RADIATION SAFETY OFFICE
UNIVERSITY STATION, BOX 3944
307-766-3277

THE UNIVERSITY OF WYOMING
RADIOLOGICAL SAFETY CONTROL PROGRAM
BIOCHEMISTRY BUILDING
LARAMIE, WYOMING 82071

November 5, 1981

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: Mr. R.G. Page

Re: Amendment to By-product Materials License Number 49-09955-10

Dear Mr. Page:

In order to conform with NRC requirements on possession limits of radionuclides, I am requesting an amendment to by-products materials license number 49-09955-10 issued to the University of Wyoming.

Conditions 6, 7, 8, are to be amended to read as follows:

6. By product, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that license may possess at an one time
A. Any byproduct material with atomic numbers 3 through 83, inclusive	A. Sealed sources	A. 20 Curies. NO sources to exceed 2 curies
B. Any byproduct material with Atomic numbers 3 through 83 and ^{210}Pu ^{241}Am, ^{243}Am, ^{252}Ca, ^{242}Cm, ^{244}Cm, ^{238}Pu, and ^{239}Pu	B. Any	B. The sums of quotients of radionulides other than sealed, divided by the quantities authorized as specified in attached Table I does not exceed unity
C. Americium-241	C. Sealed Sources	C. 5 curies

D. Californium 252	D. Sealed Sources	D. 100 Millicuries. No source to exceed 1.5 millicuries.
E. Polonium 210	E. Sealed Sources	E. 100 millicuries. No source to exceed 10 millicuries

Sincerely yours,

John E. Doerges

John E. Doerges
Health Physicist

JD/sls
Enclosure

Table 1
Schedule of
Limiting Possession Limits
Arranged Alphabetically by Elements

Radionuclide	Group Number	Limiting Possession Limit	
		Curies	Grams
Americium-241	I	0.30	0.09
Americium-243	I	0.30	1.5
Antimony-124	IV	1000	
Barium-140	V	2000	
Cadmium-113m	V	1500	
Calcium-45	IV	800	
Carbon-14	V	1300	
Californium-252	I	0.30	5.0×10^{-4}
Cesium-134	IV	350	
Cesium-137	IV	600	
Chromium-51	VI	150,000	
Cobalt-60	V	4000	
Copper-64	VI	50,000	
Curium-242	II	8.0	2.5×10^{-3}
Curium-244	I	0.50	6.0×10^{-3}
Gold-198	VI	100,000	
Hydrogen-3	V	6000	
Iodine-125	II	8.0	
Iodine-129	II	1.0	
Iodine-131	II	3.3	
Iridium-192	VI	50,000	
Iron-55	VI	30,000	
Iron-59	V	2400	
Krypton-85	V	7000	
Manganese-54	V	1500	
Manganese-56	VI	120,000	
Molybdenum-99	V	3000	
Neptunium-237	I	0.20	250
Nickel-63	V	5000	
Niobium-95	V	5000	
Phosphorous-32	III	15	
Plutonium-238	I	0.10	6.0×10^{-3}
Plutonium-239	I	0.10	1.5
Polonium-210	II	3.2	
Promethium-147	V	3500	
Ruthenium-103	V	1500	

Table 1 (Cont)

Ruthenium-105	VI	15,000	
Scandium-46	V	2500	
Selenium-75	IV	500	
Silver-110m	IV	500	
Strontium-90	III	25	
Sulfur-35	IV	500	
Tantalum-182	VI	15,000	
Technetium-99m	VI	200,000	
Thallium-204	VI	30,000	
Thulium-170	IV	1000	
Thorium-228	I	0.30	4.0×10^{-4}
Tin-113	IV	1000	
Tin-123	IV	1000	
Tungsten-187	V	5000	
Uranium-233	II	5	500
Xenon-133	V	10,000	
Zinc-65	V	2500	
Zirconium-93	V	5000	
Zirconium-95	V	1300	