

Veterans
Administration

September 7, 1984

Material Licensing Branch
Division of Fuel Cycle and Material Safety
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

Gentlemen:

Subject: Renewal of byproduct material license #26-00138-10
Amendments 11-15.

With the addition of the changes listed in the enclosed documentation we wish to continue to operate under our current license in accordance with statements, representations, and procedures contained in application dated November 11, 1978; letters dated September 6, 1979 and September 24, 1980; letter dated October 5, 1981; letter and attachments dated September 8, 1982; and letter dated February 11, 1983. We will continue to operate in accordance with these documents and applicable NRC regulations and license conditions.

1. Item 6b, November 11, 1978 and letter dated October 5, 1981:
 - a. INCREASE Hydrogen-3 to 300 millicuries in any chemical form
 - b. INCREASE Chromium-51 to 100 millicuries in any chemical form
 - c. INCREASE Molybdenum-99 to 3 curies

2. Item 7a, November 11, 1978:

SUBSTITUTE current Radioisotope and Radiation Safety
Subcommittee Memorandum - attached

Item 7b, November 11, 1978:

DELETE William C. Mulry, M.D. as a member

Item 7d, November, 1978:

DELETE Experience of William C. Mulry, M.D.

3. Item 9 Instrumentation, November 11, 1978:

SUBSTITUTE revised instrument list - attached

8508210076 850724
REG4 LIC30
26-00138-10 PDR

Material Licensing Branch

4. Item 10 Calibration of Survey Instruments, November 11, 1978:

ADD Primary calibration will be done with J.L. Shepherd and Associates Model 28-6A Calibrator containing 1.2 curies of Cs-137, June 9, 1981. Calibration of source is directly traceable to National Bureau of Standards.

In special cases the U.S. Nuclear or Tracerlab calibration sources listed in application of November 11, 1978 may be used.

5. Item 10 a Calibration of Dose Calibrator, November 11, 1978:

CHANGE Sources used for instrument accuracy and consistency tests will be as follows:

DELETE list dated November 11, 1978 and SUBSTITUTE

<u>Radionuclide</u>	<u>Activity (mCi)</u>	<u>Date</u>	<u>Accuracy</u>
CO-57	5.1	8-5-83*	±3.9%
Ba-133	0.257	3-29-83	±3.7%
Cs-137	0.203	7-19-83	±4.0%

*New source ordered 8-28-84

6. Item 11, November 11, 1978:

SUBSTITUTE Hoods: all indicated fume hoods have an air flow of 100 CFM with the hood door open one foot.

ADD Paragraph Isotope Storage: Our facility is attempting to obtain funding for a 55 gallon drum compactor to compact research radioactive waste (paper, plastic dishes etc.) containing mainly H-3, C-14, I-125 and Cr-51. If funding is obtained the compactor together with some filled 55 gallon drums will be stored in Room R-122 on the first floor of the Research Building as shown in attachment I of letter dated September 8, 1982. Storage will be prior to disposal by a commercial vendor or decay. The room and its surroundings will be locked and monitored as the waste is accumulated. Both 10 CFR 20 and the ALARA concept will be complied with.

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7. Item 12, November 11, 1978:

ADD Licensee may substitute training programs in Draft Regulatory Guide dated January, 1984 entitled "Radiation Protection Training for Personnel Employed in Medical Facilities", or the final version of the Regulatory Guide, if desired.

8. Item 13a, November 11, 1978:

CHANGE Radiation Safety Officer (Room SW-2 and Room 166) to B526 due to renumbering of rooms.

9. Item 13b, November 11, 1978:

SUBSTITUTE Item 13b dated August 30, 1984 (attached)

10. Item 16, November 11, 1978:

CHANGE Office Phone Ext: 3002
Home Phone: 397-9292

11. Item 18, November 11, 1978:

ADD 4. Radioactive material with a physical half life of less than 65 days will be held for decay in storage a minimum of ten (10) half-lives before disposal in ordinary trash. Prior to its disposal as normal waste, the radioactive waste shall be monitored to determine that its radioactivity cannot be distinguished from background with typical low-level laboratory survey instruments. All radiation labels will be removed or obliterated.

ADD 5. Radioactive material with physical half life that prevents storage for decay, including animal carcasses containing more than 0.05 $\mu\text{Ci/g}$ of H-3 or C-14 may be disposed of by one of the following waste disposal services:

- a. ADCO Services, Inc.
7225 Duval Drive
Tinley Park, IL. 60477
NRC License No. 12-11286-01
- b. U.S. Ecology, Inc.
9200 Shelbyville Road
Suite 526
Louisville, Ky. 40222
State of Washington License No. WN-1019-2

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12. Item 21, November 11, 1978:

CHANGE Paragraph B.1.a. Room E616 to 6006
Paragraph B.1.b. Room E615 to 6012
(These changes are due to renumbering room numbers)

CHANGE Paragraph C.6. Ventilation module to Radx Model Ventil-Con II

CHANGE Paragraph C.9. Xenon-133 gas monitor to Johnson Laboratories, Inc. Model 133C. This unit has a range of 0.1 to 100 MPC ¹³³Xe. on a single logarithmic scale.

CHANGE Paragraph D.1.f. Extension 432 to 3002

13. Item 22, November 11, 1978:

ADD to 1. Dogs may also be housed in the new Dog Quarters addition to the Research Building shown in the attached diagram.

14. Item 23, November 11, 1978:

SUBSTITUTE A. Bioassay

1. ³H. Individuals involved in operations which utilize 100 mCi or more of hydrogen-3 at any one time or possess more than 100 mCi per month shall have a routine bioassay if they utilize the hydrogen-3 in an open room or bench with possible escape of tritium from process vessels. Other activity levels or concentrations above which tritium bioassay programs should be provided, the frequencies of bioassays, the actions to be taken and the results that should initiate actions are as outlined in Draft Regulatory Guide "Applications of Bioassay for Tritium" Division 8 dated June, 1983.

2. Individuals involved in operations which utilize iodine-125 or iodine-131 shall have thyroid counts performed as outlined in Regulatory Guide 8.20. The counting will be done by the Nuclear Medicine Service using the procedure followed for iodine uptakes.

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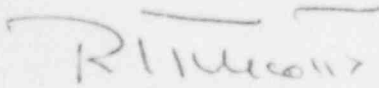
Material Licensing Branch

15. Item 24, November 11, 1978:

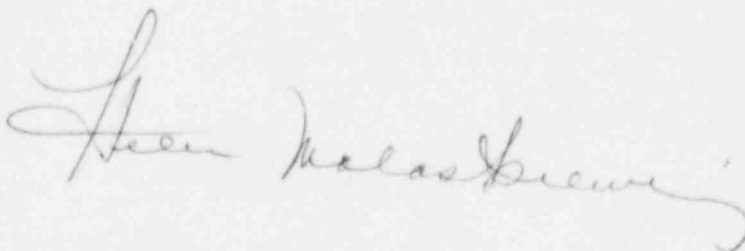
CHANGE Film Badge and TLD Service will be provided by R.S. Landauer Jr. and Company, Glenwood, IL. or other comparable supplier.

16. Person who may be contacted concerning renewal application:

Alan J. Blotcky
402-346-8800 Ext: 3002
FTS: 864-0011 Ext: 3002


R.L. TURCOTTE
Director

Enclosures


for
9/17/84

RADIOISOTOPE AND RADIATION SAFETY SUBCOMMITTEE

1. PURPOSE:

The Radioisotope and Radiation Safety Subcommittee of the Clinical Executive Board is established to produce radiation protection surveillance and to ensure compliance with the conditions of all Nuclear Regulatory Committee (NRC) Byproduct Material Licenses held by this Medical Center.

2. POLICY:

a. The Subcommittee will review proposals for the use of radioactive materials at this Medical Center and will approve all users of such material under the authorization of any Nuclear Regulatory Committee license.

b. The Subcommittee will review all forms of radiation exposure and make recommendations for policies to ensure protection of all employees.

3. DELEGATION OF AUTHORITY:

The designated Radiation Safety Officer will be assigned the responsibility for ensuring the execution of the Radiation Safety Program in accordance with the Radiation Safety Manual of the Omaha Veterans Administration Medical Center and Title 10, Part 20 and Part 30, Code of Federal Regulations. He will also assure the compliance with the conditions of all NRC Byproduct Material Licenses held by this Medical Center.

4. PROCEDURE:

a. Members:

The Radioisotope and Radiation Safety Subcommittee will be composed of the following individuals by field of specialization:

Chairman	J.J. Matoole, M.D., Internal Medicine, Chief of Staff
Member	James J. Phalen, M.D., Radiologist
Member	A.S. Lorenzo, M.D., Neurologist
Member	S. Badakhsh, M.D., Pathologist
Member	M.J. Swartz, M.D., Internal Medicine
Member	A.J. Blotcky, Nuclear Physicists, Radiation Safety Officer
Member	Marilyn Piper, Registered Nurse
Member	K.A. Schneller, Health Systems Specialist
Secretary	Secretary to Chief, Nuclear Medicine Service

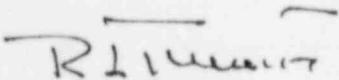
b. Meetings:

Meetings will be held monthly. A quorum will be four members. The secretary will prepare minutes of each meeting for distribution to each Subcommittee member and to the Clinical Executive Board. Specific recommendations of the Subcommittee will be prepared as a separate attachment to the minutes.

c. Coordinator:

Coordinator for the Clinical Executive Board will be the Chief of the Nuclear Medicine Service.

5. REVIEW DATE: Anniversary date of publication.
6. RESCISSION: Memorandum No. 115-1 dated July 8, 1976.


R.L. TURCOTTE
Director

DISTRIBUTION:

All Service and Section Chiefs
All Committee Members



Memorandum

Date: August 30, 1984

From: Director (00)

To: Medical Administration Service (136)
THRU: Chief of Staff (11)
THRU: Associate Director (001)

Subj: Special Instructions for Receipt
and Delivery of Radioactive Materials

1. In order to assure that radioactive materials are secured against unauthorized removal at all times, the procedures outlined below will be followed:

a. Receipt of parcel(s):

(1) Normal duty hours:

(a) Incoming parcel(s) containing radioactive materials will be delivered by the transporter to the receiving dock, where they will be inspected for radioactive leakage and either delivered immediately to the requesting individual or kept under lock and key until delivery.

(2) Off-duty hours:

(a) Incoming parcel(s) containing radioactive materials will be delivered to the switchboard operator, who will immediately notify the Medical Center police officer on duty for delivery to the Nuclear Medicine Service (Room 6401).

(b) The switchboard operator will keep the parcel(s) under surveillance until it is turned over to the Medical Center police officer, who will immediately deliver it to Room 6401.

(c) No parcel(s) containing radioactive material is to remain in the switchboard area for any extensive length of time.

(3) Inspection of package:

(a) If the package is wet or appears to be damaged, immediately contact the Medical Center Radiation Safety Officer. Ask the carrier to remain at the Medical Center until it can be determined that neither he nor the delivery vehicle is contaminated.

b. Delivery of parcel(s):

(1) All packages bearing yellow 11 or yellow 111 Department of Transportation (DOT) labels (see attachment) should be transported by cart.

(2) Normal duty hours:

(a) Packages addressed to the Nuclear Medicine Service will be delivered to Room 6401 and signed for by authorized Nuclear Medicine Service Personnel.

(b) Packages addressed to the Research Service will be delivered to Room B526 and signed for by the Radiation Safety Officer or his designee.

(3) Off-duty hours:

(a) All parcels are to be delivered by the Medical Center police officer to Room 6401 and will be placed on the counter next to table top hot plate. The room will be kept locked at all times.

(b) Parcel(s) is not to be placed on the scanning table or console.

(c) If the parcel(s) is labeled "To Be Refrigerated", it is to be placed in the large upright household refrigerator in Room 6401.

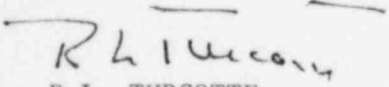
(d) Unless specifically labeled or instructed, parcel(s) is not to be placed in the freezer compartment of the refrigerator.

(e) The police officer will enter the time materials are stored and where in the daily journal.

(f) No parcel(s) containing radioactive material will be stored in any other area of the Medical Center without the prior consent of the Chief, Nuclear Medicine Service (Room 6020) or the Radiation Safety Officer (Room B526).

2. If there is any question or problem concerning parcel(s) containing radioactive material, please call the people listed below, in the following order:

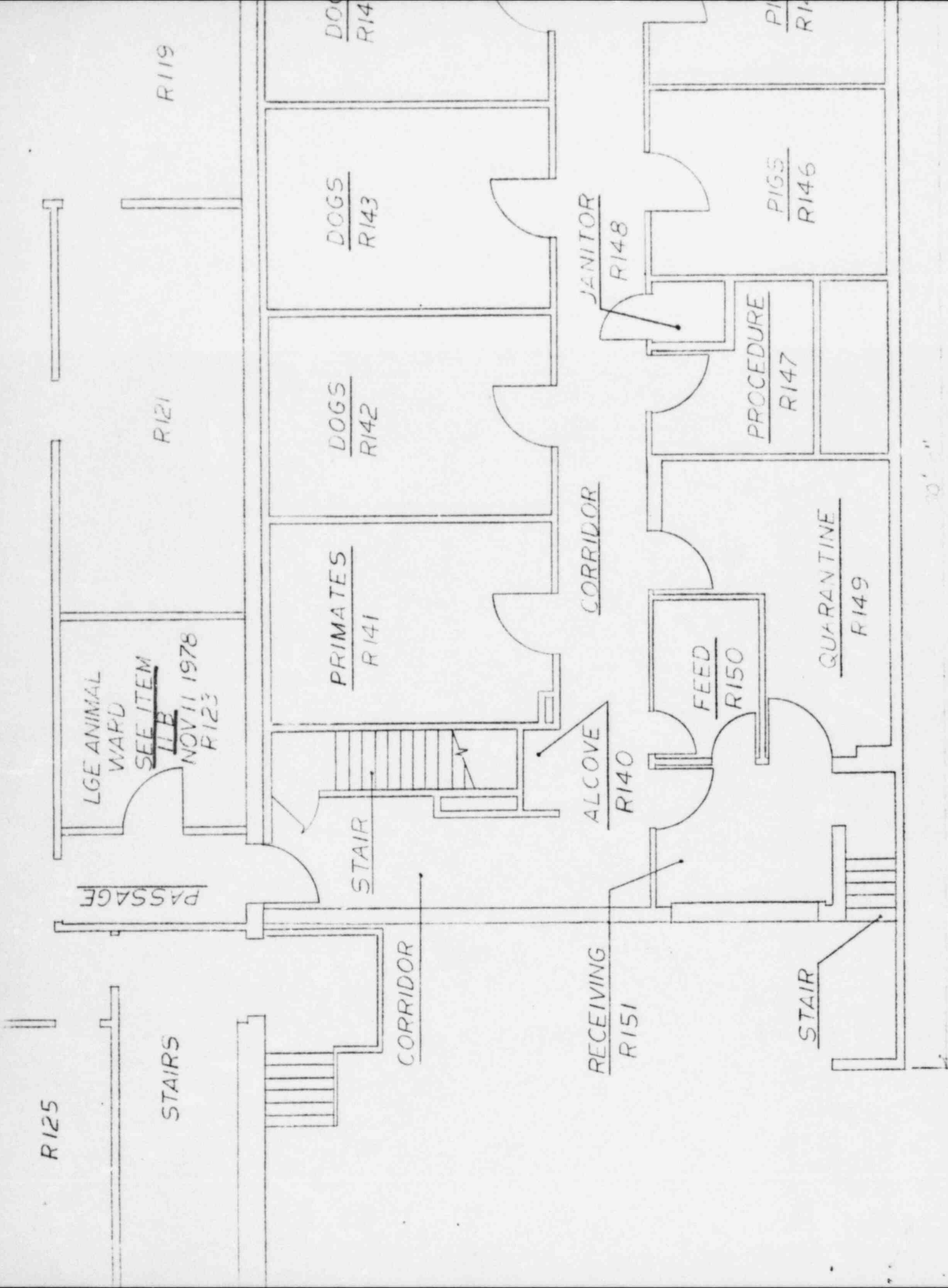
a. Jim Villotta	334-1547
b. Tom Geren	291-2859
c. J.J. Matoole, M.D.	393-4376
d. A.J. Blotcky	397-9292

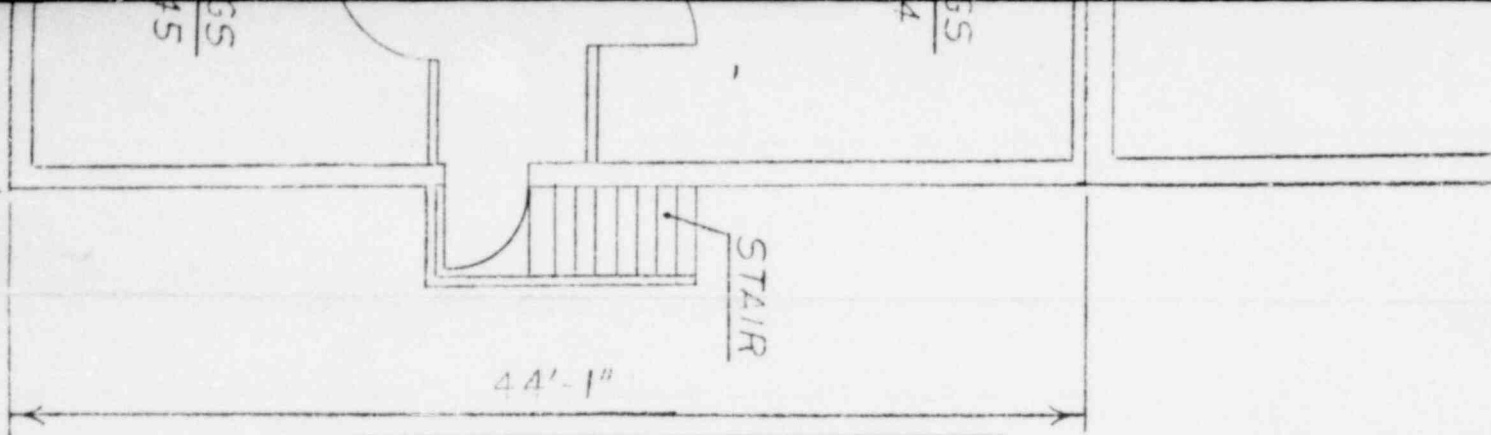

R.L. TURCOTTE
Director

Attachment

cc: Associate Director
Police Section







ITEM 22
DOG QUARTERS ADDITION

18151

INSTRUMENTATION

Type of Instrument (Make & Model No.)	Number Available	Radiation Detected	Range MR/Hr.		Window Thickness
			Min.	Max.	
a. Survey meters					
Nuclear Chicago-G.M. Model 2652	1	Alpha Beta Gamma	0-0.1	0-100	1.4
Radiation Technology, Inc. R.E.A.C. G.M. Model H575	1	Alpha Beta Gamma	0-0.2	0-20	1.4
Reactor Experiments, Inc. Digi/Master - G.M. Model 803	1	Beta Gamma	0.1	99,900	
Victoreen Ion Chamber Model 440	1	Alpha Beta Gamma	0-3	0-300	1
Victoreen-Ion Chamber Radector II Model 2025	1	Beta Gamma	0-100	Kr./Hr. 0.1 to 1	20
Jordan Electronics Ion-Chamber Model AGC-508-SRX	1	Beta Gamma	0.05- 50	R/Hr. 0.05-50	20mg/cm ²
Texas Instruments LOG G.M. Model 9120 With Model 2112 Base	1	Beta Gamma	0.02	200	30 mg/cm ²
Eberline Gas Proportional Alpha Counter Model PAC-3GN with DT-212/PDR54 Probe	1	Alpha	CPM 0-1000	CPM 0-100K	
Nuclear Chicago Labitron G.M. Area Monitor			CPM 0-500	CPM 0-20,000	1.4 mg/cm ²
Nuclear Measurements, Inc. 1 Continuous Air Monitor-G.M. Model AM2D		Beta Gamma	CPM 50	CPM 50,000	5.6 mg/cm ²

Type of Instrument (Make & Model No.)	Number Available	Radiation Detected	Range MR/Hr.		Window Thickness
			Min.	Max.	
R.I.D.L. Lab Monitor Model LM	1	Alpha Beta Gamma	CPM 0-200	CPM 0-20,000	1.4mg/cm ²
b. Dose Calibrator Radx Assayer I Model 225	1				
c. Diagnostic					
1) Scanner with Dual Opposed Scanning Heads Ohio-Nuclear Model 54F 6330-5834	1	Gamma			2 ea. 5" x 5" NaI Crystals
2) Scintillation Camera Nuclear-Chicago PhoGamma Model 6403	1	Gamma			
3) Scintillation Camera Siemens Model ZLC 370	1				
4) Scintillation Uptake System Picker Model #600012 With Model 2830A detector	1	Gamma	1		1 ea. 2" NaI Crystal
5) 80,000 LKB Auto Gamma Counter	1	Gamma			
d. Other					
1) Beckman Liquid Scintillation Counter Model LS-250 and Model LS 3133P Model LS 6800	1 1 1	Beta Beta Beta			
2) Beckman Auto Gamma 300 System Dual Channel	1	Gamma			
3) Nuclear Data Model ND2400 1024 Channel Analyzer	1	Gamma			2 ea. 3" x 3" or 2 ea. 5mm x 3" NaI Crystals
4) Nuclear Data Model ND 600 4096 Channel Analyzer	1	Gamma			60 cm ³ GE (Li) Detector

Item 9
November 11, 1978
Revised
August 24, 1984

Type of Instrument (Make & Model No.)	Number Available	Radiation Detected	Range MR/Hr.		Window Thickness
			Min.	Max	
5) Nuclear Meas. Corp Gas Flow Counter Model PCC-11T With Model DS IT Scaler	1	Alpha Beta			
6) Ortec-Single Channel Analyzer System Model 406	1	Gamma			1 ea. 2" NaI Well Crystal
7) Nuclear-Chicago Neutron Survey Meter Model 2112 With Model DN-3 Neutron Probe	1	Fast and Slow Neutrons	0-150 cpm	0-15,000 cpm	
8) Atomic Accessories Tritium Air Monitor Model TS-M-91-B	1	Beta	uci/m ³ 0-100	uci/m ³ 0-100,000	
9) Atomic Accessories Tritium Air Monitor Model TS-M-91-D	1	Beta	0-30	0-300,000	
10) Johnson Laboratories, Inc. Xe-133 Gas Monitor Model 133c	1	Beta	0.1 to	100 MPC ¹³³ Xe	

Item 9
November 11, 1978
Revised
August 24, 1984

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Administration

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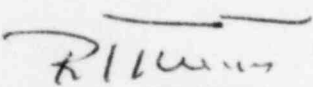
February 11, 1983

ACMD for Operations (115)
Veterans Administration Central Office
810 Vermont Avenue N.W.
Washington, D.C. 20420



SUBJ: Amendment of NRC Material License #26-00138-10 Amendment 10

1. Enclosed please find the original and two copies of an application to amend our Material License.
2. If this meets with your approval, will you please forward the original and one copy to the Nuclear Regulatory Commission.

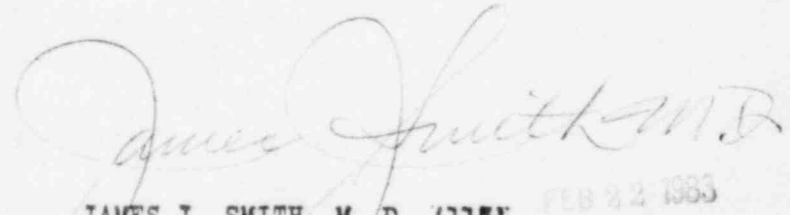

R. L. TURCOTTE
Director

Enclosure

RECEIVED

FEB 18 1983

NUCLEAR MEDICINE SERVICE
14507


JAMES J. SMITH, M. D. (115)
Director, Nuclear Medicine Service
VA Central Office
Washington, D.C. 20420

FEB 22 1983

In Reply Refer To:

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FEE EXEMPT

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