If you have any questions, please contact our consulting physicist, Dawn Edwards, at 734-662-3197.

Sincerely,



Tom Mushett, Administrative Director
Radiology Services

lr/attachment

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 ASCENSION
HEALTH

Closeout Survey

**Borgess Medical Center – Borgess Cardiology Site
363 Fremont, Suite 101
Battle Creek, MI**

Date Performed: July 23, 2014

Performed By: Dawn Edwards, M.S., Consulting Physicist

Wipe tests were analyzed with a Capintec 700t Well Counter. The efficiency factor is 1.28 dpm/cpm and the MDA is 28 dpm. The action level for wipe tests was 1000 dpm/100 cm².

Surveys were performed using a Ludlum 14C survey meter, serial number 230325, with an end window probe. The meter was last calibrated on 01/29/14. The range used was 0-0.2 mR/hr and the action level for exposure rate surveys was 0.1 mR/hr.

Visual Check

The rooms were checked to verify no radioactive materials remained. Only Tc-99m and TI-201 radiopharmaceuticals were used at this office. In addition, sealed sources for calibration were used and stored in the hot lab area of the Nuclear Medicine Room. Prior to the closeout, all sources and radioactive waste were transferred to the hot lab at our 3035 Capital Avenue, Battle Creek, Michigan location. There is no history of any leaking sources and a sealed source leak test is enclosed for your review.

Radiation Level Survey

No area within the office demonstrated radiation levels in excess of the background reading of 0.02 mR/hr.

Borgess Medical Center
Closeout of 363 Fremont, Suite 101
July 23, 2014

Removable Contamination

1 minute counts

Background 454 cpm (0 dpm)

Area Results in dpm

A diagram of the survey area is enclosed.

Wipe test results:

Area	Result
1	0 dpm
2	0 dpm
3	4 dpm
4	16 dpm
5	9 dpm
6	14 dpm
7	0 dpm
8	18 dpm
9	40 dpm
10	28 dpm
11	18 dpm
12	0 dpm
13	22 dpm
14	56 dpm
15	30 dpm
16	72 dpm
17	14 dpm
18	0 dpm
19	32 dpm
20	22 dpm

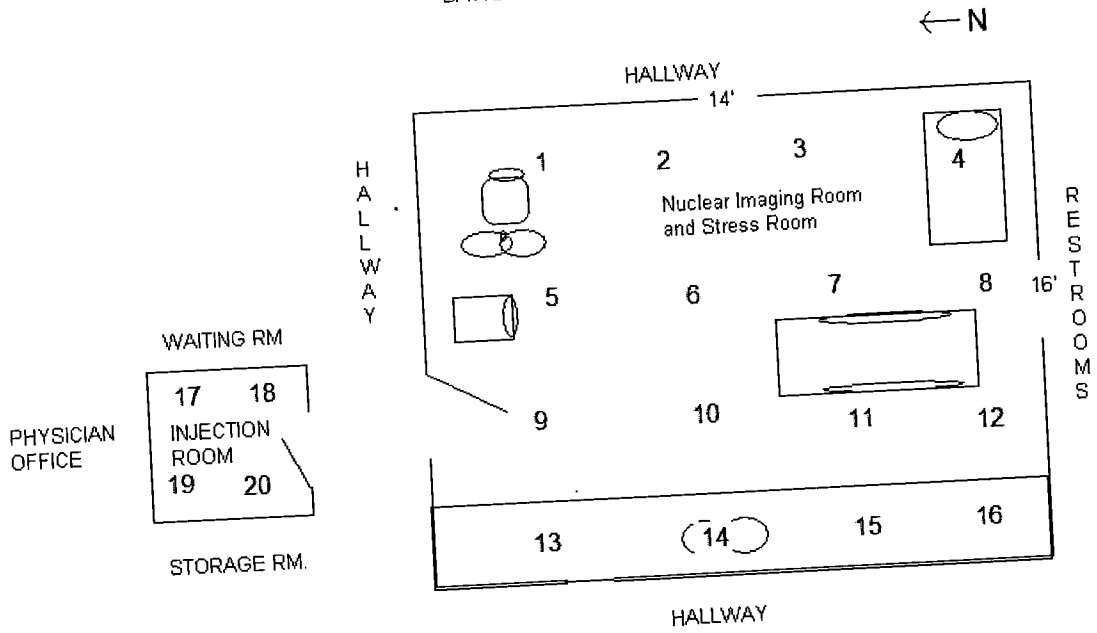
Maximum removable contamination: 72 dpm

Conclusion

No removable contamination is present.

Borgess Medical Center
Closeout of 363 Fremont, Suite 101
July 23, 2014

363 FREMONT, SUITE #101
BATTLE CREEK, MI 49017





Sealed Source Leak Test

Licensee: Borgess Medical Center - Borgess Cardiology Group Date: 01/23/14

Performed by: Dawn Edwards

Nuclide	Type	Calibration		Location	M/N	S/N
		Activity	Date			
Cs-137	Vial	211.6 uCi	01/01/07	HotLab	None	1218-17-8
Current Activity: 179.7 uCi						
Ba-133	Vial	247.9 uCi	01/01/07	HotLab	None	1218-21-22
Current Activity: 155.7 uCi						
Ba-133	Vial	233.9 uCi	06/01/04	HotLabstorag	None	1032-29-7
Current Activity: 123.9 uCi						
Cs-137	Vial	283 uCi	10/10/84	HotLabstorag	CTC.VI	3627MA
Current Activity: 143.8 uCi						
Co-57	Flood	10 mCi	12/01/12	Hot Lab	MED3744	1642-113
Current Activity: 3.432 mCi						

Comment: The sources listed above were leak tested using a dry wipe technique and were found to have less than 0.005 uCi removable activity. The following Minimum Detectable Activities are based upon a background at the indicated value. Background was at or below these levels when the above tests were completed.

Well Counter: Captus 3000

Nuclide	MDA	Background
Cs-137	2.0×10^{-4} uCi	145 counts/1 min
Ba-133	8.8×10^{-5} uCi	204 counts/1 min
Co-57	1.7×10^{-5} uCi	53 counts/1 min

RADIATION SAFETY OFFICER: _____

BORGESS

Radiology
1521 Gull Rd
Kalamazoo MI 49048

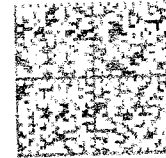
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