DEPARTMENT OF THE ARMY
U.S. ARMY CHEMICAL SCHOOL
401 MANSCEN LOOPR, SUITE 1041
FORT LEONARD WOOD MO 65473-8926

Reply to
Attention of:

'05 MAY -9

Health Physics Office

26 Apr 2005

L-9

Director
Licensing Assistant Section
U.S. Nuclear Regulatory Commission, Region 1
475 Allendale Road
King of Prussia, PA 19406-1415

Dear Sir:

This is a request concerning NRC Materials License number 01-02861-05, docket number 030-17584. This request outlines the actions undertaken by the licensee to identify and release areas of possible radiological concern at Fort McClellan, Alabama.

An extensive historical document search was conducted in 1999 by the Army Corps of Engineers, St. Louis District, to identify facilities and areas on Fort McClellan where radioactive material had been used or stored in the past. Including the sites already identified, 21 sites were identified that warranted assessment. The sites assessed are listed below.

a. Building 2281, Former Chemical School Radiological Laboratories.
This facility was surveyed and released in 1988. A confirmatory survey by the NRC was conducted in 1999 and the facility was released.

b. Building 1081, Chemical School Radiological Laboratories.
Each individual room or area within the laboratories was surveyed in addition to 4 non-impacted areas adjacent. NRC conducted a confirmatory survey and facility has been released.

c. Pelham Range 'Burial Mound'.
The "Burial Mound" and 8 associated grids were excavated to a depth of ~4 meters (12 feet) below natural grade. All material from the excavation was processed and monitored to determine the presence of radioactive material. Processing and monitoring was accomplished by placing the soil through a shredder/conveyor system. Those materials that were identified to be contaminated were packaged in intermodal containers and shipped for disposal, and the un-contaminated soil was backfilled into the excavation and the site graded. In addition wells were drilled to collect groundwater samples at the site and surrounding areas. No groundwater contamination was detected. The NRC conducted a confirmatory survey and the area was released.

d. Building 257. The installation packaged Army radioactive commodities in preparation for transport in this building. The facility was surveyed in as a MARSSIM Class III area in 2000. No residual contamination was identified and the facility was released.

e. Building 303A This building served as the Central Issue Facility for all soldier items, including radio-luminescent lensatic compasses. The front portion of the building (i.e., the portion of the building that houses the issue desk or issue) was surveyed as a MARSSIM Class III area in 2000. No residual contamination was identified and the facility was released.

FULL COST RECOVERY ACTION

137017

TAC NO. U01649

NMSS/RGN1 MATERIALS-002

f. Building 335 The installation used the structure as a General Support vehicle maintenance shop. The building was surveyed as a MARSSIM Class III area in 2000. No residual contamination was identified and the facility was released.

g. Building 337 This building was used as a General Support vehicle maintenance shop. The building was surveyed as a MARSSIM Class III area in 2000. No residual contamination was identified and the facility was released.

h. Building 338 This building was used as a General Support vehicle maintenance shop. The building was surveyed as a MARSSIM Class III area 2000. No residual contamination was identified and the facility was released.

i. Building 339 This building was used as a General Support vehicle maintenance shop. The building was surveyed as a MARSSIM Class III area 2000. No residual contamination was identified and the facility was released.

j. Building 341 Originally a general storehouse used by the Defense Reutilization and Marketing Organization (DRMO). The building was surveyed as a MARSSIM Class II area in 2000. No residual contamination was identified and the facility was released.

k. Building 345 DRMO used this structure as a general storage building. The building was surveyed as a MARSSIM Class II area in 2000. No residual contamination was identified and the facility was released.

l. Building 350 This facility was used as a General/Direct Support Maintenance shop. The maintenance areas of the building were surveyed as a MARSSIM Class III area in 2000. No residual contamination was identified and the facility was released.

m. Building 812-1/2 Used at one time as a storage vault for radium gauges. This building was surveyed as a MARSSIM Class III area in 2000. No residual contamination was identified and the facility was released.

n. Building 3181, Room 35 and Room 36 The rooms in question were used as a radiological laboratory. This building's affected rooms, rooms 35 and 36, were surveyed as a MARSSIM Class II area in 2000. No residual contamination was identified and the facility was released.

o. Building 3182 Applied Instruction Building, the Ft. McClellan Radiological Laboratories used one wing. This building was surveyed as a MARSSIM Class III area in 2000. No residual contamination was identified and the facility was released.

p. Building 4416 An ammunition magazine, during the relocation of the Chemical Command to Fort McClellan, the installation used this structure to temporarily house sealed Co-60 and Cs-137 sources. The building was surveyed as a MARSSIM Class III area in 2000. No residual contamination was identified and the facility was released.

q. Bromine Field The area was used for decontamination exercises, equipment would be contaminated with the Br-82, decontaminated on the pad that had drainage back to the tanks and then released. This training stopped in 1972. Br-82 has a half-life of 35 hours. No matter what activity concentration of Br-82 was originally used in this area, no activity would be left after this amount of time. This area was released without any additional actions.

r. Alpha Field The Chemical School used the Alpha Field to simulate a radiation field similar to an area that might have been seen following the detonation of a nuclear device. The site placed uranium-233 (U-233) plates on designed pedestals of concrete at various locations in the field. The Chemical School

possessed 500 plates, 450 with U-233 activity and 50 blank plates. Leak checks were performed periodically on the plates as required. All 500 plates were inventoried to the present time and no plates were ever lost. The Chemical School ceased activity in this area in 1972. The blank plates have been discarded over the years. Four hundred of the plates have been disposed of as waste in May, 1999 through the Army Radiological Waste Office. Fifty of the active plates are still stored at the Chemical School at Fort Leonard Wood, Missouri. Based on the fact that there was no significant loss of any radioactive material in this area, this area was released.

s. Radiological Survey Area #1. This area was off Sumeral Gate Road adjacent to area T-2. This area was surveyed and core samples taken in 1995 by the Army Center for Health Promotion and Preventive Medicine (CHPPM). No residual contamination was identified and the area was released.

t. Field Hot Cell. It is within the envelope of Radiological Survey Area #1. This area was surveyed and core samples taken in 1995 by the Army Center for Health Promotion and Preventive Medicine (CHPPM). No residual contamination was identified and the area was released.

u. Old Chemical School Burial Ground. Reportedly the installation used this site for radiological burials from 1957-1958. This site includes the Northeast corner of the Anniston Community Center. In the 1958-1959 timeframe the buried radioactive materials were removed. The site conducted a second cleanup in 1971. This area was identified in the 1999 historical assessment and later confirmed during the airborne gamma survey. The Corp of Engineers, Mobile District, has assumed control of this area under the FUDS (Formerly Used Defense sites) Program. See attached email from Ellis Pope, Mobile District Corps of Engineers.

In addition to the above an Airborne Gamma Radionuclide survey of two separate areas at the former U.S. Army Installation, Fort McClellan, was conducted. One large area was located in the northwest portion of Pelham Range. The second was a small area on the Main Post. The purpose of the survey was to identify if there were any detectable radiological sources. All anomalies were investigated. One of the anomalies was found be a contaminated area identified in u above and was outside the post boundaries. The Corp of Engineers, Mobile District, assumed control of this area under the FUDS (Formerly Used Defense Sites) Program. All other anomalies were determined to be due to naturally elevated background.

Since all radiological sites identified have been assessed and no further radiological sites have been identified on Fort McClellan, request that NRC Materials License number 01-02861-05, docket number 030-17584, issued to the U.S. Army Chemical School for operations at Fort McClellan, Alabama be terminated.

Sincerely,

for Gary R. Wallace, COC
Acting Commandant

Stanley H. Lillie
Brigadier General, U.S. Army
Commandant

NRC FORM 314 (6-2004) 10 CFR 30.36(j)(1); 40.42(j)(1); 70.38(j)(1); and 72.54(j)(1)

U.S. NUCLEAR REGULATORY COMMISSION

CERTIFICATE OF DISPOSITION OF MATERIALS

APPROVED BY OMB: NO. 3150-0028 **EXPIRES: 06/30/2007**

LICENSEE NAME AND ADDRESS	LICENSE NUMBER	DOCKET NUMBER
U.S. Army Chemical School 401 MANSCEN Loop, Suite 1843 Fort Leonard Wood, MO 65473	01-02861-05	030-17584
	LICENSE EXPIRATION DATE 06/30/2005	

A. LICENSE STATUS *(Check the appropriate box)*

☐ This license has expired. ☑ This license has not yet expired; please terminate it.

B. DISPOSAL OF RADIOACTIVE MATERIAL

(Check the appropriate boxes and complete as necessary. If additional space is needed, provide attachments)

The licensee, or any individual executing this certificate on behalf of the licensee, certifies that:

☐ 1. No radioactive materials have ever been procured or possessed by the licensee under this license.

☑ 2. All activities authorized by this license have ceased, and all radioactive materials procured and/or possessed by the licensee under this license number cited above have been disposed of in the following manner.

☐ a. Transfer of radioactive materials to the licensee listed below:

☐ b. Disposal of radioactive materials:

☐ 1. Directly by the licensee:

☐ 2. By licensed disposal site:

☑ 3. By waste contractor:

The residual contamination in the soil at the Pelham Range "Burial Mound" was disposed of by Allied Technology Group as part of a contract to remediate site. See "Final Radiological Status Report, Fort McClellan, Pelham Range", dated October 2002.

☐ c. All radioactive materials have been removed such that any remaining residual radioactivity is within the limits of 10 CFR Part 20, Subpart E, and is ALARA.

C. SURVEYS PERFORMED AND REPORTED

☑ 1. A radiation survey was conducted by the licensee. The survey confirms:

☐ a. the absence of licensed radioactive materials

☑ b. that any remaining residual radioactivity is within the limits of 10 CFR 20, Subpart E, and is ALARA.

☑ 2. A copy of the radiation survey results:

☐ a. is attached; or ☐ b. is not attached (Provide explanation); or ☑ c. was forwarded to NRC on: 01/10/2003 (Date)

☐ 3. A radiation survey is not required as only sealed sources were ever possessed under this license, and

☐ a. The results of the latest leak test are attached; and/or ☐ b. No leaking sources have ever been identified.

The person to be contacted regarding the information provided on this form:

NAME	TITLE	TELEPHONE *(Include Area Code)*	E-MAIL ADDRESS
John W. May	Health Physics Manager	(573) 563-6224	mayj@wood.army.mil

Mail all future correspondence regarding this license to:
U.S. Army Chemical School, 401 MANSCEN Loop, Suite 1843, Fort Leonard Wood, MO 65473

C. CERTIFYING OFFICIAL

I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT

PRINTED NAME AND TITLE	SIGNATURE	DATE
GARY R. WALLACE, Colonel, U.S. Army	Gary R. Wallace	26 Apr 2005

WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECT. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

May, John MR

From: Pope, Ellis C SAM [Ellis.C.Pope@sam.usace.army.mil]
Sent: Wednesday, August 27, 2003 2:48 PM
To: May, John MR; Webb, Ronald D SAM
Subject: LaGarde Park FUDS Site (formerly part of Fort McClellan)

John,

Here is some information on Formerly Used Defense Sites (FUDS) Program that might help regarding the NRC licensing issue.

LaGarde Park has been determined to be eligible for inclusion in the FUDS Program. The U.S. Army Corps of Engineers is required under the DERP statute [10 U.S.C. 2701 (a) & (b)] to investigate and take the appropriate response action at Formerly Used Defense Sites (FUDS) in accordance with Section 120 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) [42 U.S.C. 9601 et seq.].

CERCLA Section 121(e)(1) provides that no Federal, State or local permit shall be required for the portion of any removal or remedial action conducted entirely on-site and in compliance with CERCLA [42 U.S.C. Section 9621(e)(1)]. EPA has implemented the permit waiver for Federal agency CERCLA response actions under Section 300.400(e) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), which are the implementing regulations for CERCLA [55 Fed. Reg. 8666, 8689 (8 March 1990)]. Although the term "permit" is not defined in CERCLA or the NCP, it is a term commonly used in environmental laws to refer to regulatory permission or approval to conduct activities which are restricted by the governing statutes. Black's Law Dictionary defines the term as, "In general, any document which grants a person the right to do something. A license or grant of authority to do a thing." *Black's Law Dictionary* (6th ed. 1998). CERCLA equates the term "permit" with "license" in defining " federally permitted release" to include the release of material licensed under the Atomic Energy Act (AEA) [42 U.S.C Sect 9601(10)]. Although there is no explicit definition of "license" in the AEA, the term is used to refer to activities that may only be undertaken with the approval of the NRC or an "Agreement State" as reflected in a document. Thus, a license issued under the AEA falls within the permit waiver provision of CERCLA.

The absence of a requirement to obtain a license for on-site FUDS remedial activities does not render the AEA provisions inapplicable. USACE recognizes that as part of the conduct of remedial action at any specific site, USACE must comply with the substantive requirements of the AEA and its implementing regulations that are applicable or relevant and appropriate to CERCLA response actions involving AEA regulated radioactive materials [42 U.S.C. 9621 (d)(2)]. The NCP preamble clarifies that the substantive requirements of laws which would otherwise require permits must be followed as applicable or relevant and appropriate requirements (ARARs) under Section 121(d)(2) of CERCLA, even though the procedural requirements of permits do not need to be completed. Compliance includes consultation as appropriate with the government agency (Federal, State) that would otherwise have authority over an applicable permitting program. CERCLA (42 U.S.C. 9621(d)(2)(ii))and the NCP (40 CFR 300.400(g)(4)) also requires that USACE consider promulgated State regulations when determining the ARARs for response action.

Ellis C. Pope
DERP-FUDS Project Manager
Mobile District Corps of Engineers
CESAM-PM-SI
251-690-3077
ellis.c.pope@usace.army.mil

This is to acknowledge the receipt of your letter/application dated

4/26/2005, and to inform you that the initial processing which includes an administrative review has been performed.

TERM. 01-02864-05

☑ There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card

_____

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 137017.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

(FOR LFMS USE)
INFORMATION FROM LTS

Program Code: 03900
Status Code: 0
Fee Category: EX 14
Exp. Date: 20050630
Fee Comments: FULL COST EFF 03/02/01
Decom Fin Assur Reqd: Y

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED
Applicant/Licensee: ARMY, DEPARTMENT OF THE
Received Date: 20050509
Docket No: 3017584
Control No.: 137017
License No.: 01-02861-05
Action Type: Termination

2. FEE ATTACHED
Amount: /
Check No.: /

3. COMMENTS

Signed M. A. Barbin
Date 5/13/2005

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /__/)

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:
Amendment _____
Renewal _____
License _____

3. OTHER _____

Signed _____
Date _____

FULL COST RECOVERY ACTION

TAC NO. 401649