

Blodgett Memorial Medical Center
ATTN: Sun-Shing Leung, Ph.D.
Radiological Physicist
1840 Wealth S. E.
Grand Rapids, MI 49506

MAY 01 1987

70-2204

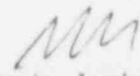
Gentlemen:

This refers to your letter dated March 23, 1987, regarding your non-compliance with NRC Rules and Regulations, which will require an amendment to Materials Licenses 21-01424-03 and SNM-1614.

An amendment fee of \$120 is required as specified in §170.31 (7C) of 10 CFR 170, copy enclosed. Payment should be made to the U.S. Nuclear Regulatory Commission and mailed to the attention of Cheryl Phillips at our Washington, D.C. address.

Your application will be processed by the Region III Licensing staff located at 799 Roosevelt Road, Glen Ellyn, Illinois 60137. The fee, however, is required prior to issuance of the amendment. When submitting the fee, please refer to CONTROL NUMBER 383301.

Sincerely,


Glenda Jackson
License Fee Management Branch
Division of Accounting and Finance
Office of Administration and
Resources Management

Enclosure:
10 CFR 170

cc: Region III

DISTRIBUTION:
Pending Fee File
CPhillips, LFMB
ARM/DAF R/F
LFMB R/F (2)
DW/RIII/Blodgett

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21-01424-03 PDR

OFFICE	: ARM/LFMB	: ARM/LFMB	:	:	:	:	:	:
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Blodgett

Memorial Medical Center

March 30, 1987

Log	4/1/87
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Check No.	197311
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	and
Date	6/8/87
By:	S. Gumbury

U.S. Nuclear Regulatory Commission
Region III
ATTN: W. L. Axelson, Chief
Nuclear Materials Safety
and Safeguards Branch
799 Roosevelt Road
Glen Ellyn, IL 60137

License No. 21-01424-03
License No. SNM-1614

Gentlemen:

This is a response to your letter of March 13 concerning our non-compliance with NRC Rules and Regulations:

1. We understand it is a repeated violation that we have failed to consistently follow Appendix F of Regulatory Guide 10.8 procedures for safely opening packages containing radioactive material. To prevent future violations the following have been implemented:
 - a. The nuclear medicine staff have been instructed on the seriousness of the violation.
 - b. The Physicist and the Radiology Manager will be conducting periodic unannounced inspection of the records for package surveys and wipe tests and for other activities governed by our NRC licences.
2. Extra sealed sources of I-125 have been shipped back to the manufacturer on March 30 so that our possession limit will not exceed 400 mCi (2 sources not to exceed 200 mCi each).
3. Attached is a description of the new area where nuclear medicine procedures, including xenon studies, are performed.
4. The nuclear medicine staff have been instructed of the violation and instructed to dispose radioactive material into ordinary waste only at background radiation level.
5. The gadolinium-153 sealed source has been leak tested on 3-26-87, and will be leak tested on time intervals not exceeding 6 months. Leak tests for all sealed sources will be performed by a licensed vendor (such as Health Physics Associates of Northbrook, IL), or be performed in-house using the thyroid uptake probe as counting instrument.
6. The Keithley Model 36100 has been calibrated on March 2, 1987 and will be calibrated on an annual basis.

CONTROL NO. 83301

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1840 Wealthy S. E. Grand Rapids, MI 49506 (616) 774-7444

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7. The nuclear medicine staff have been instructed of the violation and instructed that daily surveys and weekly wipe tests must be performed as required.
8. The nuclear medicine staff have been instructed of the violation. The staff have agreed that when handling radioactive material protective gloves should be worn at all times except during injecting patients intravenously, as one of the hands must be used to palpate for the blood vessel. Therefore, we would like to amend our licence so that personnel are required to wear gloves when handling radioactive material except during injecting patients intravenously, during which glove is only required for the hand which is used for handling the syringe.

If you need additional information please contact me.

Sincerely,



Sun-Shing Leung, Ph.D.
Radiological Physicist

Blodgett Memorial Medical Center
Grand Rapids, Michigan

NUCLEAR MEDICINE FACILITIES
March 25, 1987

Attached figure is a layout of the Nuclear Medicine Area, which includes the Imaging Lab (Room F) and the Hot Lab (Room B). Radioisotope shipments are delivered directly to the Hot Lab. The isotopes are stored, in their original lead containers, on the counter (area 3) or (in a brief case) on the floor (area 8) At the present time Tc-99m generators are not being used. All unused byproducts, used syringes and radioactive waste, etc. are either sent back to the suppliers or left to decay to background in lead-lined "decay" tanks stored under the counter (area 3) in the Hot Lab. Dose preparation is performed behind a L-shaped lead block with a lead-glass shield (ADC Medical Model TTS-101).

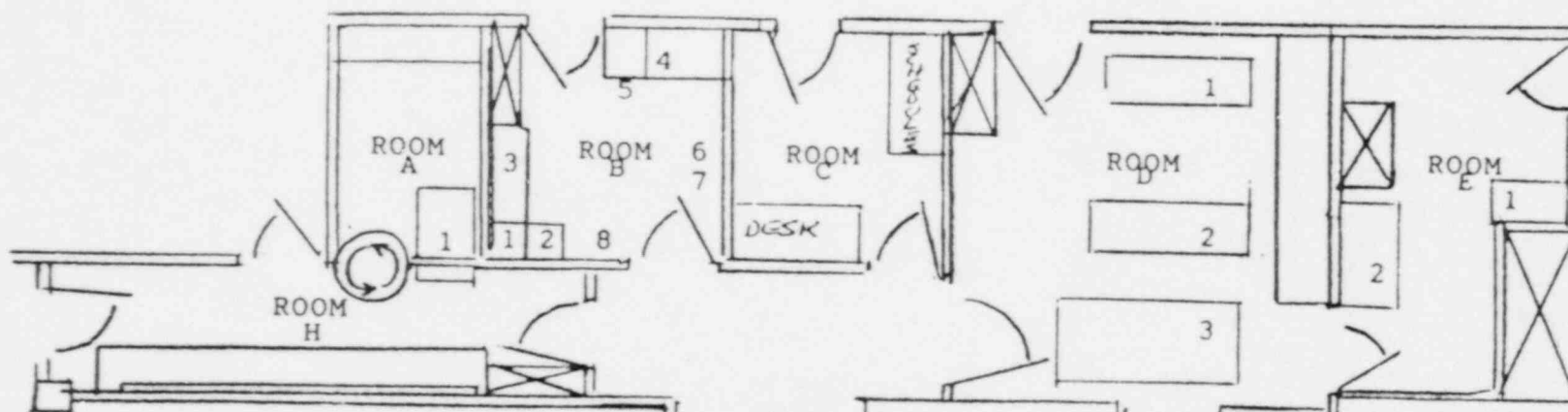
Air-flow figures in the Nuclear Medicine Area are as follows:

Imaging Lab	Room Size	2340 cu. ft.
	Total air supply	1400 cfm
	Total air exhaust	1450 cfm
Hot Lab	Room Size	1000 cu. ft.
	Total air supply	550 cfm
	Total air exhaust	640 cfm

These rooms are continuously ventilated and none of the air is re-circulated. The exhaust point for either room is located on the roof of the building and is at least 40' from the nearest window or air intake. The above air-flow figures, according to our calculations in Item 21 of our original licence application dated June 22, 1983, appear to be adequate for our xenon studies.

Effective: November 10, 1986

Scale: 1/8" = 1'



ROOM	ITEM	ROOM LEGEND
A	1	Film Processor
B	1	Refrigerator
B	2	Sink/Cabinet
B	3	Nuclide Waste
B	4	Fume Hood
B	5	Dose Calibrator
B	6	Overhead Shower
B	7	Injection Area
B	8	Nuclide Delivery
C		Office Area
E	1	Treadmill
E	2	Scanning Table
E	3	Mobile Camera

HALLWAY
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ROOM	ITEM	ROOM LEGEND
E	1	Array Processor
E	2	Computer Terminal
F	1	CDS Computer
F	2	LFOV Cam Console
F	3	Collimators, (3)
F	4	LFOV Detector
F	5	Uptake Probe
F	6	Xenon Dispenser
F	X	Room Exhaust Duct
F	Y	Air Inlet Duct (2)
G		Hallway
H		Film QC Area

Blodgett Memorial Medical Center
Nuclear Medicine Section

CONTROL NO. 83301