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MAY 04 1984

Wright State University
ATTN: Bruce T. Austin, Ph.D.
Radiation Safety Officer
7751 Colonel Glen Highway
Dayton, OH 45435

License No. 34-11912-03
Control No. 76674

SUBJECT: LICENSE RENEWAL APPLICATION

Gentlemen:

This is to acknowledge receipt of your application for renewal of the material(s) license identified above. Your application is deemed timely filed, and accordingly, the license will not expire until final action has been taken by this office.

Any correspondence regarding the renewal application should reference the control number specified and your license number.

Sincerely,

Material Licensing Section
Region III

Wright State University

Department of Safety
Dayton, Ohio 45435
513/873-2XXX 2215

030-15160

April 26, 1984

U.S. Nuclear Regulatory Commission
Materials Licensing Section
799 Roosevelt Rd.
Glen Ellyn, IL 60137

Madam or Sir,

This letter is submitted in application for renewal of USNRC License No. 34-11912-03, issued to the University.

The University wishes to continue operation under the provisions of this license and will continue to operate in accordance with the relevant documents, cited below, applicable USNRC regulations and License conditions.

Documents listed in License condition 20 that remain relevant to the current radiation safety and material control program are:

Application dated August 3, 1978
Letters dated March 5, 1981
October 12, 1982
December 1, 1982
March 4, 1983
April 22, 1983
October 7, 1983
Radiation Safety Manual dated August 1983

Those superseded are:
Radiation Safety Manual dated 1978
Letter dated March 20, 1979
Application dated August 31, 1979
Letters dated September 17, 1980
April 7, 1982
July 6, 1982

In addition to the above, the following changes have recently occurred and should be reflected in license documentation:

By Provost's memorandum dated April 3, 1984, Dr. Albert E. Langley, Associate Professor and Chairman of Pharmacology and Toxicology has been appointed as member and chairman of the University Radiation Safety Committee. This

170.11(a)(9) - State
FEE EXEMPT

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results in partial revision of the letter dated April 22, 1983. A copy of the Provost's memorandum and Dr. Langley's credentials relevant to his appointment are enclosed (enclosures 1 and 2).

Due to replacement of radiation survey and assay equipment that is available for use for radiation safety purposes, item 10 of Appendix D to the application of 1978, last updated by letter dated March 4, 1983, should be updated by substitution of the enclosed listing (enclosure 3). No significant alteration of radiation survey and assay capability is reflected in the updated listing.

Reflecting the changing education and research mission of the University School of Medicine at the V.A. Medical Center, the lease designating University control of space at the center has been amended to add portions of V.A. Building 315 and to delete portions of V.A. Building 307 in which material has not been used. While material has not yet been used in these new areas, the University Radiation Safety Committee will continue to authorize material use in accord with policy previously elaborated for areas under University jurisdiction. Enclosure 4, (4 pages), is enclosed in description of areas under University control.

Enclosure 5 depicts a new laboratory complex for the radiation safety program that is nearing completion.

Besides a contained working environment, the facility will provide a centralized location for improved program efficiency and control of material receipt and distribution in support of the University Radiation Safety Program.

With the availability of this dedicated space, the J.L. Shepherd, model 28-6 calibration source is to be relocated for use and storage from the area specified in the letter dated March 4, 1983. Use and storage procedures, previously specified, remain unchanged. At a source to barrier distance of 28 feet or greater, the unattenuated beam intensity at the proximate surface of the barrier will not exceed 3.67 mR/hr. Typical use for calibration purposes involving attenuation for most procedures, a source use cycle of less than 50% and inherent barrier attenuation, will assure an exposure rate of less than 2 mR in any hour in uncontrolled areas adjacent to the laboratory.

Should any questions arise concerning this application, please do not hesitate to contact the undersigned at 513/873-2215.

Sincerely,

Bruce T. Austin, Ph.D., Consultant
University Radiation Safety Officer

BTA/sdb

Enclosures

Control No. 76674

WRIGHT STATE UNIVERSITY

OFFICE OF THE PROVOST

Provost's Memorandum April 3, 1984

No. 84-1 (Supersedes No. 83-1)

SUBJECT: University Radiation Safety Committee

Nuclear Regulatory Commission guidelines require an official announcement of University Radiation Safety Committee membership. Current members of the Committee are:

Dr. Albert E. Langley, Associate Professor, Pharmacology and Toxicology (Chairperson)

Dr. George G. Hess, Associate Professor Chemistry

Dr. Lawrence J. Prochaska, Assistant Professor, Biological Chemistry

Dr. Adrian Rake, Associate Professor, Biological Sciences

Mr. David S. Atwater, Assistant Vice President, Facilities and General Services

Dr. Bruce T. Austin, University Radiation Safety Officer, (Ex-officio/Non-voting member)

The University Radiation Safety Committee will report to the Provost. This memorandum supersedes Provost's Memorandum 83-1, dated April 11, 1983.

WRIGHT STATE UNIVERSITY

RADIATION SAFETY COMMITTEE

Albert E. Langley, Ph.D.
Associate Professor, Pharmacology and Toxicology

I. Education:

Ph.D. Ohio State University, 1974

II. Training:

Ohio State University
Isotopic Tracers in Biology, 3 credit hrs

III. Experience:

ISOTOPE	WHERE USED	DURATION	TYPE OF USE
^{14}C	Ohio St. University	3 years	Enzyme Assay
^{14}C	Univ. of Colorado	2 years	Enzyme Assay
^{3}H	Univ. of Colorado	2 years	Tracer labeling
^{3}H	Warner-Lambert Co.	1 year	Tracer labeling
^{3}H	Wright State University	6 1/2 yrs	Tracer labeling
^{125}I	Wright State University	2 years	RIAs
^{32}P	Wright State University	1 year	Enzyme Assay

IV. Previous Radiation Safety Committee Experience:

None

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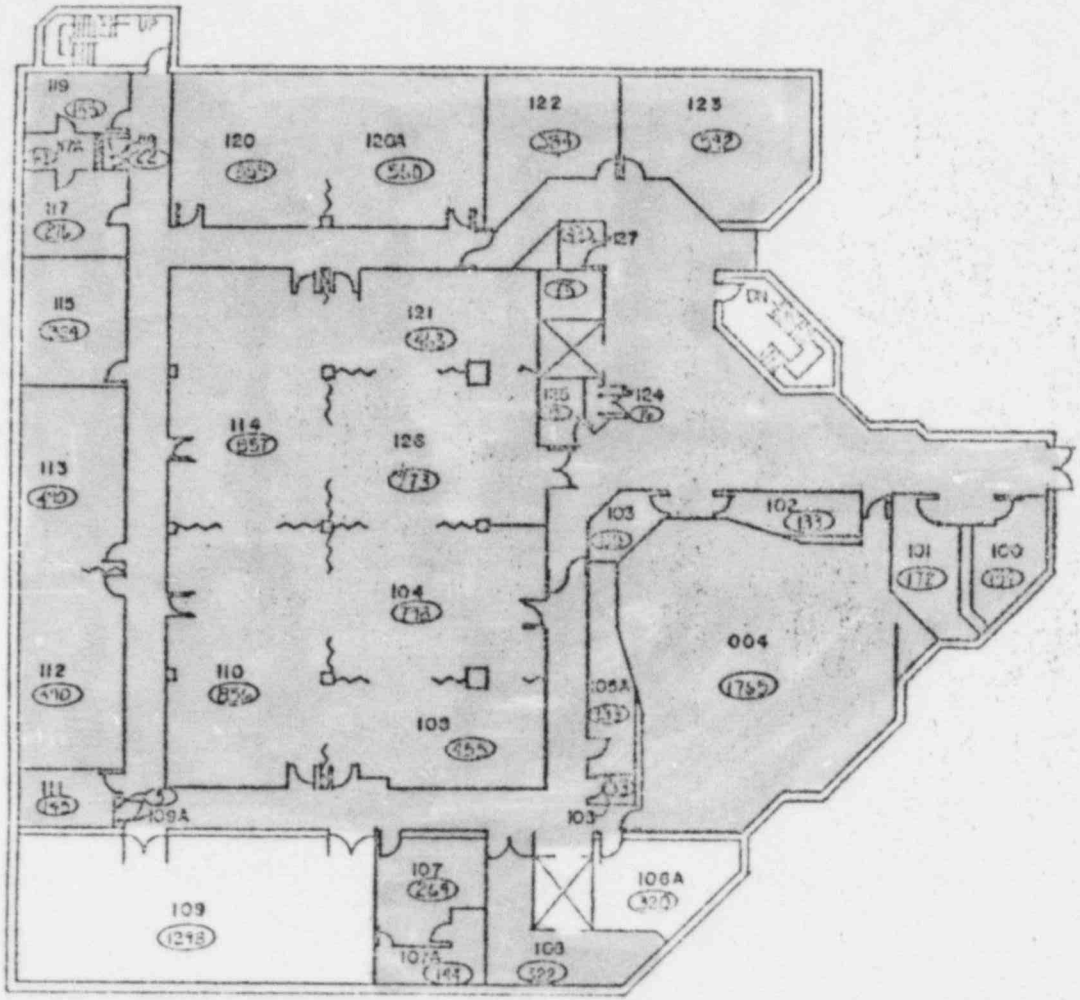
APPENDIX D ITEM 10

TYPE INSTRUMENT	RADIATION DETECTED	COUNTING RANGE	WINDOW THICKNESS	USE
SAFETY DEPT.				
Eberline E120	Beta, Gamma	0-500 mR/Hr	1.4-2 mg/cm^2	GM survey meter
Eberline PAC-4G-3	Alpha	0-500,000 cpm	.85 mg/cm^2	Alpha survey meter
Ludlum 2200			7 mg/cm^2	scintillation
	Beta, Gamma	0-500,000 cpm	.093 mg/cm^2	analyzer
Victoreen 470A	x-ray	0-1000 mr/hr	w/o cap 17 mg/cm^2	
	Beta, Gamma	0-1000 r/hr	w. cap 5000 mg/cm^2	survey meter
Victoreen 541R	Gamma, x-ray	0-200 mr		pocket dosimeter
Victoreen 855 (3)	Gamma, x-ray	0-999 mr		pocket dosimeter
Beckman LS9000	Beta	0-5.6×10^6cpm		liquid scintillation counter
Victoreen 471	Alpha, Beta			
	Gamma, x-ray	0-3000 mr/hr	1.1 mg/cm^2	survey meter
Victoreen 808D	Beta, Gamma	.1-1000 mr/hr	680 mg/cm^2	area monitor
Victoreen 498 (2)	Beta, Gamma	0-1 r/hr	w/o cap	survey meter
			170 mg/cm^2	
Siersat 08-400	none	n/a	n/a	air sampler
Nuclear-Chicago	Beta, Gamma	0-1 r/hr	1 mg/cm^2	cutiepie
2592, 2593, 2594				survey meter
Victoreen 570 r-meter	x-ray	0-250 roentgens	663-213 mg/cm^2	precision ion
	Beta, Gamma		705-67 mg/cm^2	chambers
			621-576 mg/cm^2	
			651-6.1 mg/cm^2	
			154-89 mg/cm^2	
			130-212 mg/cm^2	
Ludlum Model 3 (4)	Beta, Gamma	0-200 mR/hr		survey meter
D.S. Davidson	Beta, Gamma	0-1,000,000 counts		multi-channel analyzer
FELS INSTITUTE				
Nuclear-Chicago	Beta, Gamma	0-100,000 cpm		planchet counter
Packard 2420A (tri carb)	Beta	0-2,000,000 cpm		liquid scintillation counter
Packard 410 (tri carb) series 314F	Beta, Gamma	0-999,999 cpm		well counter
Victoreen 498	Beta, Gamma	0-1 r/hr	170 mg/cm^2	survey meter
Packard 5110	Beta	0-999,999 cpm		liquid scintillation counter
BIOLOGICAL SCIENCES				
Packard 3255 (2)	Beta	0-999,999 cpm		liquid scintillation counter
Nuclear-Chicago 6770	Beta	0-499,999 cpm		liquid scintillation counter
Packard Autogamma	Gamma	0-3999,999 cpm		gamma counter
Packard B460CD	Beta	0-999,999 cpm		liquid scintillation counter

Appendix D Item 10 Cont.

TYPE INSTRUMENT	RADIATION DETECTED	COUNTING RANGE	WINDOW THICKNESS	USE
COX HEART INSTITUTE				
Searle Delta 300	Beta	0-999,999 cpm		liquid scintillation counter
Packard 800 CD	Beta, Gamma	0-999,999 cpm		Gamma counter
Eberline rm-14	Beta, Gamma	0-50,000 cpm	30 mg/cm^2	radiation monitor
PHYSICS				
Xetec 501A-1	Beta, Gamma	.1-99.9 mr/hr	internal GM tube	range monitor
Victoreen 808D	Gamma	.1-1000 mr/hr	internal GM tube	area monitor
Nuclear-Chicago Labitron	Beta, Gamma	0-20,000 cpm		counter
Victoreen Fricker Model 495-5	Beta, Gamma	0-500 x 10^3 cpm		survey meter
MICROBIOLOGY & INNUNOLOGY				
Packard 3255	Beta	0-999,999 cpm		liquid scintillation counter
Abbott Auto Logic (2)	Gamma	0-999,999 cpm		well counter
Eberline E120	Beta, Gamma	0-500 mr/hr	30 mg/cm^2	survey meter
ENVIRONMENTAL HEALTH				
Eberline E530	Beta, Gamma	0-200 mr/hr	30 mg/cm^2	survey meter
CENTRAL STORES				
Eberline E120	Beta, Gamma	0-500 mr/hr	30 mg/cm^2	survey meter
CHEMISTRY				
Nuclear Supplies SA-250	Beta, Gamma	0-999,999 cpm		GM counter
BLDG. 307 V.A. CENTER				
Beckman LS3011	Beta	0-999,999 cpm		liquid scintillation counter
Beckman Gamma Mate	Gamma	0-99,999 cpm		single well counter
GEOLOGY				
Victoreen 498 (2)	Beta, Gamma	0-1 r/hr	170 mg/cm^2	survey meter
PHARMACOLOGY				
Packard Prias Model P1	Beta	0-9,999,999 cpm		liquid scintillation counter



LEGEND	
241	ROOM NO.
(275)	ROOM SQ. FT.

Control No. 76674

Application for Renewal
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Enclosure 4

SQUARE FOOT AREAS						
	GROSS	NET ASSIGNABLE	CUSTODIAL	CIRCULATION	STRUCTURAL	MECHANICAL
FIRST	20503	10485	98	4193	2992	NUMBERED 2571, UNNUMBERED 166, TOTAL 2737
TOTAL (EXISTING)	40193	19499	264	8893	6184	NUMBERED 8091, UNNUMBERED 264, TOTAL 8355

1	6/11/82	
REVISION NO.	DATE	

WRIGHT STATE UNIVERSITY

TITLE
BASIC SCIENCE TEACHING ADDITION
FIRST FLOOR PLAN V.A. CENTER
BLDG. UG33 V.A. 35

DWG NO	BY	APPROVED	SCALE	DATE
1110	C.G.		1"=20'-0"	7/7/82

Application for Renewal
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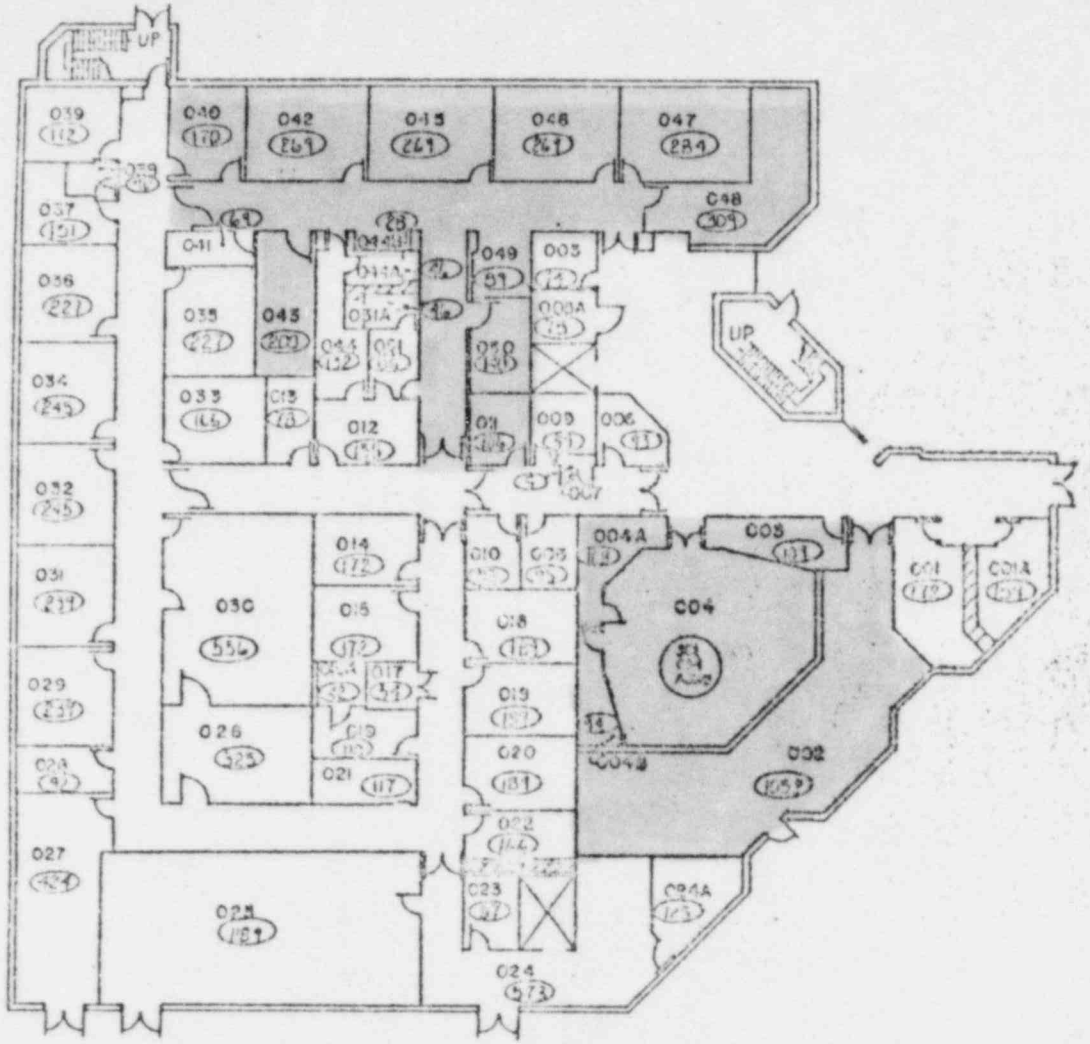
Enclosure 4 Cont.



LEGEND	
241	ROOM NUMBER
(275)	ROOM SQ. FT.

SQUARE FOOT AREAS						
	GROSS	NET ASSIGNABLE	CUSTODIAL	CIRCULATION	STRUCTURAL	MECHANICAL
GROUND	19330	3014	166	4700	3102	NUMBERED 2520 UNNUMBERED 79 TOTAL 2599
BASEMENT (B.S.T.A)	40105	19499	264	8893	6184	NUMBERED 5091 UNNUMBERED 204 TOTAL 5295

REVISION NO.	DATE	TITLE

WRIGHT STATE UNIVERSITY

TITLE
BASIC SCIENCE TEACHING ADDITION
GROUND FLOOR PLAN V.A. CENTER
BLDG # U635 V.A. # 315

DWG NO.	BY	APPROVED	SCALE	DATE
1110	C.G.		1"=20'-0"	7/7/83

Control No. 76674

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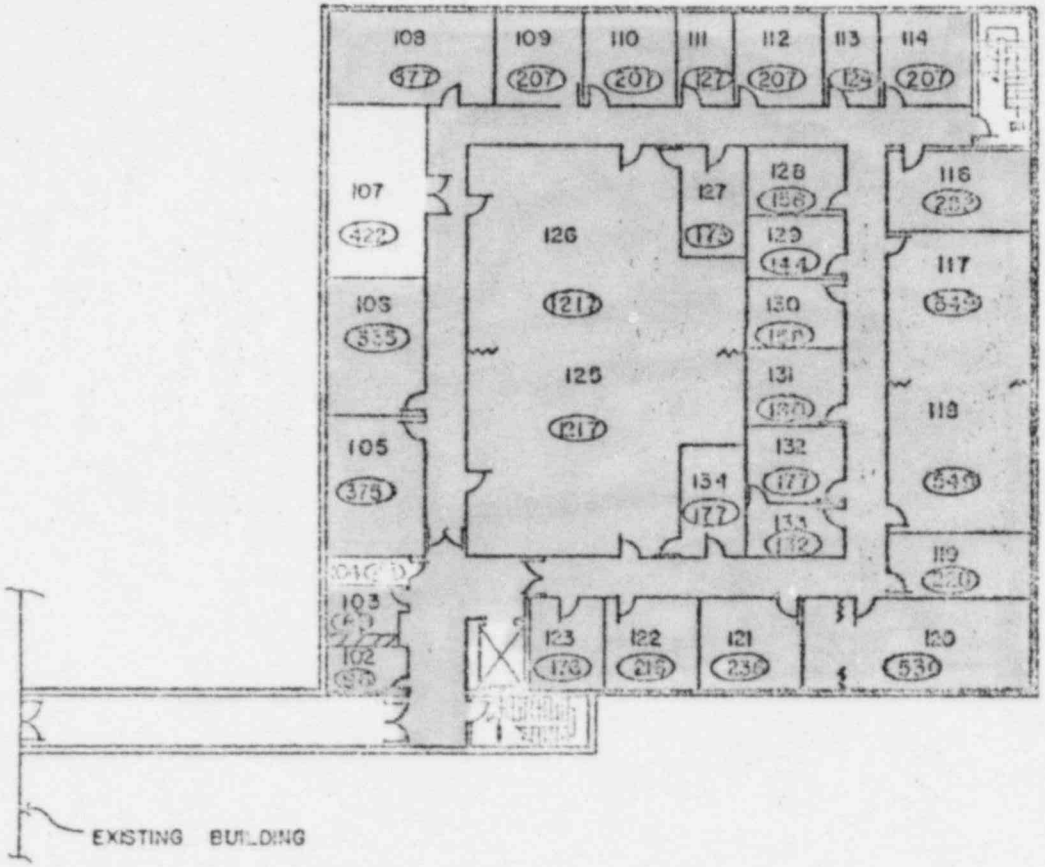
Application 4 Cont.

LE	
241	ROOM NUMBER
(225)	ROOM SQ. FT.



SQUARE FOOT AREAS						
	GROSS	NET (ASSIGNABLE)	CUSTODIAL	CIRCULATION	STRUCTURAL	MECHANICAL
FIRST	13,027	8,663	48	2605	815	NUMBERED 633 UNNUMBERED 27 TOTAL 633
TOTAL CENTER	26,269	17,705	96	4750	2169	NUMBERED 1453 UNNUMBERED 53 TOTAL 1506

REVISION NO.	DATE	TITLE

WRIGHT STATE UNIVERSITY

TITLE
FIRST FLOOR
EDUCATION BLDG. VA CENTER U 27
SCHOOL OF MEDICINE VA-307

DWG NO.	BY	APPROVED	SCALE	DATE	SHEET
1670	K.P.		1/32"=1'-0"	AUG 77	X

Application for Renewal
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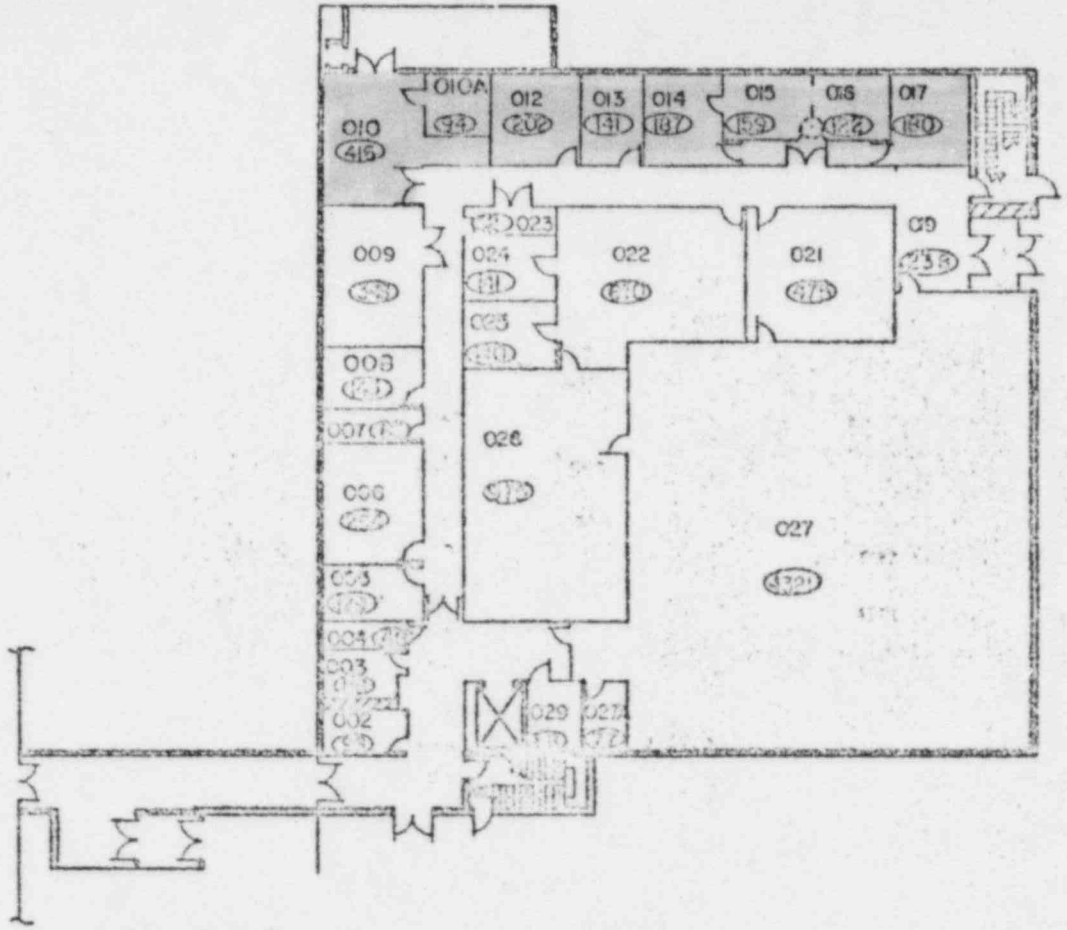
Enclosure 4 Cont.

LEGEND	
241	ROOM NUMBER
(241)	ROOM SQ. FT.



SQUARE FOOT AREAS						
	GROSS	NET ASSIGNABLE	CUSTODIAL	CIRCULATION	STRUCTURAL	MECHANICAL
GROUND	13,242	9,042	48	1912	1364	NUMBERED 847 UNNUMBERED 672 TOTAL 1519
CENTER	26,269	17,705	96	4760	2169	NUMBERED 1653 UNNUMBERED 1.0 TOTAL 1519

REVISION NO.	DATE	REMOVE 02	SQ FT
1	12-7-78	TIT	

WRIGHT STATE UNIVERSITY

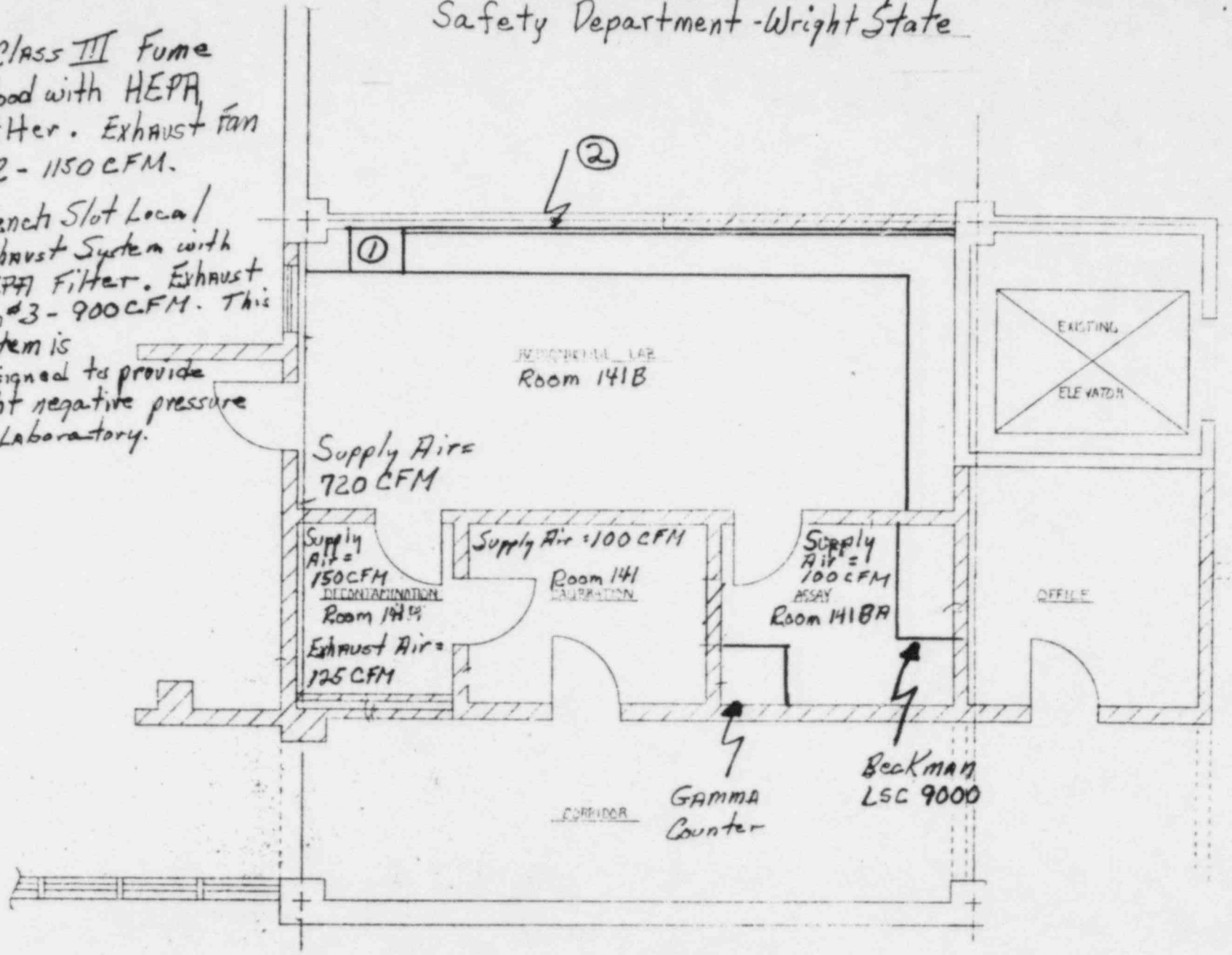
TITLE
GROUND FLOOR
EDUCATION BLDG. V.A. CENTER
SCHOOL OF MEDICINE

DWG NO.	BY	APPROVED	SCALE	DATE	DRAWN
1670	K.P.		1"=20'-0"	AUG. 77	

Radionuclide Laboratory
Safety Department - Wright State

① Class III Fume Hood with HEPA Filter. Exhaust fan #2 - 1150 CFM.

② Bench Slot Local Exhaust System with HEPA Filter. Exhaust Fan #3 - 900 CFM. This system is designed to provide slight negative pressure to Laboratory.



Control No. 766774
Application for Renewal
April 26, 1984

Enclosure 5