

July 27, 2000

Department of the Army
ATTN: Colonel Patricia L. Nilo
Commandant
U. S. Army Chemical School
Fort Leonard Wood, Missouri 65473-8926

SUBJECT: TRANSMITTAL AND EXPLANATION OF AMENDMENT TO LICENSE NO. 01-02861-05 (REFERENCE CONTROL NO. 258979; DOCKET NO. 030-17584)

Dear Colonel Nilo:

Enclosed please find Amendment No. 15 to your NRC materials license. This action was taken in response to your letter dated June 12, 2000, providing additional survey data obtained at the former Chemical School (Building 1081) at Fort McClellan, Alabama. This information, and the information provided in your March, 2000 Final Survey Report, was compared to the NRC's data obtained during an inspection completed on October 1, 1999. The inspection results were documented in Inspection Report No. 01-02861-05/99-01 issued on March 1, 2000. Additional survey results from the survey conducted in Building 1081 are contained in Enclosure 2 to this letter. The results of this review confirm that Building 1081 meets the criteria for unrestricted release delineated in 10 CFR 20.1402. Accordingly it has been removed from your license. A survey of Alpha Field was not required since the only licensed materials used there were plated U-233 sources and your report indicated that there was no contamination found when the plates were tested.

The following is an update of the remaining issues concerning the burial mound at Pelham Range.

1. The Environmental Assessment for the Decommissioning Plan for the contaminated soil in the burial mound at Pelham Range is under final review and will be published in the Federal Register for public review and comment shortly.
2. We are awaiting your response to our letter dated May 4, 1999. In it we asked what assurance you can provide that contamination is limited to the area of the burial mound. We understand that you plan to address this concern by performing an aerial fly over of the area and have received your fax dated July 12, 2000, which delineates the areas to be considered. Please ensure that the area to be surveyed contains the areas used for radiological exercises at the Pelham Range.
3. We have received your letter dated July 6, 2000, containing information regarding the hydro geologic conditions at the Pelham Range. It will be used to help determine whether the groundwater in the area has been affected by the burial mound.
4. We are also awaiting your response to our letter dated March 1, 2000, asking you to discuss your method of securing any licensed material that may be removed from the mound or accumulated as the work continues.

We have reviewed your November, 1999, Radiological Historical Assessments of the Pelham Range and Main Post as well as your March, 2000, Commodity Site Survey Report. Based on the information provided in these documents and previous NRC inspection activities at Fort McClellan we have determined that the following areas identified in the Commodity Site Survey Report do not require additional attention from the NRC; Buildings 337, 338, 339, 341, 3181, 345, 335, 228, 303-A, 812-1/2, 257, 4416, 256, 3182, and 350, Bromine Field, and Alpha Field. We have no further radiological concerns regarding the use or control of these areas.

No further action is required based on the adequacy and thoroughness of your final surveys, your conservative assessment of the appropriate MARSSIM Class of the areas to be surveyed, your findings that no residual contamination remained, and for the following reasons.

1. Inspectors from the Alabama Department of Radiological Safety and the Federal Environmental Protection Agency were present during the final survey of Building 3181, and based on discussions with them, and review of your report, we have determined that the survey was appropriate and adequate.
2. The materials used in Buildings 228, 256, 257, 303A, 335, 337, 338, 339, 341, 345, 350, 812-1/2, and 4416 were in sealed source form with no history of leaking or contamination or were material not regulated by the NRC.
3. The material used at Bromine Field, Br-82, has a half life of 2.4 days, no contamination can remain, and no survey is required.

We have received your Sampling Plan dated July 20, 2000 for the remaining areas to be surveyed as follows: Buildings T-810, 811, 812, 836 and 837 which housed the original Chemical School in the 1950s; three additional burial or use sites in the Rattlesnake Gulch area, two near the Summerall Gate area and one in the northeast corner of the Anniston Community Center Property; a room in Building 3182, and a location at Range 25 which was used for the testing of prototype actuators.

We will observe the decommissioning and survey activities as time and work load permit. Please advise us if you deviate from the schedule provided in the Sampling Plan.

If you have any questions please call me at (404) 562-4739.

Sincerely,

/RA/

Orysia Masnyk Bailey, License Reviewer
Division of Nuclear Materials Safety

Enclosures: 1. Amendment No. 15
License No. 01-02861-05
2. Building 1081 Survey Results

cc w/encls: (See page 3)

cc w/encls:

Richard G. Button, Jr.
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345 Courtland Street, N.E.
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James T. Williams
Division of Radiation Control
State of Alabama
Department of Public Health
201 Monroe Street, Suite 700
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Lisa Kingsberry
Directorate of Environment
Bldg. 141A 13th Ave.
ATTN: ATZN-EM
Fort McClellan, AL 36205

*see previous concurrence

OFFICE	RII:DNMS	RII:DNMS					
SIGNATURE	JLH 7/27/00	TRD 7/27/00					
NAME	JHenson*	TDecker*					
DATE	7/ /2000	7/ /2000	7/ /2000	7/ /2000	7/ /2000	7/ /2000	7/ /2000
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY

DOCUMENT NAME: C:\258979.wpd

Location/Grid	Fixed Point Measurement (dpm/100 cm ²)	uRem/Hr at one meter	Wipe Test Alpha (dpm/100 cm ²)	Wipe Test Beta (dpm/100 cm ²)
Building 1081 Room 0				
4N	79	0	-0.1	-1.3
6M	150	0	-0.1	0.7
7L	32	0	-0.1	0.7
6N	150	-1	0.9	-1.3
5N	339	0	-0.1	-0.3
9H	336	-1	-0.1	-0.3
9I	107	0	-0.1	-1.3
8G	382	0	-0.1	0.7
9E	161	-1	-0.1	1.7
8D	7	0	-0.1	-1.3
10F	232	0	0.9	1.7
7G	68	-1	0.9	-0.3
5B	50	-1	-0.1	-0.3
4C	89	-1	-0.1	-0.3
4A	107	0	-0.1	1.7
6B	196	0	-0.1	-0.3
2D	207	-1	-0.1	-0.3
2E	139	-1	-0.1	2.7
3G	286	-1	-0.1	3.7
3I	218	-1	0.9	-1.3
1I	171	-1	-0.1	-1.3
4D	14	0	-0.1	1.7
5E	57	-1	-0.1	-1.3
6F	-46	-1	-0.1	-0.3

Location/Grid	Fixed Point Measurement (dpm/100 cm ²)	uRem/Hr at one meter	Wipe Test Alpha (dpm/100 cm ²)	Wipe Test Beta (dpm/100 cm ²)
7G	79	-1	0.9	-0.3
6I	1282	-1	-0.1	2.7
5K	32	-1	-0.1	-0.3
5I	657	-1	-0.1	-0.3
6H	-57	-1	-0.1	-0.3
6D	504	0	-0.1	-0.3
BUILDING 1081 PREP LAB				
Inside Fume Hood	-50	0	-0.1	17.70
Floor Surrounding Fume Hood	scan only	--	-0.1	1.7
6B	118	0	-0.1	3.7
4C	175	0	-0.1	-0.3
9C	257	-2	-0.1	2.7
13F	268	2	-0.1	-0.3
12H	361	-1	-0.1	-0.3
14I	307	0	0.9	-1.3
9M	221	3	-0.1	1.7
10L	61	2	0.9	-0.3
6M	314	3	-0.1	0.7
2I	211	2	-0.1	-1.3
4I	14	1	-0.1	-0.3
1G	100	0	-0.1	-1.3
5F	0	0	-0.1	2.7
2D	239	-1	-0.1	0.7
5E	-57	0	-0.1	-1.3
8F	-21	-1	-0.1	-1.3

Location/Grid	Fixed Point Measurement (dpm/100 cm ²)	uRem/Hr at one meter	Wipe Test Alpha (dpm/100 cm ²)	Wipe Test Beta (dpm/100 cm ²)
9I	79	-1	-0.1	1.7
6K	-14	-1	-0.1	0.7
10D	-50	-1	-0.1	0.7
8E	557	-1	-0.1	-1.3
8I	579	-1	-0.1	-0.3
6K	575	0	-0.1	0.7
BUILDING 1081 AREA V -VAULT				
9G	1411	-1	-0.1	2.7
9J	-96	0	0.9	-0.3
6I	-21	0	-0.1	-0.3
4D	-4	0	-0.1	0.7
6E	18	1	-0.1	-0.3
11I	7	-1	0.9	-0.3
13G	179	0	-0.1	-1.3
9F	182	0	-0.1	-1.3
9I	146	0	-0.1	-1.3
8M	29	0	-0.1	0.7
5L	36	0	-0.1	-0.3
2I	221	0	0.9	-0.3
3F	61	1	-0.1	1.7
4B	154	1	-0.1	-1.3
7F	643	0	-0.1	2.7
9G	-61	0	-0.1	-0.3
8I	557	0	-0.1	0.7
BUILDING 1081 - AREA P - LAB 1				
16D	43	0	0.9	3.7

Location/Grid	Fixed Point Measurement (dpm/100 cm ²)	uRem/Hr at one meter	Wipe Test Alpha (dpm/100 cm ²)	Wipe Test Beta (dpm/100 cm ²)
15G	68	-1	-0.1	0.7
14F	18	-1	-0.1	1.7
11H	7	-1	-0.1	0.7
12E	39	-1	-0.1	-1.3
10G	57	-1	-0.1	-1.3
7H	57	-1	-0.1	0.7
6J	75	-1	-0.1	-0.3
6F	100	-1	-0.1	-0.3
4G	107	-1	-0.1	-1.3
10A	246	-1	-0.1	1.7
12B	246	0	-0.1	1.7
14C	232	1	-0.1	-0.3
15B	293	1	-0.1	2.7
6L	114	-1	0.9	-0.3
7K	296	-1	-0.1	-0.3
13L	296	0	-0.1	-1.3
16M	271	0	-0.1	-1.3
19H	418	0	-0.1	0.7
18D	243	0	-0.1	0.7
2I	296	-1	-0.1	-1.3
3D	250	-1	-0.1	0.7
4F	571	-1	-0.1	0.7
8H	579	-1	-0.1	1.7
12D	425	0	-0.1	5.7
15F	650	0	-0.1	-0.3
14I	582	0	-0.1	-0.3

Location/Grid	Fixed Point Measurement (dpm/100 cm ²)	uRem/Hr at one meter	Wipe Test Alpha (dpm/100 cm ²)	Wipe Test Beta (dpm/100 cm ²)
BUILDING 1081 - AREA Q - LAB HALLWAY				
5E	-14	0	-0.1	0.7
8D	61	-1	-0.1	-0.3
11D	-143	0	-0.1	1.7
15E	-46	-1	-0.1	1.7
17B	171	0	-0.1	1.7
7F	50	-1	-0.1	-1.3
7B	207	-1	-0.1	-0.3
10C	121	-1	-0.1	-1.3
BUILDING 1081 - AREA I - JANITOR'S CLOSET				
3C	96	0	-0.1	0.7
3D	-14	-1	-0.1	-0.3
4G	311	0	-0.1	-1.3
5C	161	0	0.9	-0.3
3D	146	0	-0.1	-0.3
2D	-232	-1	-0.1	0.7
BUILDING 1081 - LAB #4				
7E	46	-1	-0.1	0.7
3D	4	-1	-0.1	-1.3
5A	150	0	-0.1	-0.3
3B	129	0	-0.1	0.7
2F	157	3	-0.1	-0.3
3I	304	0	-0.1	-0.3
7H	157	-1	-0.1	0.7
10E	214	-1	0.9	0.7
14B	111	-1	-0.1	-1.3

Location/Grid	Fixed Point Measurement (dpm/100 cm ²)	uRem/Hr at one meter	Wipe Test Alpha (dpm/100 cm ²)	Wipe Test Beta (dpm/100 cm ²)
7C	207	-2	-0.1	-1.3
2G	264	3	-0.1	-0.3
6L	164	-1	-0.1	0.7
13M	393	-1	-0.1	1.7
18H	286	-1	0.9	-0.3
14H	61	-2	-0.1	-1.3
10J	-18	-1	-0.1	-0.3
7E	-86	-1	-0.1	-1.3
13E	-36	-2	-0.1	-0.3
BUILDING 1081 - LAB #2				
13F	157	-1	-0.1	-0.3
12Q	196	-1	.09	.07
10Q	-82	-2	-0.1	-0.3
8W	243	-1	-0.1	-1.3
7S	100	-1	-0.1	-0.3
3R	129	-1	-0.1	-0.3
5R	-32	-2	-0.1	-1.3
6O	-71	-1	-0.1	-1.3
2G	264	0	-0.1	0.7
6F	-118	-1	-0.1	2.7
8C	264	-1	0.9	3.7
9F	7	-1	0.9	1.7
7H	-21	-1	-0.1	-1.3
BUILDING 1081 - LAB #7				
7E	-14	-2	-0.1	0.7
1E	161	-1	-0.1	-1.3

Location/Grid	Fixed Point Measurement (dpm/100 cm ²)	uRem/Hr at one meter	Wipe Test Alpha (dpm/100 cm ²)	Wipe Test Beta (dpm/100 cm ²)
4F	-18	-1	-0.1	-0.3
9L	200	-1	0.9	-0.3
10I	-54	-1	-0.1	-0.3
11F	43	-2	-0.1	0.7
BUILDING 1081 VAULT				
9G	429			
9G	364			
LSC SMEARS FOR H-3				
WATER BACKGROUND			138	
9G			13	
9J			-4	
6I			-51	
4D			42	
6E			-5	
9F			5	
5L			7	
9G			27	
8H			4	
BUILDING 1081 - TANK ROOM				
5D	96	-3	-0.1	4.7
7E	293	-3	-0.1	2.7
7C	75	-3	-0.1	4.7
BUILDING 2281- LAB #1				
NORTH WALL - 1 LOW	-136	-3	-0.1	2.7
NORTH WALL - 5 LOW	339	-1	-0.1	2.7
NORTH WALL - 8 LOW	-30	-4	-0.1	8.7

Location/Grid	Fixed Point Measurement (dpm/100 cm ²)	uRem/Hr at one meter	Wipe Test Alpha (dpm/100 cm ²)	Wipe Test Beta (dpm/100 cm ²)
WEST WALL - A LOW	-171	-6	-0.1	2.7
WEST WALL - C LOW	-150	-5	-0.1	2.7
WEST WALL - F LOW	-86	-5	-0.1	5.7
SOUTH WALL - 8 LOW	500	1	0.9	4.7
SOUTH WALL - 5 LOW	532	-1	-0.1	1.7
SOUTH WALL - 2	707	0	-0.1	1.7
EAST WALL - G	671	2	-0.1	0.7
EAST WALL - D	729	3	-0.1	3.7
EAST WALL - A	764	-1	-0.1	5.7
BUILDING 22 81 - HP LAB				
NORTH - RIGHT OF LIGHT SWITCH	-243	-3	-0.1	-1.3
WEST WALL - 8 FT SOUTH - LOW	-239	-5	-0.1	0.7
WEST WALL - 14 FT SOUTH	-96	-6	-0.1	0.7
WEST WALL - 22 FT SOUTH	-286	-8	1.9	1.7
SOUTH WALL - BETWEEN WINDOWS	-343	-8	-0.1	-0.3
EAST WALL - 20 FT SOUTH	575	-1	-0.1	-0.3
EAST WALL - 14 FT SOUTH	-46	-1	-0.1	-0.3
EAST WALL - 6 FT SOUTH	464	0	-0.1	0.7
FLOOR - 6 FT NORTH - 3 FT EAST	-164	7	-0.1	-0.3
FLOOR - 10 FT NORTH - 4 FT EAST	-211	-5	-0.1	-1.3

Location/Grid	Fixed Point Measurement (dpm/100 cm ²)	uRem/Hr at one meter	Wipe Test Alpha (dpm/100 cm ²)	Wipe Test Beta (dpm/100 cm ²)
FLOOR - 18 FT NORTH - 1 FT EAST	-136	-4	-0.1	1.7
FLOOR - 22 FT NORTH - 4 FT EAST	-114	-6	-0.1	-0.3
FLOOR - 20 FT NORTH - 8 FT EAST	-246	-5	0.9	2.7
FLOOR - 12 FT NORTH - 6 FT EAST	-239	-6	-0.1	2.7
BUILDING 2281 - DECON ROOM A				
WEST WALL - 4 FT SOUTH	246	-6	-0.1	-0.3
WEST WALL - 22 FT NORTH	-143	-7	-0.1	5.7
SOUTH WALL - 5 FT EAST - HIGH	-93	-7	-0.1	-0.3
SOUTH WALL - 16 FT EAST - LOW	161	-4	-0.1	-0.3
SOUTH WALL - 22 FT EAST - LOW	161	-6	-0.1	1.7
EAST WALL - 6 FT NORTH	-179	-5	-0.1	-0.3
EAST WALL - 16 FT NORTH	-293	-5	-0.1	-0.3
EAST WALL - 22 FT NORTH	-246	-4	-0.1	-0.3
EAST WALL - XX FT NORTH	-239	-3	-0.1	-0.3
NORTH WALL - 3 FT EAST	489	-3	-0.1	-0.3
NORTH WALL - 8 FT WEST	621	-3	-0.1	0.7
BUILDING 2281 - DECON ROOM B				
WEST WALL - 2 FT SOUTH	-161	-4	-0.1	-0.3
WEST WALL - 12 FT SOUTH	-407	-4	1.9	5.7

Location/Grid	Fixed Point Measurement (dpm/100 cm ²)	uRem/Hr at one meter	Wipe Test Alpha (dpm/100 cm ²)	Wipe Test Beta (dpm/100 cm ²)
WEST WALL - 20 FT SOUTH	-225	-4	-0.1	-0.3
WEST WALL - 24 FT SOUTH	-279	-4	-0.1	1.7
SOUTH WALL - 4FT WEST	-186	06	-0.1	-0.3
SOUTH WALL - 4 FT NORTH	-425	-4	-0.1	-0.3
EAST WALL - 10 FT NORTH	-171	-6	-0.1	0.7
EAST WALL - 20 FT NORTH	-68	-4	0.9	2.7
EAST WALL - 24 FT NORTH	-161	-4	-0.1	0.7
EAST WALL - 28 FT NORTH	-207	-4	-0.1	-0.3
NORTH WALL - 4 FT EAST	489	-2	-0.1	2.7
NORTH WALL - 16 FT EAST	189	-2	-0.1	-0.3
BUILDING 2281 - PREP LAB				
NORTH WALL - 3 FT EAST	832	-4	-0.1	0.7
NORTH WALL - 15 FT EAST	432	-5	-0.1	1.7
WEST WALL - 7 FT SOUTH	-132	-4	-0.1	-0.3
WEST WALL - 14 FT SOUTH	-296	-5	-0.1	-0.3
WEST WALL - 23 FT SOUTH	-239	-5	-0.1	2.7
SOUTH WALL - 6 FT EAST	118	-5	-0.1	-0.3
SOUTH WALL - 15 FT EAST	-82	-5	-0.1	-0.3
EAST WALL - 2 FT NORTH	757	-4	-0.1	0.7

Location/Grid	Fixed Point Measurement (dpm/100 cm ²)	uRem/Hr at one meter	Wipe Test Alpha (dpm/100 cm ²)	Wipe Test Beta (dpm/100 cm ²)
EAST WALL - 7 FT NORTH	800	-4	-0.1	-0.3
EAST WALL - 13 FT NORTH	-61	-3	0.9	-0.3
EAST WALL - 23 FT NORTH	564	2	-0.1	-0.3
BUILDING 2281 - LAB 2				
T1	-332	-5	-0.1	-1.3
S1	-75	-5	-0.1	-1.3
M2	-396	-4	-0.1	-1.3
L6	-407	-3	-0.1	-1.3
R9	-143	-3	-0.1	-0.3
R11	39	-3	-0.1	0.7
O1	-46	-6	-0.1	-0.3
L11	-300	-4	-0.1	-1.3
N9	-261	-4	-0.1	0.7
BUILDING 2281 - HALLWAY OUTSIDE LAB 2				
X11	-307	-3	-0.1	-1.3
V9	-229	-4	-0.1	0.7
BB11	493	-3	-0.1	-0.3
FF10	-64	-3	-0.1	0.7
BUILDING 2281 - LAB 2 OFFICE				
V5	-289	-5	-0.1	-0.3
U4	-282	-4	-0.1	-0.3
V1	-71	-4	0.9	0.7
U8	-179	-6	-0.1	2.7
X7	421	-3	-0.1	2.7
X6	564	-4	0.9	-1.3

Location/Grid	Fixed Point Measurement (dpm/100 cm ²)	uRem/Hr at one meter	Wipe Test Alpha (dpm/100 cm ²)	Wipe Test Beta (dpm/100 cm ²)
X3	400	-4	-0.1	0.7
U1	-257	-4	-0.1	-0.3
U4	-336	-6	-0.1	1.7
V1	-139	-5	-0.1	0.7
BUILDING 2281 - VAULT				
JJ5 TOP	150	-3	-0.1	-1.3
JJ7 BOTTOM	754	-3	-0.1	1.7
JJ5 BOTTOM	-79	4	0.9	0.7
LL6 BOTTOM	-29	-2	-0.1	-1.3
LL8 BOTTOM	-314	-2	-0.1	0.7
LL8 TOP	-139	-2	-0.1	-1.3
LL8 FLOOR	-164	-3	-0.1	0,7
JJ5 FLOOR	-64	-2	-0.1	-1.3
DD1	582	-4	-0.1	2.7
1AA BOTTOM	704	3	0.9	-0.3
1AA TOP	457	3	0.9	-0.3
3Y BOTTOM	486	3	-0.1	2.7
4Y BOTTOM	436	-4		-1.3
5Y TOP	-207	2	-0.1	0.7
BB8 TOP	132	-4	-0.1	-0.3
CC8 BOTTOM	-354	-4	-0.1	-0.3
Y8 BOTTOM	471	3	0.9	1.7
GG8 BOTTOM	582	3	-0.1	-1.3
II5 BOTTOM	-221	2	-0.1	-0.3
II2 BOTTOM	-286	4	-0.1	-0.3
II1	-136	5	-0.1	-0.3

Location/Grid	Fixed Point Measurement (dpm/100 cm ²)	uRem/Hr at one meter	Wipe Test Alpha (dpm/100 cm ²)	Wipe Test Beta (dpm/100 cm ²)
BUILDING 2281 - LAB 2				
A8	136	0	-0.1	2.7
A2	-7	-2	-0.1	-1.3
D1	-189	-2	0.9	0.7
J1	-318	-4	-0.1	0.3
H1	57	-1	-0.1	-0.3
K-6	-504	-4	0.9	1.7
G-11	-64	-2	-0.1	0.7
J-11	-236	-2	-0.1	-0.3
J-7	-296	-4	-0.1	-1.3
I-3	-111	-1	-0.1	0.7
F-1	-32	-2	-0.1	0.7
G-5	-107	-3	-0.1	0.7
C-9	-32	-2	-0.1	-1.3
A-3 TOP	-136	-2	-0.1	0.7
A-3 BOTTOM	-196	-2	-0.1	0.7
A-9	218	-2	-0.1	1.7
C-11	-86	-1	-0.1	0.7