

USGS-FISC-Gainesville
7920 NW 71st Street
Gainesville, Florida 32653

M516
J-6

Nuclear Regulatory Commission - Region I
Atten: Dennis Lawyer
475 Allendale Road
King of Prussia, PA 19406

October 25, 2006

Ref: License No. 09-25420-01
Docket No. 03034625
Control No. 139272

Subject: Additional information requested concerning USGS-FISC application for termination of License No. 09-25420-01.

Dear Mr. Lawyer:

Below is the additional information you requested in your letter dated October 6, 2006.

- 1) A) beta energy ranges:
- | | |
|-------------|----------------|
| Standard H3 | 0.0 – 18.6 KeV |
| C14 | 12.0 – 156 KeV |
| Duel label | 0.0 – 12.0 KeV |

B) Counting efficiencies for:
H3: 61%, C14: 80 – 95%, I125: 70%

- 2) I have submitted the drain wipe test to Darrell Liles and will send you the results of that swipe test once I receive it.

- 3) Instrument used to conduct scan survey of Room 15.
Ludlum Model 44-3 probe serial number PR196719
Ludlum Model 3 Survey Meter serial number 189281
Detection Check source serial number 2278
Act approx 1.0₄ CI Reads approx 27K CPM

Scanned Room 15 on 10/24/06 and swiped any area that read > 250 – 300 CPM. Those swipes have been sent to Darrell Liles and I will send you the results of those swipes as soon as I receive them.

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REGION I
2006 OCT 30 AM 10:26

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NMSS/RGN MATERIALS-002

Please contact me if you are in need of any other information pertaining to the decommissioning and termination of license 09-25420-01.



Carla Wieser
Fisheries Biologist
RSO
352 264 3493



Lynn Lefebvre, PhD
Section Leader, Wildlife, Invasives, Contaminants

RADIOACTIVE MATERIALS AUTHORIZED USER (NRC) EXPERIENCE FORM

TRAINING AND EXPERIENCE AUTHORIZED USER OR RADIATION SAFETY OFFICER				
1. Name of Proposed Authorized User or Radiation Safety Officer Sean R. Eddy, Ph.D			2. For Physicians, State or Territory where Licensed	
3. Certification				
Specialty Board A	Category B	Month and Year Certified C		
4. Training Received in Basic Radioisotope Handling Techniques				
Field of Training A	Location and Date(s) of Training B	Type and Length of Training		
		Clock Hours in Lecture or Laboratory	Clock Hours of Supervised On-The-Job Experience	
a. RADIATION PHYSICS AND INSTRUMENTATION	Univ. Of Colorado, Boulder 05/1986 Washington University, St. Louis 04/1995 Annual ALARA training (1986-2005)	3 3 1 (per year)	4 years 9 years	
b. RADIATION PROTECTION	Same as above	Same as above	Same as above	
c. MATHEMATICS PERTAINING TO THE USE AND MEASUREMENT OF RADIOACTIVITY	Same as above	Same as above	Same as above	
d. RADIATION BIOLOGY	Same as above	Same as above	Same as above	
e. RADIOPHARMACEUTICAL CHEMISTRY				
5. Experience with Radiation or Radioactive Materials (<i>Actual use of Radioisotopes or Equivalent Experience</i>)				
Isotope/Source	Activity Used at one time (mCi / MBq)	Location	Clock Hours	Type of Use
P-32	0.01- 5.0 mCi	Univ. Of Colorado, Boulder (1986) MRC Laboratory, Cambridge, England (1990-95)	10 years	Nucleic acid detection
S-35 H-3	0.01- 5.0 mCi 0.01-.5mCi	Washington University, St. Louis, MO (1995 -2006)	9 years	Nucleic acid detection Nitric oxide assay

Verification Swipe for waste shed and Room 15	
Swipes sent to Darrell Liles	
RSO - USGS	
Swipe #	ID
Waste Shed	
1	outside handle of waste shed
2	outside doors of waste shed
3	doorstop
4	front half of floor
5	back half of floor
6	top shelf
7	bottom shelf
8	back wall
9	wall on right
10	wall on left
Room 15	
11	lab bench 1
12	lab bench 2
13	sink
14	freezer
15	refrigerator
16	lab bench 3
17	doorway
18	floor 1
19	floor 2
20	floor 3

Results of Verification swipes from Waste Shed and Room 15 that were sent to Darrell Liles as per my decommission letter sent September 19, 2006.

SYSTEM CALIBRATION: Maxi 22 SEP 2006 15:54
 Calibration successful

RSO - FLORIDA

22 SEP 2006 15:54

LSR:12 COMMENT: H-3 JUDGE
 PRESET TIME : 2.00
 DATA CALC : CPM : NO SAMPLE REPEATS: 1 PRINTER : STD
 COUNT BLANK : YES ICM : NO REPLICATES : 1 RS232 : OFF
 TAO FRAC : NO AOC : NO CYCLE REPEATS : 1
 SCINTILLATOR: LIQUID LUMEX: NO LOW SAMPLE REJ: 0
 LOW LEVEL : NO HALF LIFE CORRECTION DATE: none

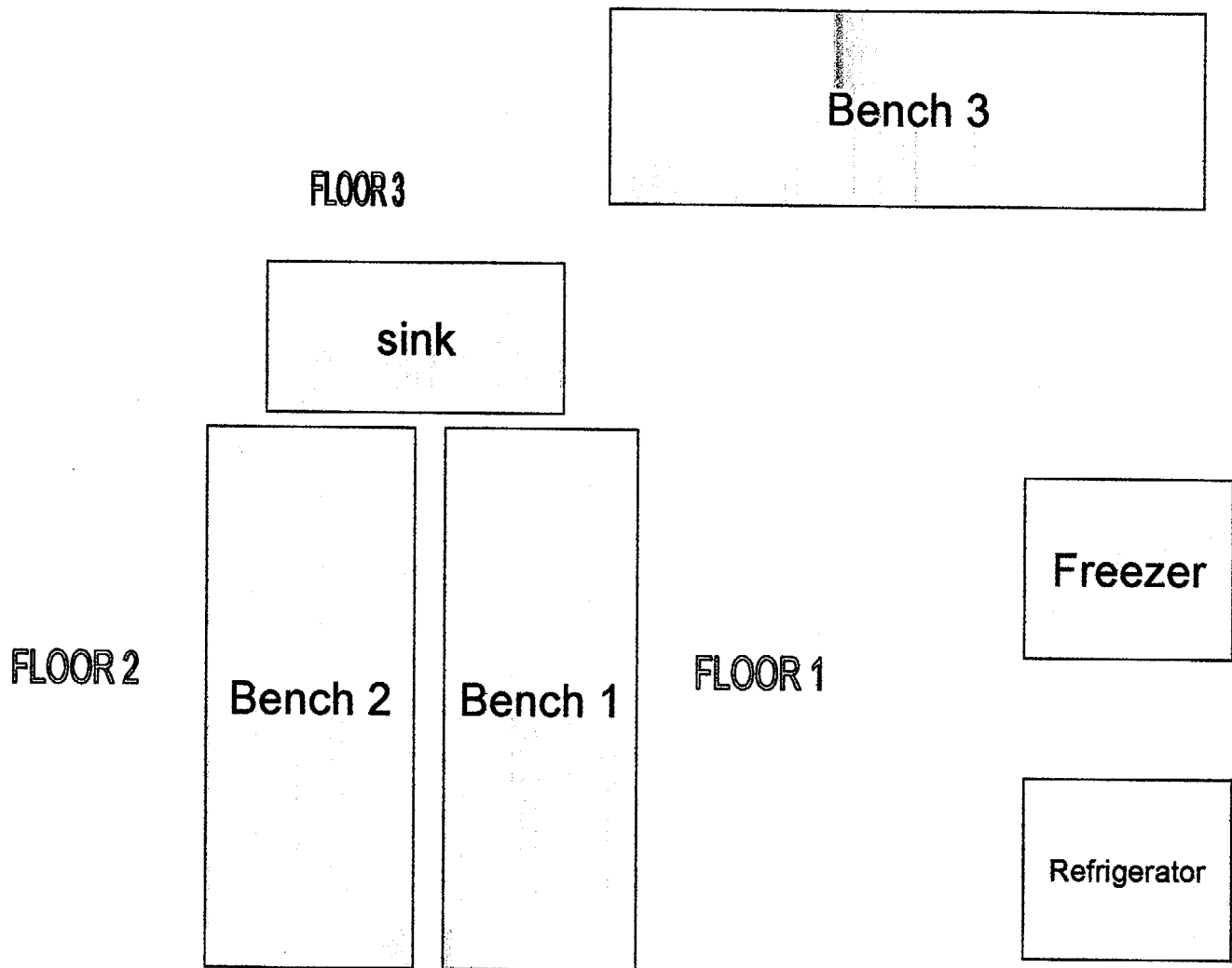
ISOTOPE 1: 3H %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
 ISOTOPE 2: 125I %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
 ISOTOPE 3: 14C %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

ALPHA-BETA DISCRIMINATION: NO

SAM NO	POS	TIME MIN	3H		125I		14C		LUMEX %	ELAPSED TIME
			CPM	%ERROR	CPM	%ERROR	CPM	%ERROR		
B1	**1	2.00	26.50	27.47	18.50	32.88	7.00	53.45	6.76	2.27
			Blank Average CPM for 3H		26.50		COEF. OF VAR:		0.000	
			Blank Average CPM for 125I		18.50		COEF. OF VAR:		0.000	
			Blank Average CPM for 14C		7.00		COEF. OF VAR:		0.000	
1	**3	2.00	2.00	524.40	-0.50	1.E+06	1.50	371.18	1.14	4.69
2	**4	2.00	93.50	18.31	-4.50	1.E+06	-0.50	1.E+06	0.58	7.07
3	**5	2.00	6.50	167.83	-7.00	1.E+06	-1.50	1.E+06	5.43	9.47
4	**6	2.00	-1.00	1.E+06	-8.50	1.E+06	-3.50	1.E+06	1.64	11.85
5	**7	2.00	3.00	352.77	-9.00	1.E+06	0.00	1.E+06	0.95	14.25
6	**8	2.00	3.50	303.72	-9.00	1.E+06	0.50	1077.0	5.86	16.65
7	**9	2.00	5.50	196.67	-7.00	1.E+06	-1.50	1.E+06	3.19	19.06
8	**10	2.00	-2.00	1.E+06	-4.00	1.E+06	-2.00	1.E+06	0.84	21.47
9	**11	2.00	7.00	156.49	-10.00	1.E+06	0.50	1077.0	0.87	23.85
10	**12	2.00	1.50	696.02	-6.50	1.E+06	2.00	282.84	0.80	26.25
11	**1	2.00	6.00	181.05	-6.50	1.E+06	2.00	282.84	0.73	28.75
12	**2	2.00	7.50	146.67	-4.50	1.E+06	-3.50	1.E+06	0.81	31.15
13	**3	2.00	4.00	266.93	-3.00	1.E+06	-0.50	1.E+06	0.67	33.55
14	**4	2.00	8.50	130.48	-6.00	1.E+06	1.00	547.72	2.25	35.96
15	**5	2.00	-0.50	1.E+06	-1.50	1.E+06	0.50	1077.0	1.08	38.35
16	**6	2.00	1.00	1039.2	-7.50	1.E+06	0.50	1077.0	1.43	40.75
17	**7	2.00	2.50	421.43	-6.00	1.E+06	-2.00	1.E+06	7.15	43.19
18	**8	2.00	2.00	524.40	-6.00	1.E+06	1.00	547.72	3.35	45.70
19	**9	2.00	6.00	181.05	-6.50	1.E+06	0.00	1.E+06	3.89	48.01
20	**10	2.00	1.50	696.02	-6.50	1.E+06	-0.50	1.E+06	3.80	50.43

BECKMAN
 LS6000 LL
 S/n 7065943

ROOM 15



Doorway