DCN 817

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF LEGISLATIVE LIAISON
1600 ARMY PENTAGON
WASHINGTON DC 20310-1600

May 8, 1995

Honorable Howell Heflin
United States Senate
Washington, D. C. 20510

Please refer to this number when responding 95CC59-17

Dear Senator Heflin:

This replies to your April 13, 1995, letter to the Defense Base Closure and Realignment Commission, concerning the cost of building a new Chemical Defense Training Facility (CDTF) and dismantle the current CDTF.

During Commissioner Davis' visit to Fort McClellan, he received conflicting information regarding the cost to build a new CDTF. One figure briefed was $70 million. This estimate included $1.7 million for permits and documentation, $28 million for buildings and facilities, and $40 million for an incinerator. This estimate is significantly higher than U. S. Army Training and Doctrine Command's and the Assistant Chief of Staff for Installation Management's estimate used by the Army Basing Study. However, during the visit wrap-up session the Fort McClellan leadership informed Commissioner Davis that the $70 million figure briefed was incorrect.

The Army's best estimate of the cost to build the CDTF at Fort Leonard Wood is the $30 million figure used in the COBRA analysis. This cost includes the incinerator. When the CDTF was built at Fort McClellan, the incinerator was included in the overall $14.2 million original construction cost. Approximately $4 million of this was attributed to the waste treatment system with incinerator.

In its application to the Missouri Department of Natural Resources (DNR), Fort Leonard Wood included a worst case cost estimate of $43 million to build a CDTF. This included the $30 million identified in the COBRA analysis closing Fort McClellan and an additional $13 million to meet more stringent requirements if the incinerator had to be upgraded to a hazardous waste incinerator. When the permit application was submitted, Fort Leonard Wood was unsure of DNR's requirements for hazardous waste mitigation. However, DNR has since formally stated that no hazardous waste permit is required. Therefore, the $30 million estimate remains the best and most accurate available.

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Disposition of the CDTF along with all other facilities will be determined during the implementation and execution phases. Commissioner Davis received a briefing that the cost to dismantle the CDTF would be between $40 and $50 million. The Army has not definitively determined the cost of dismantling the CDTF; however, it is expected that the majority of costs will be related to environmental issues which are not included in COBRA analyses. The 1993 Base Realignment and Closure estimate for dismantling the CDTF, inflated to Fiscal Year 1996 dollars, is $10 million.

I trust this information will be of assistance.

Sincerely,

George T. Greiling
Lieutenant Colonel, U. S. Army
Chief, Special Actions Branch
Congressional Inquiry Division

General Services Administration
Office of General Counsel
Washington, DC 20405

February 8, 1995

Mr. Mark F. Wagner
Special Assistant to the
Assistant Secretary of Defense (Economic Security)
Office of the Secretary of Defense
The Pentagon, Room 3E808
Washington, DC 20301

Subject: Delegation of Authority Under the Property Act for Base Closure Properties.

Dear Mr. Wagner:

This letter replies to a request made by the Department of Defense in a meeting held on January 19, 1995, between yourself and a member of my staff, Richard Butterworth, and staff of the Public Buildings Service of the General Services Administration (GSA). At the meeting, you requested a delegation of GSA's authority under the Federal Property and Administrative Services Act of 1949, as amended (Property Act) to the Department of Defense (DOD) to allow DOD, after identification of a Federal need for a portion of Base Closure property, to transfer the property to the local community. The identified Federal need would then be satisfied through a long-term, nominal fee lease from the community. After careful consideration of our authority under the Property Act, GSA has determined that it does not have the authority to carry out such a transaction and therefore cannot delegate authority it does not possess.

The Property Act emphasizes the intent of Congress to maintain property within the Federal Government's inventory whenever possible. Section 202(c) of the Property Act states that

> "(e)ach executive agency shall, as far as practicable, (1) make reassignments of property among activities within the agency when such property is determined to be no longer required for the purposes of the appropriation from which it was purchased, (2) transfer excess property under its control to other Federal agencies and organizations specified in section 109(f), and (3) obtain excess property from other Federal agencies."

The Federal Property Management Regulations, which GSA has promulgated to implement the Property Act, confirm and support this policy of utilizing excess property. See 41 C.F.R. §§ 101-47.201-2(b), 201-2(c), and 201-2(d)(2).

Furthermore, in order to accomplish a transfer to the local community, DOD would have to determine that the property was surplus. The Property Act defines surplus as "any excess property not required for the needs and the discharge of the responsibilities of all Federal agencies". If DOD has identified a further Federal need for the property, under the definitions of the Property Act, the property cannot be determined surplus.

The scenario presented by DOD has actually already been considered and rejected by the Comptroller General. In the Matter of Immigration and Naturalization Service -- Lease-back arrangement to pay for renovations to detention facility, the INS submitted a similar proposal for the Comptroller General's determination. 65 Comp. Gen. 339 (February 25, 1986). The Comptroller General found that such an arrangement would not be possible since the continuing need for the property prevented it from being determined excess or surplus, and therefore could not be transferred to the proposed contractor.

Even if GSA determined it had the authority to conduct the type of transaction described, which it does not, GSA is also restricted as to the leasing authority it is able to delegate. Under the Property Act, GSA is limited to twenty (20) year leasing authority. Section 210 of the Property Act, 40 U.S.C. § 498(h). Therefore, as stated in the meeting, GSA would be unable to delegate authority for longer terms, such as the 99 year leasing authority requested by DOD.

If we can be of further assistance as you consider these matters, please do not hesitate to contact Richard Butterworth of my staff on (202) 501-4436, or Margie Lomax of GSA's Public Building Service on (202) 501-0052.

Sincerely,

Emily Hewitt

Emily C. Hewitt
General Counsel

cc: Mr. Richard Butterworth
Ms. Margie Lomax

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950331-2

FROM: PHILLIPS, WALTON A.	TO: LYLES, DAVID
TITLE: COL. (RET) U.S. ARMY	TITLE: STAFF DIRECTOR
ORGANIZATION: CALHOUN COUNTY CHAMBER	ORGANIZATION: DBCRC
INSTALLATION (s) DISCUSSED: FORT MCCLELLAN	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT	COMMISSION MEMBERS	FYI	ACTION	INIT
CHAIRMAN DIXON				COMMISSIONER CORNELLA			
STAFF DIRECTOR	✓			COMMISSIONER COX			
EXECUTIVE DIRECTOR	✓			COMMISSIONER DAVIS			
GENERAL COUNSEL				COMMISSIONER KLING			
MILITARY EXECUTIVE				COMMISSIONER MONTOYA			
				COMMISSIONER ROBLES			
DIR. CONGRESSIONAL LIAISON				COMMISSIONER STEELE			
DIR. COMMUNICATIONS				REVIEW AND ANALYSIS			
				DIRECTOR OF R & A	✓		
EXECUTIVE SECRETARIAT				ARMY TEAM LEADER	✓		
				NAVY TEAM LEADER			
DIRECTOR OF ADMINISTRATION				AIR FORCE TEAM LEADER			
CHIEF FINANCIAL OFFICER				INTERAGENCY TEAM LEADER	✓		
DIRECTOR OF TRAVEL				CROSS SERVICE TEAM LEADER			
DIR. INFORMATION SERVICES				RALPH KAISER	✓		

TYPE OF ACTION REQUIRED

	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

FORWARDING COPIES OF VIEWGRAPHS DURING DBCRC VISIT TO FORT MCCLELLAN.

Due Date:	Routing Date: 950331	Date Originated: 950327	Mail Date:

Calhoun
County
Chamber of
Commerce

ACCREDITED
CHAMBER OF COMMERCE
CHAMBER OF COMMERCE OF THE UNITED STATES

March 27, 1995

Mr. David Lyles
Defense Base Closure and
Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, VA 22209

Dear David:

You said you wanted a copy of our viewgraphs we used last Wednesday. I think this is a complete set. When you have four briefers and making changes even Wednesday morning, this set may be missing one or two.

Sincerely,

Walton Phillips
Walton A. Phillips
Colonel (Ret) U.S. Army

WAP/mkg

David -
Thanks for including the different staff representatives in your visit to Ft McClellan. We strongly feel Fort McClellan is an international and joint service issue and not just an Army one. If possible, it would be very beneficial for other commissioners to visit here in order to have a better understanding of this issue.

Thanks
Walt

J. S. GERTLER

Ralph Kasing also wanted copy of the viewgraphs

1330 Quintard Avenue ☐ P.O. Box 1087 ☐ Anniston, Alabama 36202 ☐ (205) 237-3536

AGENDA

- Introduction
- Economic Impact
- Military Value
- Environmental Requirements
- Return on Investment
- Summary

(2) Installation Assessment Rankings - TRAINING SCHOOLS

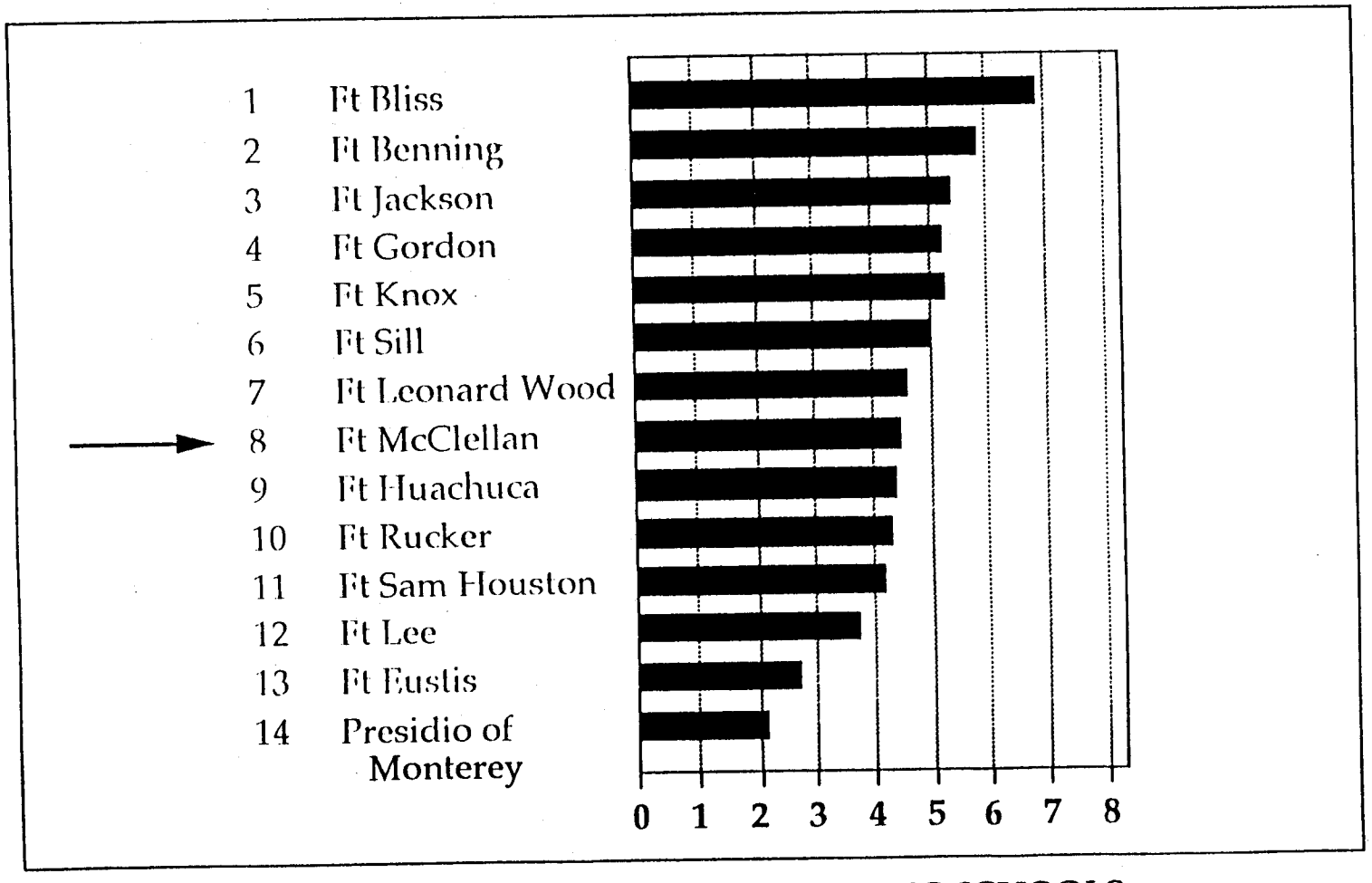


Figure 8. Installation Assessment Rankings - TRAINING SCHOOLS

1995 List of U.S. Military Installations for Closure

Army	Employment Loss (%)
Fort McClellan, Alabama	-17.3
Fort Chaffee, Arkansas	-0.3
Fitzsimmons Army Medical Center, Colorodo	-0.4
Price Support Center, Illinois	-0.1
Savanna Army Depot Activity, Illinois	-8.2
Fort Ritchie, Maryland	-4.8
Selfridge Army Garrison, Michigan	-0.1
Bayonne Military Ocean Terminal, New Jersey	-0.8
Seneca Army Depot, New York	-3.2
Fort Indiantown Gap, Pennsylvania	Net+0.2
Red River Army Depot, Texas	-7.7
Fort Pickett, Virginia	-0.8
Navy	
Naval Air Facility, Adak, Alaska	No Net Impact
Navel Shipyard, Long Beach, California	-.04
Ship Repair Facility, Guam	-10.6
Naval Air Warfare Center, Aircraft Division, Indianapolis, Indiana	-2.3
Naval Surface Warfare Ctr, Crane Division Det, Louisville, Kentucky	-0.7
Naval Surface Warfare Ctr, Dahlgren Division Det, White Oak, Maryland	-0.6
Naval Air Station, Souty Weymouth, Masssachusetts	-0.1
Naval Air Station, Meridian, Mississippi	-8.0
Naval Air Warfare Center, Aircraft Division, Lakehurst, New Jersey	Net+1.1
Naval Air Warfare Center, Aircraft Division, Warminster, Pennsylvania	-1.2
Air Force	
North Highlands Air Guard Station, California	
Ontario IAP Air Guard Station, California	No Net Impact
Rome Laboratory, Rome, New York	-6.2
Roslyn Air Guard Station, New York	Net +0.1
Springfield-Beckley MAP, Air Guard Station, Ohio	No Net Impact
Greter Pittsburgh IAP Air Reserve Station, Pennsylvania	-0.1
Bergstrom Air Reserve Base, Texas	-0.2
Brooks Air Force Base, Texas	-0.9
Reese Air Force Base, Texas	-2.2
Defense Logistics Agency	
Defense Distribution Depot, Memphis, Tennessee	-0.9
Defense Distribution Depot, Ogden, Utah	-0.3

Economic Aspects (From the DOD Perspective)

DOD Numbers:

$259M	One-Time Costs to Implement
$122M	Net Costs During Implementation
Year 2005	Break-Even

Points for BRAC Commission to Consider:

DOD understated CDTF Rebuild costs

$70M	Rebuild Cost
– $30M	DOD Programmed
$40M	**Additional Cost**

1993 List of Military Installations for Closure

Installation	Employment Loss (%)
Fort McClellan, Alabama	-17.3
All Others (Average)	-1.9

Economic Impact

BRAC Average Employment Loss	1.9%
Fort McClellan Employment Loss	17.3%
Total Calhoun Co. Workforce	44,498
Estimated Job Loss	**10,720**
Total Unemployment (Calhoun Co.)	**~24%**

Loss Represents:

- Nearly 2 of 5 Jobs with Incomes Greater than $15,000
- Nearly One-Third of Revenues for Education and Services to Communities in North Part of County (e.g., Weaver, Saks, Jacksonville)

Weapons of Mass Destruction

The Threat to United States National Security

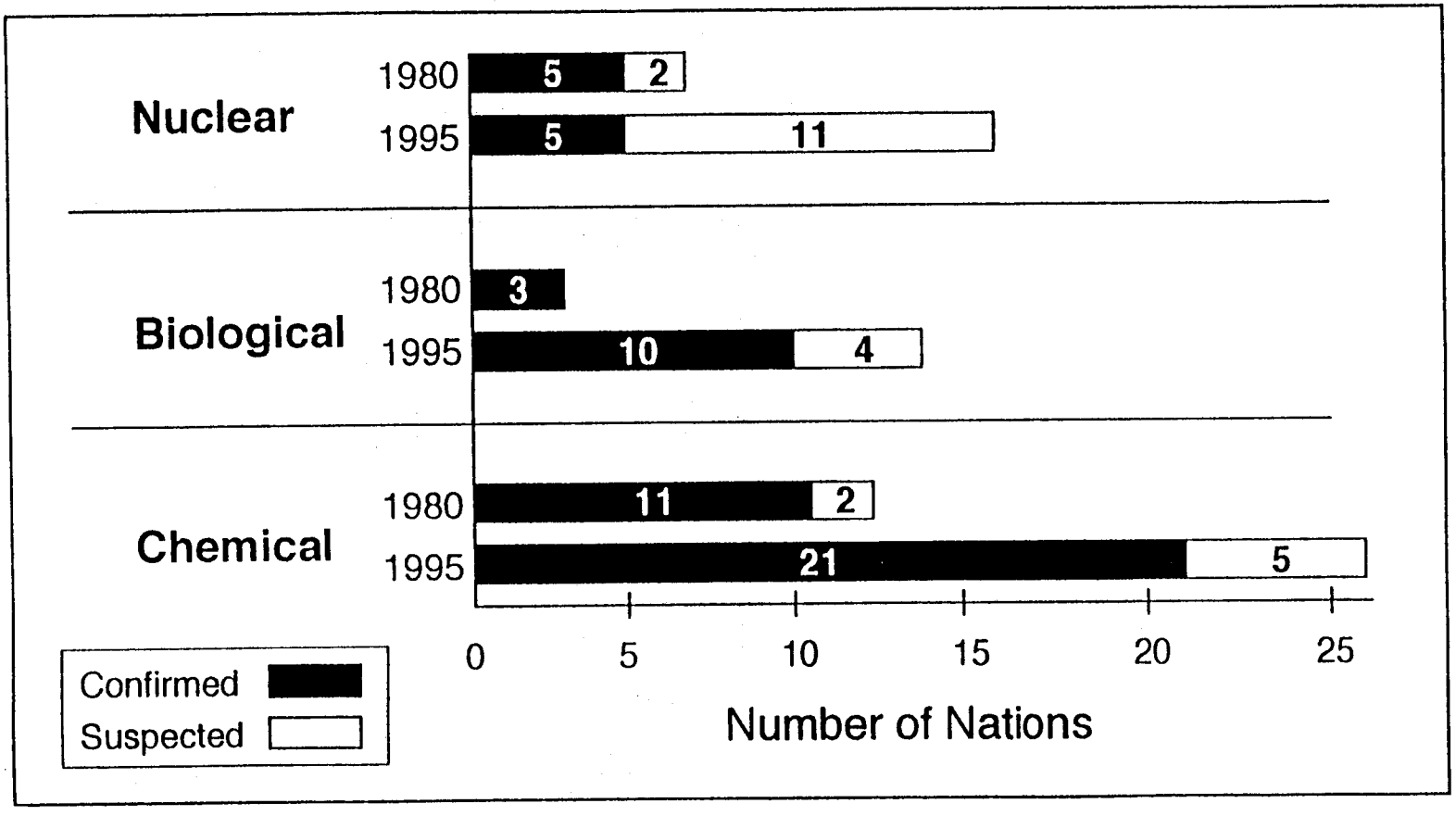
"The proliferation of weapons of mass destruction represents a major challenge to our security."

William J. Clinton
Defense 94, Issue 6

"The future world military situation will be characterized by regional actors with modern destructive weaponry, including chemical and biological weapons, modern ballistic missiles, and, in some cases, nuclear weapons."

William J. Perry
Secretary of Defense
DOD BRAC Report
March 1995

Proliferation of NBC Weapons



Army Focus 94 - Force XXI

"There are three general levels of military threat to the United States and its interests: nuclear, biological, and chemical weapons; standing armies of foreign powers; and irregular forces ranging from ethnic militias to terrorists and the gunmen of criminal cartels.

Nuclear, biological, and chemical weapons are viewed as potential equalizers by States that cannot compete with the technology and wealth of the United States. . .Moscow retains the nuclear capability to destroy the United States. . . biological weapons pose a 'dark horse' threat of ferocious potential. Offensive biological warfare programs are still on the agendas of many nations that are potential adversaries."

GEN Gordon R. Sullivan
US Army Chief of Staff

Togo D. West, Jr.
Secretary of the Army

Testimony Before BRAC Commission

"The Commission should consider the negative signals which such closing would send to our friends, allies and potential enemies. It should also examine the adverse consequences of not maintaining an integrated training program. In my judgment the closing of Fort McClellan, Alabama, would undermine deterrence against chemical and biological attacks and engender serious risks for the Armed Forces of the United States."

Ambassador Edwin L. Rowny, April 5, 1993

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Terrorist Attack in Tokyo

"It's a threshold that's been crossed -- proof that terrorists are now psychologically prepared to use weapons of mass destruction, such as chemicals, germs and perhaps even nuclear devices."

Vincent Cannistraro
Central Intelligence Agency
USA Today, 21 March 1995

1991 DOD position:	Live agent training is not essential. Place CDTF in a caretaker status. Close Ft McClellan.
1991 BRAC Commission:	**Live agent training is essential. Continue to operate CDTF. Keep Ft McClellan open.**
1993 DOD position:	Live agent training is essential. Leave CDTF as a stand alone facility. Close Ft McClellan.
1993 BRAC Commission:	**Live agent training is essential. CDTF is an integral part of the Chemical School. Keep Ft McClellan open.**
1995 DOD position:	Live agent training is essential. CDTF is an integral part of the Chemical School. Move the CDTF. Close Ft McClellan.

LIVE AGENT TRAINING/READINESS

A. **Prior to 1973**
   - Howitzer Hill Exercise

B. **1973 - 1986**
   - 73: Move to Aberdeen Proving Ground
     - **Stopped live agent training**
     - **Overall training program degraded**
   - 77: Revitalize the Chemical Program
   - 80: Move to Fort McClellan

C. **1987: On-Line Training**

D. **1990 - 1991**
   - Desert Shield/Storm (17,000 trained)

E. **Present**
   - 35,000 Total Trained
   - 24 Countries - All Services
   - One Trained Chemical Soldier in each Company

It was frequently observed that if students knew that they were working with simulant agents, they would neither remember nor follow all the measures outlined in instruction. While in chemical protective clothing, the students, to enhance their personal comfort, would deliberately compromise the protective clothing, i.e., lift the mask, open the protective clothing. . .Deliberate compromise of protective equipment was never known to occur when live agents were incorporated in the training exercises and safety procedures were nearly always strictly adhered to.

Revitalization Study, 4 February 1977

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Revitalization Study, 4 February 1977

Student Comments about the CDTF

"Never have I attended a school where one was left with a feeling such as this one - a feeling of having had a chance to test a true agent and see for myself how effective the Chemical Protective Overgarment really is."

"The CDTF was great training for me and it opened my eyes to the fact that this could really happen, so this is serious."

"CDTF really made a lot of the class instruction 'stick.' Some things that I wasn't too clear on are crystal clear, sunk in concrete now. My command is emphasizing CBR-Defense and the feedback will probably result in more of our people coming down."

"This is the best training that I have attended in my 10 years of being in the Navy. The CDTF was well worth it."

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KEY CIVILIAN PERSONNEL SKILL REQUIREMENTS

- **Key civilian positions essential in training, training development and combat developments**
- **40% of professional staff are civilians (>100 positions)**
- **Must be NBC specialist as well as functional specialist**
- **Typical skill requirements:**

Chemists
Chemical Engineers
Physicists
Biologists
Operational Research Analysts
Computer Specialists

Test and Evaluation Analysts
NBC Educational Specialists
NBC Training Specialists
Force Structure Analysts
Doctrinal Publication Writers
Force-on-Force Modeling Specialists

CIVILIAN RECRUITING AND RETENTION EXPERIENCE

- **Move to Aberdeen Proving Ground 1973**
  - 80 civilians; 7 moved (9%)
  - Excellent recruiting area
  - 2-3 years to replace
- **Move to Fort McClellan 1979**
  - 38 civilian positions; 4 moved (11%)
  - Good recruiting area
  - 5 years to replace
- **Move to Fort Leonard Wood - ?**
  - Retention expected to be no better
  - Recruiting area?
  - Results in severe loss of expertise and continuity

CHEMICAL SCHOOL FACILITIES

- Ranges
- FOX's Den
- Radiological Laboratory
- Biological Training Center
- Warfighter Center
- Decontamination Apparatus Training Facility
- Chemical Defense Training Facility (Live Agent Training)

"One of a Kind Institution"

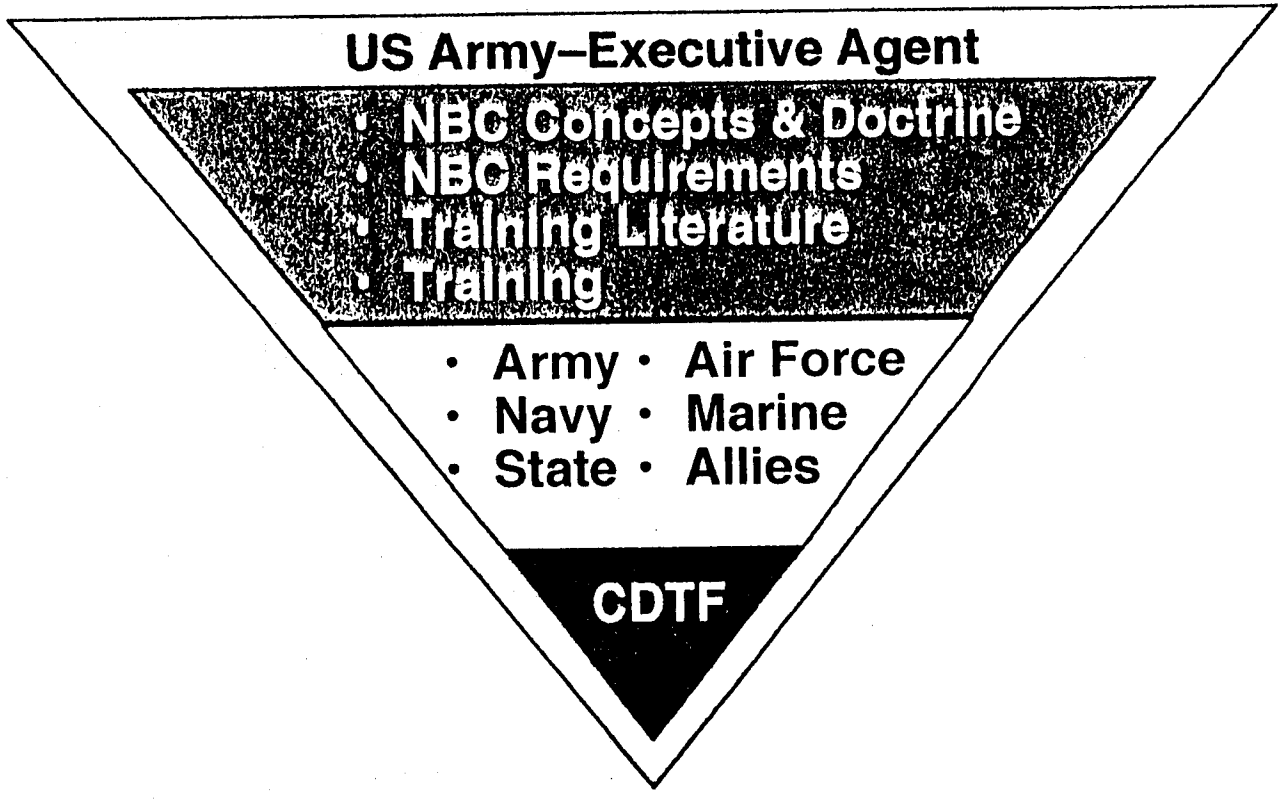
Military Value Overview

- Why We are Here
- NBC Warfare Threat
- Chemical School Background
- Chemical School Mission
- CDTF Issues and Risk
- MP School Mission
- Summary

Why We are Here

- Retired Military
- Each with 30+ years of Active Service
- Impact on National Security and Readiness of Armed Forces

NBC Defense Roles and Missions



National Defense Authorization Act for Fiscal Year 1994 (PL 103-160) Title XVII - Chemical and Biological Warfare Defense

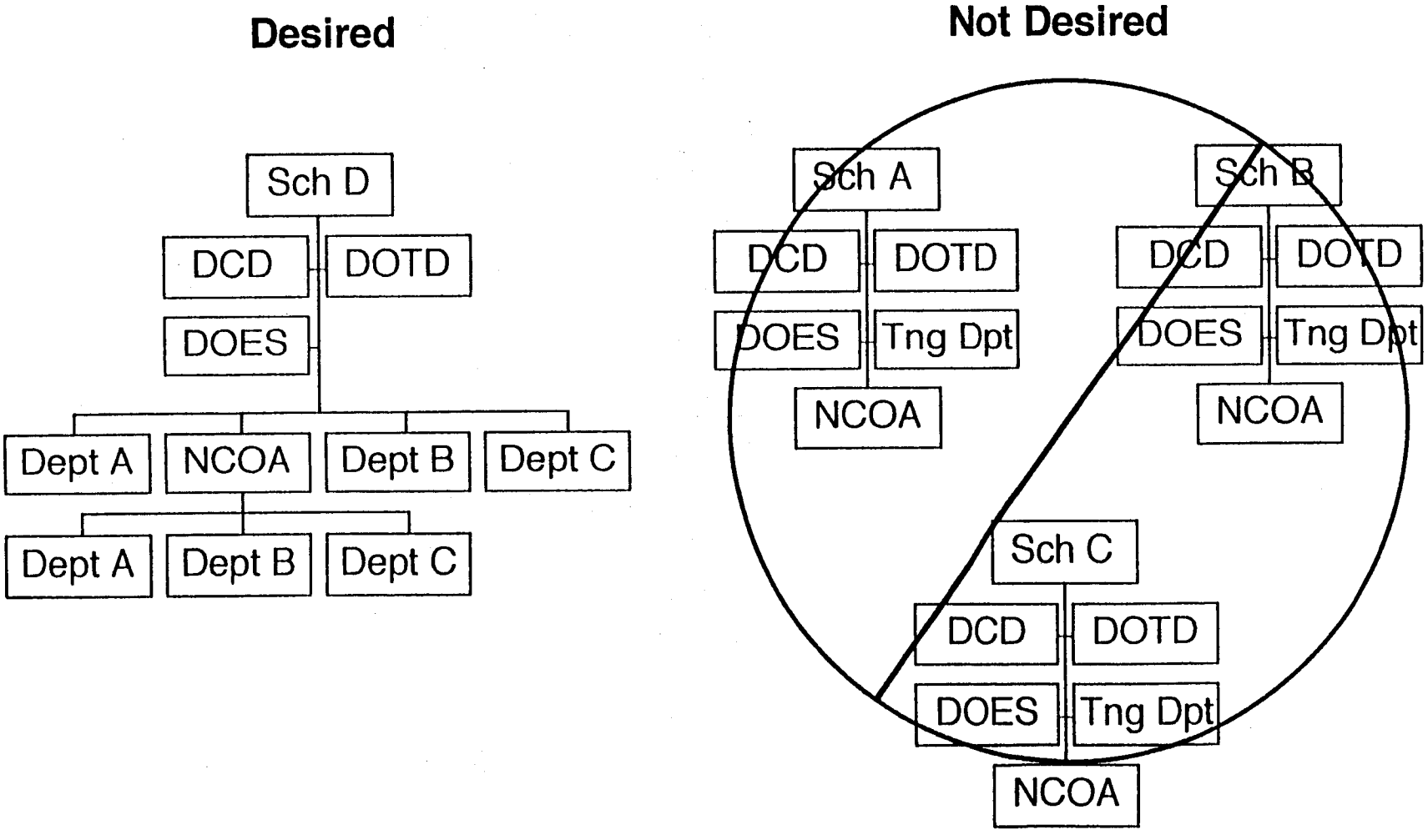
- Requires that DOD consolidate all CB warfare defense training activities of the DOD at the US Army Chemical School

- Designates Army as Executive Agent for doctrine development, policy, risk assessment and acquisition requirements for CB warfare defense for the DOD

Implementation of PL 103-160

- **Joint Service Agreement signed Aug 94**
- **All Services have permanent training units/cadre at the Chemical School, Ft McClellan**
- **Joint Service Implementation Group (JSIG) activated at Ft McClellan to:**
  - Develop the Joint Service Modernization Plan
  - Coordinate and integrate joint professional training
  - Develop joint doctrine
- **Army, Navy, and Air Force representatives on-board and working JSIG**

Desired Configuration
(Gaining Installation)



BRAC 95 Recommendation

Collocation allows the Army to focus on the doctrinal and force development requirements of Engineers, Military Police, and the Chemical Corps. The synergistic advantages of training and development programs are: coordination, employment, and removal of obstacles; conduct of river crossing operations; operations in rear areas or along main supply routes; and counter-drug operations. The missions of the three branches will be more effectively integrated.

Department of Defense

PRESENT: **Joint Service Chemical/Biological School**

Focus: International Mission
Train, develop doctrine and requirements with Air Force, Navy and Marines.

PROPOSED: **Department within an Army School**

Focus: Train and develop doctrine and requirements with Military Police and Engineers.

Biological Defense Program (Background 1991 - Present)

- **Threat Significant and Recognized**
- **Biological Program Initiated 1991**
  - **Goal:** Field a biological detection and identification capability as soon as possible.
  - **Actions:**
    - Biological Defense Project Manager appointed (General Officer)
    - $150M expended/BW sensor developed

Biological Defense Program
(Present Actions)

Biological Defense Company currently being activated:

- **Location:** Fort McClellan
- **Organization:** Conversion of a USAR Chemical Company with one active duty platoon
- **Status:**
  - Have began construction of Bio Training Facility
  - Began Training at Unit Oct 95

Biological Defense Program
(Impact of Moving Chemical School)

Delay Program 3-5 years:

- No Chemical USAR unit in Missouri
- Start Training Program from Beginning
- Destroy Interaction and Synergism between USAR and Active Unit

Impact of BRAC 95 on Dugway Proving Ground's (DPG) Biological Defense Program

- Puts Test Facility in Caretaker Status
- Moves R&D to Edgewood, MD
- Transitions DPG Safari Testing Approach

SMOKE TRAINING REQUIREMENTS

REQUIREMENT	FT MCCLELLAN	FT LEONARD WOOD	SUITABILITY
AREA			
STATIC SMOKE (16 SQ KM)	YES	YES	
MOBILE SMOKE (31 SQ KM)	YES	NO (50%)	OFF POST IMPACT
RANGES USE (DAYS/YR)			
STATIC SMOKE 117	YES	YES	CONFLICT SCHEDULE
MOBILE SMOKE 196	YES	YES(?)	3 OTHER SCHOOLS
FTX 252	YES	NO	
PERMITS			
FOG OIL	X	?	FULL EIS
IR GRENADES	X	?	LIKELY AT
IR LARGE AREA	X	?	NEW SITE
COLORED SMOKE	X	?	

MOBILIZATION FOR CHEMICAL UNITS

- Ft McClellan designed Lead Station (Apr 92)
- 52 RC and 5 NG Chemical Units in contingency force pool
- Allows RC units to use unique training facilities
  - CDTF
  - FOX Simulator
  - DATF

Peter Charts - one complete set
I have the vugraphs
PH

Environmental Permitting Perspective

- BRAC 93 (COM. H. T. JOHNSON): Army should .... permits in hand. Eliminate the "what ifs."
- **BRAC 95 Testimony, Mar 7: Dep Sec Def Deutch, Sec Army West, et al**
  - Q. COM Cox: ".... do you think we should close .... Fort McClellan without the permits in hand?"
  - A. Sec West. "Our recommendation is conditioned on getting the permits."
  - Q. Chrm. Dixon: "Have any of the necessary permits been obtained by the Army at the receiving installation."
  - A. Dep Sec Def Deutch: "No, they have not."

Chrm. Dixon: "And it is our statement to you that we would not act unless they (permits) were in place."

"....with respect to permits....if those things aren't resolved by June 22nd, it would be difficult for us to accommodate the services and their recommendations."

What Permits are Required?

- **Missouri Dept of Natural Resources (MDNR) letter, May 19, 1993**
  - Air Pollution Control Program
  - Water Pollution Control Program (NPDES)
  - Hazardous Waste Program (RCRA)

- **MDNR letter to Sec Defense Perry, Dec 23, 1994:**

  "....construction of this facility (the CDTF) will require air pollution control, water pollution control, and hazardous waste program-related permits."

What Permits Have Been Applied For?

- **Only the Construction Permit, Air Source (March 1, 1995)**
- **No water or hazardous waste application submitted**
- **Construction Permit, Air Source deficiencies:**
  - Based on 1983 data
  - Not based on current CDTF design
  - Does not address all waste streams from CDTF operation

Why Hasn't Army Applied for Other Permits?

- **We don't know - some likely reasons?**
  - Working with incomplete information
  - Time constraints (June 22)
  - Probable public opposition to siting a nerve gas facility

Permitting Timelines

Hazardous Waste (Incinerator) Part 1 (prior to construction) Part 2 (after construction)	 9 - 14 months 8 - 12 months
Air and Water	6 months or less

NOTE: Above estimates from Missouri DNR. Based on actual experience, they appear very optimistic.

Compliance with the National Environmental Policy Act (NEPA)

- NEPA process evaluates environmental effects and potential alternatives
- BRAC deliberation and decision process is exempt from NEPA
- NEPA does apply to implementation of BRAC decisions
- Application for and granting of a permit could be considered a prejudicial action
- Army Policy - integrate NEPA concurrently with other environmental review procedures
- NEPA compliance has not been addressed by Army or Missouri

Permit Summary

CDTF Permits	Required	Application Before 1 March	Application After 1 March	Granted
Air Permit to Construct	Yes	No	Yes	No
Air Permit to Operate	Yes	No	No	No
RCRA	Yes	No	No	No
NPDES	Yes	No	No	No
EIS	Yes	Not Initiated		
Smoke Permits				
Air Permit	Yes	No	Limited to Fog Oil	No
EIS	Yes	Not Initiated		

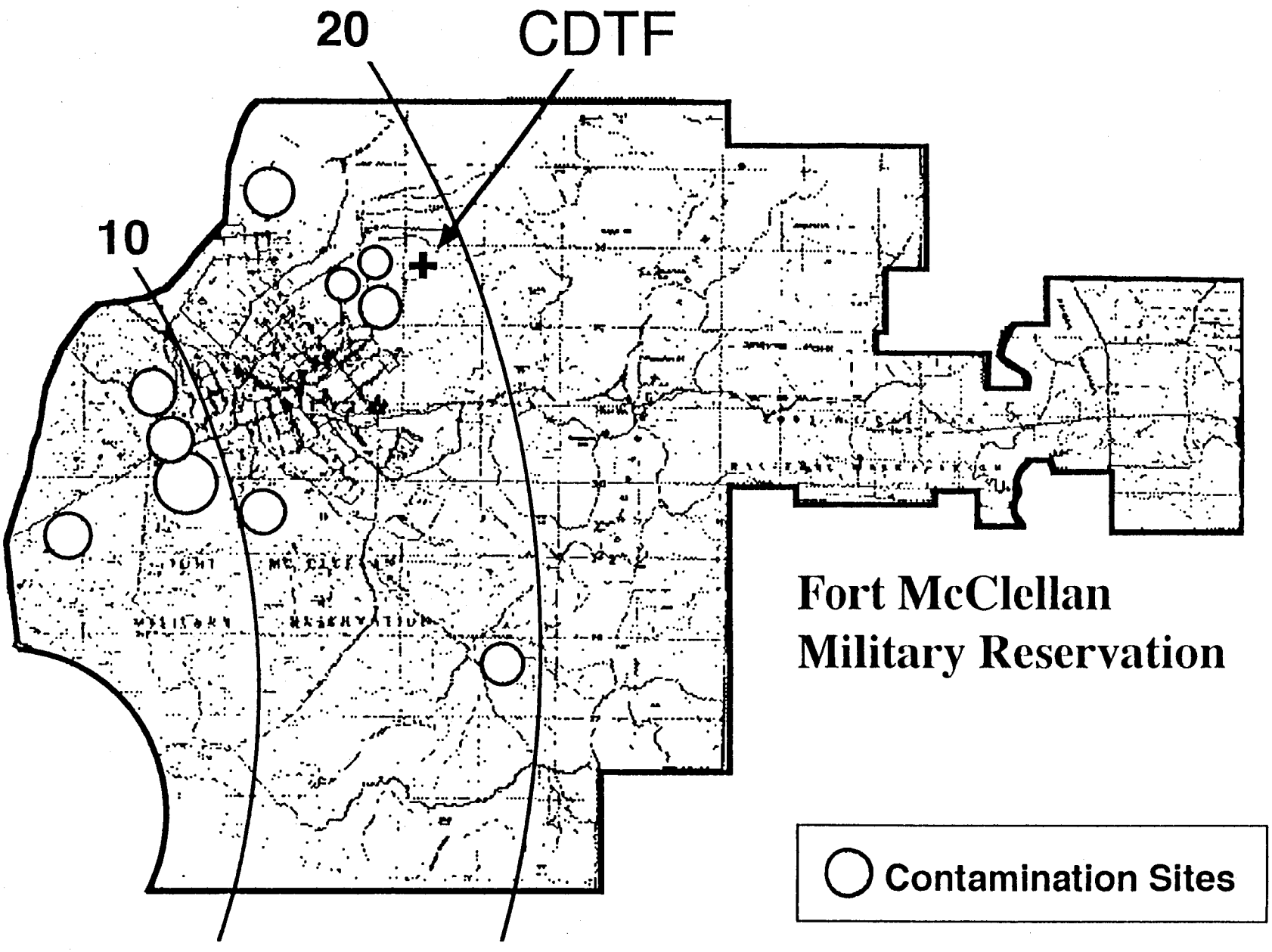
Additional Environmental Considerations

Radiological Laboratory

- 2 NRC licenses
- Dispose/store low level rad waste
- Only certification facility for DOD and other govt agencies

Smoke Training

- At Ft McClellan 165,000 gals of fog oil/year plus smoke pots, brass flakes, colored smokes
- Ft Leonard Woods' air source permit addresses only fog oil and only 1000 gal/year
- Endangered species at Ft Leonard Wood could be affected
- Smoke training may have to be curtailed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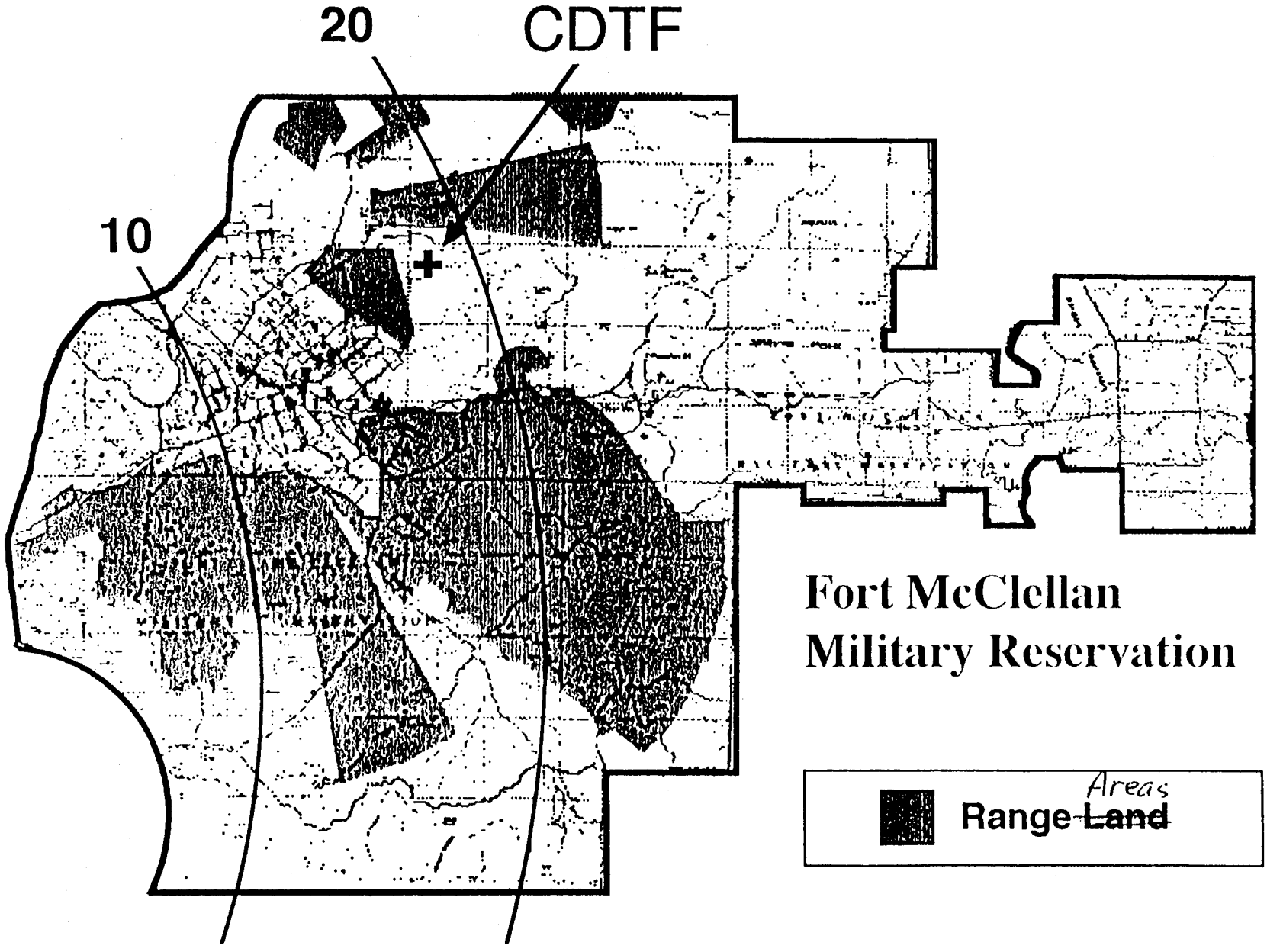
CDTF
10
Fort McClellan
Military Reservation
Contamination Sites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CDTF
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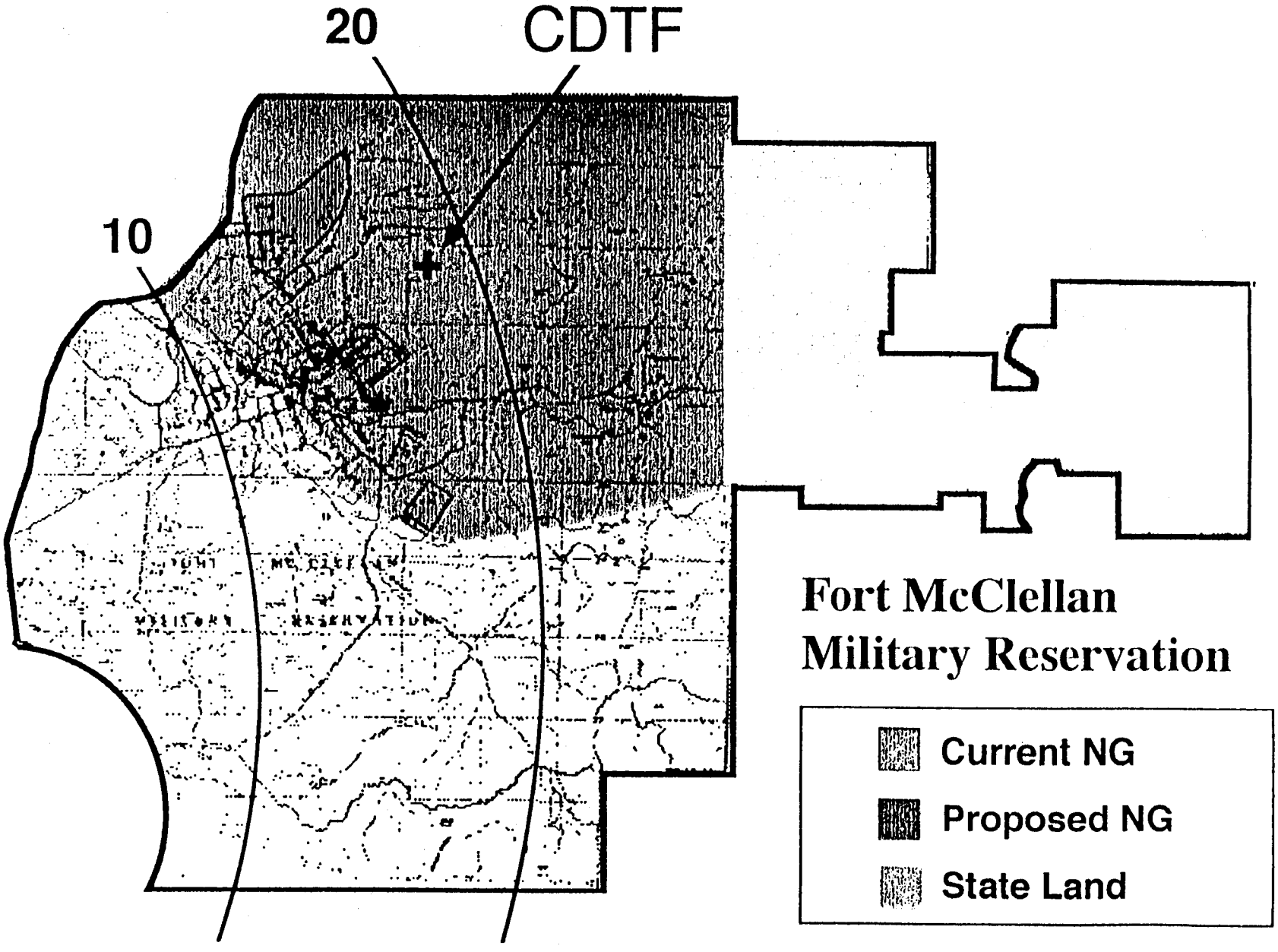
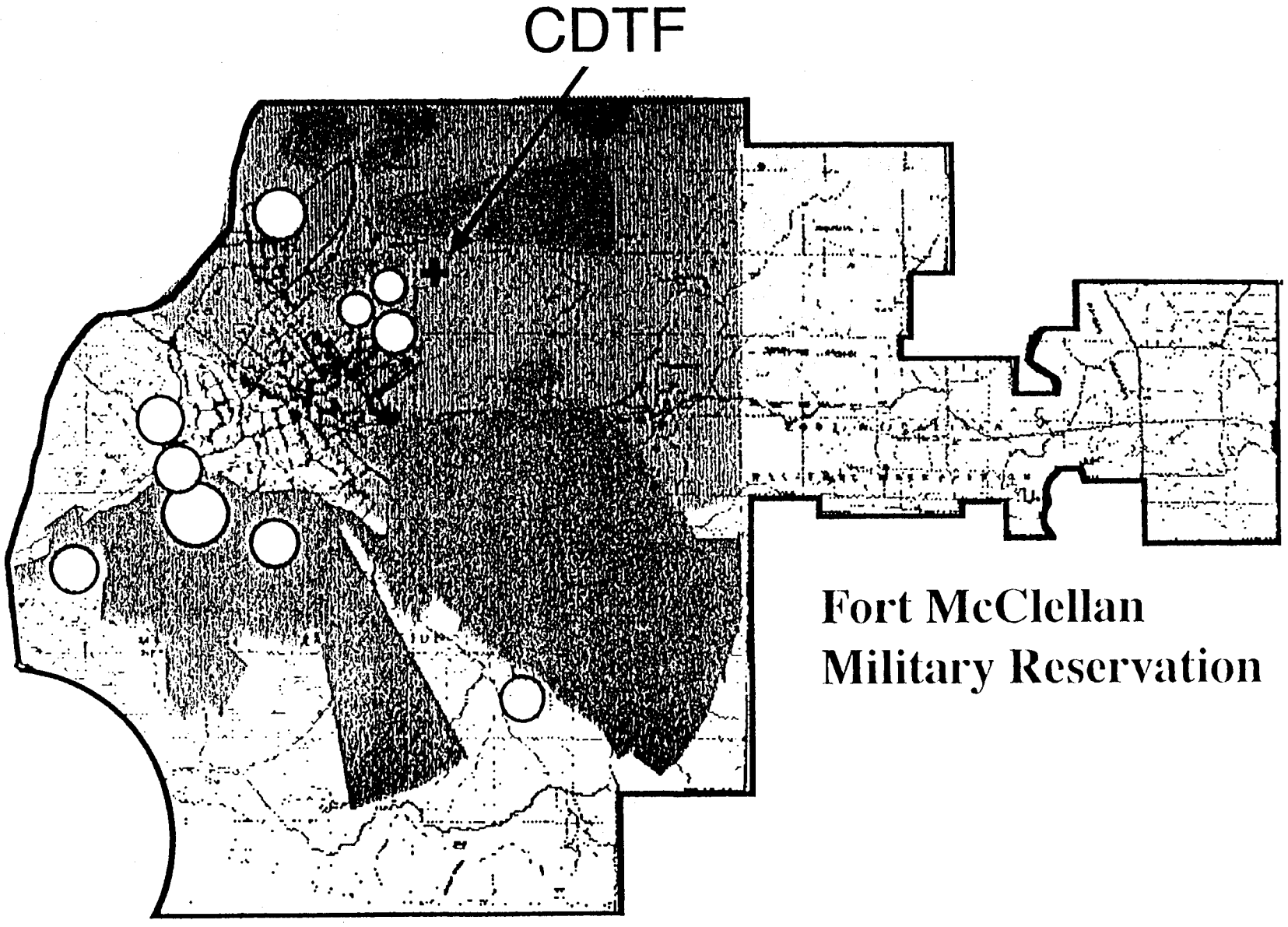
Fort McClellan
Military Reservation
Range ~~Land~~ Areas


20
CDTF
10
Fort McClellan
Military Reservation
Current NG
Proposed NG
State Land


CDTF
Fort McClellan
Military Reservation

Additional Environmental Considerations

Disposition of Ft McClellan CDTF

- Will leave behind a contaminated facility
- Cannot be abandoned (requires round-the-clock security pending dismantlement)
- Cost $45-50M to dismantle (not included in ROI calculations)

Ft McClellan Support to Chemical Demil Permit Application at Anniston Army Depot

- RCRA Part B permit application cites extensive support from Ft McClellan
- State concerned about Army plans if Ft McClellan closed
- Army says it will leave behind necessary support
- Support requirements have not been identified or costed

Environmental Considerations

- Gen Colin Powell (93 BRAC): "It can't be moved, really."
- Sec Army Togo West (95 BRAC): "There are no guarantees in the permitting process....we have no real indication how the process will turn out when a community and a permitting authority begin to come to grips with reality."

Full compliance with NEPA and <u>all</u> permitting requirements has not been adequately addressed, when/if it is, there is a high risk that it will not be successful, thus blocking the CDTF at Fort Leonard Wood.

Military Value Summary

- Threat Increasing
- NBC Defense Mission Eroding
- CDTF at Risk
- Potential Loss of Biological Defense Capability
- Joint and International Programs at Risk
- CWC Treaty Ratification?
- Smoke and Obscurants Significantly Impacted
- Mobilization
- Chemical Stockpile Destruction at Risk

Document Separator

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION
1700 NORTH MOORE STREET SUITE 1425
ARLINGTON, VA 22209
703-696-0504

ALAN J. DIXON, CHAIRMAN

COMMISSIONERS:
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GEN J. B. DAVIS, USAF (RET)
S. LEE KLING
RADM BENJAMIN F. MONTOYA, USN (RET)
MG JOSUE ROBLES, JR., USA (RET)
WENDI LOUISE STEELE

MEMORANDUM

To: Chairman Dixon

From: Madelyn R. Creedon

Re: Fort Leonard Wood, Missouri

Date: April 11, 1995

The Commission staff has sent the following attached letters to the Department of the Army and to the Missouri Department of Natural Resources requesting information on the status of issues with respect to environmental permitting in Missouri and how this may affect the relocation of the functions of Fort McClellan, Alabama to Fort Leonard Wood, Missouri.

I plan to accompany Commissioner Davis on his future visit to Fort Leonard Wood when that is scheduled and also hope to be able to visit with David Shorr, Director of the Missouri Department of Natural Resources on this matter.

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MG JOSUE ROBLES, JR., USA (RET)
WENDI LOUISE STEELE

April 7, 1995

Colonel Michael G. Jones
Director, The Army Basing Study
200 Army Pentagon
Washington, D.C. 20310-0200

Please refer to this number when responding 950407-14

Dear Colonel Jones:

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1. All completed applications for environmental permits relating to the proposed relocation of functions from Fort McClellan, Alabama to Fort Leonard Wood, Missouri.

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Please also respond to the following questions:

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personnel near Fort Leonard Wood?

Any required clarification concerning these questions can be given by Mr. J. J. Gertler, the Army Team analyst.

Thank you for your assistance. I appreciate your time and cooperation.

Sincerely,

Edward A. Brown III
Army Team Leader

EAB/jjg

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MG JOSUE ROBLES, JR., USA (RET)
WENDI LOUISE STEELE

Mr. David Shorr
Director
Department of Natural Resources
State of Missouri
PO Box 176
Jefferson City, Missouri 65102-0176

Please refer to this number when responding: 950330-14

Dear Mr. Shorr:

As you know, the Defense Base Closure and Realignment Commission is currently considering the Department of Defense's proposal to relocate functions of Fort McClellan, Alabama to Fort Leonard Wood, Missouri. As part of that consideration, we would appreciate your answers to the following questions regarding the environmental aspects of this proposed move.

- What environmental permits are required for construction and full operation of a Chemical Defense Training Facility (CDTF) similar to that at Fort McClellan, using live-agent training, and at what point in construction, testing, or operation will each be required?

- What environmental permits are required to institute open-air smoke training at Fort Leonard Wood, and at what point will each be required?

- As of today, has the Army applied for any of these permits? When were these applications received?

- Have any significant concerns or obstacles to issuance of any permit so far been identified? If so, what are they?

- If it is possible to estimate issuance dates, please do so.

- Is a Resource Conservation and Recovery Act permit necessary for the Army to perform any function proposed for transfer to Fort Leonard Wood? If so, please identify the listed or characteristic wastes that would require permitting for storage or disposal.

- Has the Department received any correspondence from the public regarding the proposed CDTF at Fort Leonard Wood? If so, please indicate the nature of such comments.

- On May 19, 1993, you wrote to Commission Chairman Jim Courter, responding to questions raised then about a similar DoD proposal. A copy of the letter is attached. Is that letter still accurate?

We appreciate your help in supplying this data. The Commission is under very short, statutorily imposed deadlines; as a result, we need this information as soon as possible. Again, thank you for your help on this.

Sincerely,

Madelyn R. Creedon
General Counsel

MRC/jjg

STATE OF MISSOURI
Mel Carnahan, Governor • David A. Shorr, Director
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF THE DIRECTOR
P.O. Box 176 Jefferson City, MO 65102-0176 (314)751-4422
FAX (314)751-7627

May 19, 1993

Please refer to this number when responding 930510-28

Mr. Jim Courter
Chairman, Defense Base Closure and Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, VA 22209

Dear Mr. Courter:

In your letter of May 7, concerning the relocation of the Chemical Defense Training Facility at Fort McClellan to Fort Leonard Wood in Missouri, you presented four issues for discussion by the State of Missouri. The Missouri Department of Natural Resources is still in the process of reviewing the applicable Environmental Impact Statement and permitting information from Fort McClellan for the Chemical Defense Training Facility. Below I have provided you with Missouri's initial response to the issues. We will continue to review documents recently received and will provide additional information within two weeks as appropriate.

Issue #1: The Chemical Defense Training Facility will require nine years to put into operation.

Discussion: (See enclosed timeline.) An Environmental Impact Statement will require four years to complete, based on experience at Lexington-Bluegrass Army Depot with chemical weapons demilitarization facility, and the Gaithersburg, MD chemical weapons research facility. There was no inkling of opposition until the Environmental Impact Statement scoping meeting.

Missouri's Response: We understand that it is the Department of Defense's intent to prepare an Environmental Impact Statement (EIS) for the movement of all operations to Fort Leonard Wood. The Chemical Defense Training Facility will be included in this package and not result in an additional document. All correspondence regarding the EIS should be directed to my office to ensure timely response. We are willing to cooperate to the maximum extent possible in the identification of issues for purposes of the EIS related to compliance with state environmental laws and permitting requirements.

Issue #2: The Resource Conservation Recovery Act (RCRA) permits required for the Chemical Defense Training Facility and smoke operations will take two-four years to obtain, with most probable timeframe being closer to four years.

RECYCLED PAPER

Discussion: Based on Army guidance, which provides a planning figure of two-four years (reference not stated). As an example, chemical demilitarization facility at Johnston Island took four years to obtain a RCRA permit, and it isn't even in the continental U.S. It is Army policy that construction cannot commence without a completed RCRA permit. This will also hold up the move of the Chemical School until 1998, after the RCRA permit is received.

Missouri's Response: Currently, we anticipate that the Chemical Defense Training Facility would require permits from Missouri's Air Pollution Control Program, Water Pollution Control Program (for NPDES), and the Hazardous Waste Program. The permit for the incinerator from the Hazardous Waste Program will, no doubt, take the most time to obtain. Air and water permits typically require six months or less. The original NPDES water quality permit issued to Lake City Army Ammunition was issued within seven months of receiving all necessary information. Depending on the complexity of the permit and the complexity of the incinerator, the Part 1 application will take nine to fourteen months to complete. Part 2 of the permit (after construction is complete), will take an additional eight months to a year to complete. I have enclosed a typical review schedule for your use in this matter. Please note the items with an asterisk on the schedule are dependent on Department of Defense, and the timeliness and completeness of their response can either accelerate or delay the process.

I have also included for your review Missouri's applicable hazardous waste rules for incinerators and a brief history of the permitting of a hazardous waste incinerator at Lake City Army Ammunition Plant, which took nine months to complete.

Issue #3: The Chemical Defense Training Facility will be more costly to build in Missouri because a technology upgrade will be required. This will add $20-25 million dollars to construction costs.

Discussion: Missouri will require a more advanced incineration system in order to obtain a RCRA permit.

Missouri's Response: At this time I see no reason to believe that construction of an incinerator in Missouri would be any more costly or time consuming than construction in any other state. Missouri's rules on hazardous waste incinerators parallel those of the U.S. EPA and these rules apply nationwide. As mentioned previously, I have enclosed a copy of Missouri's rules for the permitting of the incinerator through the Hazardous Waste Program.

Issue #4: Smoke training operations are not possible in an environmentally sensitive area like Fort Leonard Wood and the Ozarks, including the national forest areas surrounding Fort Leonard Wood.

Discussion: Last year, Fort McClellan used 600,000 lbs. of fog oil for smoke training operations. Missouri would never allow smoke to filter into national forest areas or be used around the sensitive Indiana and Grey Bat feeding areas.

Missouri's Response: Based upon information submitted to the Department of Natural Resources by Fort Leonard Wood, the Army is in the process of establishing numerous test areas and with monitoring of meteorological conditions they propose to ensure that the smoke stays on Army property. We will have to study the issue further. Currently, we are scheduled to observe trial runs of the smoke training exercise to give us a better feel for environmental impacts that can be anticipated.

I hope that this information will assist you in your deliberations. Should you have additional questions, please don't hesitate to call me at 314-751-4422.

Very truly yours,

DEPARTMENT OF NATURAL RESOURCES

David A. Shorr
Director

DAS:esp

Enclosures

c: The Honorable Christopher Bond
The Honorable John Danforth
The Honorable William Clay
The Honorable James Talent
The Honorable Richard Gephardt
The Honorable Ike Skelton
The Honorable Alan Wheat
The Honorable Pat Danner
The Honorable Melton Hancock
The Honorable Bill Emerson
The Honorable Harold Volkmer

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950407-14

FROM: BROWN, ED	TO: JONES, MICHAEL
TITLE: ARMY TEAM LEADER	TITLE: DIRECTOR
ORGANIZATION: DBCRC	ORGANIZATION: ARMY BASING STUDY
INSTALLATION (s) DISCUSSED: FORT MCCLELLAN	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT
CHAIRMAN DIXON			
STAFF DIRECTOR	✓		
EXECUTIVE DIRECTOR	✓		
GENERAL COUNSEL	✓		
MILITARY EXECUTIVE			
DIR./CONGRESSIONAL LIAISON			
DIR. COMMUNICATIONS			
EXECUTIVE SECRETARIAT			
DIRECTOR OF ADMINISTRATION			
CHIEF FINANCIAL OFFICER			
DIRECTOR OF TRAVEL			
DIR./INFORMATION SERVICES			

COMMISSION MEMBERS	FYI	ACTION	INIT
COMMISSIONER CORNELLA			
COMMISSIONER COX			
COMMISSIONER DAVIS			
COMMISSIONER KLING			
COMMISSIONER MONTOYA			
COMMISSIONER ROBLES			
COMMISSIONER STEELE			
REVIEW AND ANALYSIS			
DIRECTOR OF R & A	✓		
ARMY TEAM LEADER	✓		
NAVY TEAM LEADER			
AIR FORCE TEAM LEADER			
INTERAGENCY TEAM LEADER	✓		
CROSS SERVICE TEAM LEADER			

TYPE OF ACTION REQUIRED

	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

QUESTIONS REGARDING FORT MCCLELLAN AND FORT LEONARD WOOD.

Due Date:	Routing Date: 950407	Date Originated: 950407	Mail Date: 950407

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION
1700 NORTH MOORE STREET SUITE 1425
ARLINGTON, VA 22209
703-696-0504

ALAN J. DIXON, CHAIRMAN

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RADM BENJAMIN F. MONTOYA, USN (RET)
MG JOSUE ROBLES, JR., USA (RET)
WENDI LOUISE STEELE

April 7, 1995

Colonel Michael G. Jones
Director, The Army Basing Study
200 Army Pentagon
Washington, D.C. 20310-0200

Please refer to this number when responding 950407-14

Dear Colonel Jones:

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personnel near Fort Leonard Wood?

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Thank you for your assistance. I appreciate your time and cooperation.

Sincerely,

Edward A. Brown III
Army Team Leader

EAB/jjg

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

EXECUTIVE CORRESPONDENCE TRACKING SYSTEM (ECTS) # 950330-14

FROM: CREEDON, MADELYN R	TO: SHORR, DAVID
TITLE: GENERAL COUNSEL	TITLE: DIRECTOR
ORGANIZATION: DBCRC	ORGANIZATION: DEPT OF NATURAL RESOURCES, MO
INSTALLATION (s) DISCUSSED: FORT MCCLELLAN, FORT LEONARD WOOD	

OFFICE OF THE CHAIRMAN	FYI	ACTION	INIT	COMMISSION MEMBERS	FYI	ACTION	INIT
CHAIRMAN DIXON				COMMISSIONER CORNELLA			
STAFF DIRECTOR	✓			COMMISSIONER COX			
EXECUTIVE DIRECTOR	✓			COMMISSIONER DAVIS			
GENERAL COUNSEL	✓			COMMISSIONER KLING			
MILITARY EXECUTIVE				COMMISSIONER MONTOYA			
				COMMISSIONER ROBLES			
DIR./CONGRESSIONAL LIAISON				COMMISSIONER STEELE			
DIR./COMMUNICATIONS				REVIEW AND ANALYSIS			
				DIRECTOR OF R & A	✓		
EXECUTIVE SECRETARIAT				ARMY TEAM LEADER	✓		
				NAVY TEAM LEADER			
DIRECTOR OF ADMINISTRATION				AIR FORCE TEAM LEADER			
CHIEF FINANCIAL OFFICER				INTERAGENCY TEAM LEADER	✓		
DIRECTOR OF TRAVEL				CROSS SERVICE TEAM LEADER			
DIR./INFORMATION SERVICES							

TYPE OF ACTION REQUIRED

	Prepare Reply for Chairman's Signature		Prepare Reply for Commissioner's Signature
	Prepare Reply for Staff Director's Signature		Prepare Direct Response
	ACTION: Offer Comments and/or Suggestions	✓	FYI

Subject/Remarks:

QUESTIONS REGARDING ENVIRONMENTAL ASPECTS OF MOVING FUNCTIONS OF FORT MCCLELLAN TO FORT LEONARD WOOD.

Due Date:	Routing Date: 950330	Date Originated: 6	Mail Date: 950330

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1700 NORTH MOORE STREET SUITE 1425
ARLINGTON, VA 22209
703-696-0504

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MG JOSUE ROBLES, JR., USA (RET)
WENDI LOUISE STEELE

Mr. David Shorr
Director
Department of Natural Resources
State of Missouri
PO Box 176
Jefferson City, Missouri 65102-0176

Please refer to this number when responding 950330-14

Dear Mr. Shorr:

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Madelyn R. Creedon
General Counsel

MRC/jjg

STATE OF MISSOURI
Mel Carnahan, Governor • David A. Shorr, Director
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF THE DIRECTOR
P.O. Box 176 Jefferson City, MO 65102-0176 (314)751-4422
FAX (314)751-7627

May 19, 1993

Please refer to this number when responding 930616-28

Mr. Jim Courter
Chairman, Defense Base Closure and Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, VA 22209

Dear Mr. Courter:

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RECYCLED PAPER

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DEPARTMENT OF NATURAL RESOURCES

David A. Shorr

David A. Shorr
Director

DAS:esp

Enclosures

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The Honorable James Talent
The Honorable Richard Gephardt
The Honorable Ike Skelton
The Honorable Alan Wheat
The Honorable Pat Danner
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The Honorable Harold Volkmer

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MG JOSUE ROBLES, JR., USA (RET)
WENDI LOUISE STEELE

MEMORANDUM

To: Chairman Dixon

From: Madelyn R. Creedon

Re: Fort Leonard Wood, Missouri

Date: April 11, 1995

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WENDI LOUISE STEELE

April 7, 1995

Colonel Michael G. Jones
Director, The Army Basing Study
200 Army Pentagon
Washington, D.C. 20310-0200

Dear Colonel Jones:

Please refer to this number when responding 950407-14

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2. What prime contractor supervised construction of the Fort McClellan CDTF?

3. If the CDTF is relocated to Fort Leonard Wood, will the operations contract be recompeted, or will it transfer with the function?

4. Are the costs of moving civilian contract personnel who operate the Fort McClellan CDTF included in the COBRA? Has the operating contractor been consulted to develop an estimate of how many of these personnel will move with the facility, or the contractor's ability to find similarly-skilled

personnel near Fort Leonard Wood?

Any required clarification concerning these questions can be given by Mr. J. J. Gertler, the Army Team analyst.

Thank you for your assistance. I appreciate your time and cooperation.

Sincerely,

Edward A. Brown III
Army Team Leader

EAB/jjg

THE DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION
1700 NORTH MOORE STREET SUITE 1425
ARLINGTON, VA 22209
703-696-0504

ALAN J. DIXON, CHAIRMAN

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WENDI LOUISE STEELE

Mr. David Shorr
Director
Department of Natural Resources
State of Missouri
PO Box 176
Jefferson City, Missouri 65102-0176

Please refer to this number when responding 950330-14

Dear Mr. Shorr:

As you know, the Defense Base Closure and Realignment Commission is currently considering the Department of Defense's proposal to relocate functions of Fort McClellan, Alabama to Fort Leonard Wood, Missouri. As part of that consideration, we would appreciate your answers to the following questions regarding the environmental aspects of this proposed move.

- What environmental permits are required for construction and full operation of a Chemical Defense Training Facility (CDTF) similar to that at Fort McClellan, using live-agent training, and at what point in construction, testing, or operation will each be required?

- What environmental permits are required to institute open-air smoke training at Fort Leonard Wood, and at what point will each be required?

- As of today, has the Army applied for any of these permits? When were these applications received?

- Have any significant concerns or obstacles to issuance of any permit so far been identified? If so, what are they?

- If it is possible to estimate issuance dates, please do so.

- Is a Resource Conservation and Recovery Act permit necessary for the Army to perform any function proposed for transfer to Fort Leonard Wood? If so, please identify the listed or characteristic wastes that would require permitting for storage or disposal.

- Has the Department received any correspondence from the public regarding the proposed CDTF at Fort Leonard Wood? If so, please indicate the nature of such comments.

- On May 19, 1993, you wrote to Commission Chairman Jim Courter, responding to questions raised then about a similar DoD proposal. A copy of the letter is attached. Is that letter still accurate?

We appreciate your help in supplying this data. The Commission is under very short, statutorily imposed deadlines: as a result, we need this information as soon as possible. Again, thank you for your help on this.

Sincerely,

Madelyn R. Creedon
General Counsel

MRC/jjg

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
Mel Carnahan, Governor • David A. Shorr, Director
OFFICE OF THE DIRECTOR
P.O. Box 176 Jefferson City, MO 65102-0176 (314)751-4422
FAX (314)751-7627

May 19, 1993

Please refer to this number when responding 930516-23

Mr. Jim Courter
Chairman, Defense Base Closure and Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, VA 22209

Dear Mr. Courter:

In your letter of May 7, concerning the relocation of the Chemical Defense Training Facility at Fort McClellan to Fort Leonard Wood in Missouri, you presented four issues for discussion by the State of Missouri. The Missouri Department of Natural Resources is still in the process of reviewing the applicable Environmental Impact Statement and permitting information from Fort McClellan for the Chemical Defense Training Facility. Below I have provided you with Missouri's initial response to the issues. We will continue to review documents recently received and will provide additional information within two weeks as appropriate.

Issue #1: The Chemical Defense Training Facility will require nine years to put into operation.

Discussion: (See enclosed timeline.) An Environmental Impact Statement will require four years to complete, based on experience at Lexington-Bluegrass Army Depot with chemical weapons demilitarization facility, and the Gaithersburg, MD chemical weapons research facility. There was no inkling of opposition until the Environmental Impact Statement scoping meeting.

Missouri's Response: We understand that it is the Department of Defense's intent to prepare an Environmental Impact Statement (EIS) for the movement of all operations to Fort Leonard Wood. The Chemical Defense Training Facility will be included in this package and not result in an additional document. All correspondence regarding the EIS should be directed to my office to ensure timely response. We are willing to cooperate to the maximum extent possible in the identification of issues for purposes of the EIS related to compliance with state environmental laws and permitting requirements.

Issue #2: The Resource Conservation Recovery Act (RCRA) permits required for the Chemical Defense Training Facility and smoke operations will take two-four years to obtain, with most probable timeframe being closer to four years.

Discussion: Based on Army guidance, which provides a planning figure of two-four years (reference not stated). As an example, chemical demilitarization facility at Johnston Island took four years to obtain a RCRA permit, and it isn't even in the continental U.S. It is Army policy that construction cannot commence without a completed RCRA permit. This will also hold up the move of the Chemical School until 1998, after the RCRA permit is received.

Missouri's Response: Currently, we anticipate that the Chemical Defense Training Facility would require permits from Missouri's Air Pollution Control Program, Water Pollution Control Program (for NPDES), and the Hazardous Waste Program. The permit for the incinerator from the Hazardous Waste Program will, no doubt, take the most time to obtain. Air and water permits typically require six months or less. The original NPDES water quality permit issued to Lake City Army Ammunition was issued within seven months of receiving all necessary information. Depending on the complexity of the permit and the complexity of the incinerator, the Part 1 application will take nine to fourteen months to complete. Part 2 of the permit (after construction is complete), will take an additional eight months to a year to complete. I have enclosed a typical review schedule for your use in this matter. Please note the items with an asterisk on the schedule are dependent on Department of Defense, and the timeliness and completeness of their response can either accelerate or delay the process.

I have also included for your review Missouri's applicable hazardous waste rules for incinerators and a brief history of the permitting of a hazardous waste incinerator at Lake City Army Ammunition Plant, which took nine months to complete.

Issue #3: The Chemical Defense Training Facility will be more costly to build in Missouri because a technology upgrade will be required. This will add $20-25 million dollars to construction costs.

Discussion: Missouri will require a more advanced incineration system in order to obtain a RCRA permit.

Missouri's Response: At this time I see no reason to believe that construction of an incinerator in Missouri would be any more costly or time consuming than construction in any other state. Missouri's rules on hazardous waste incinerators parallel those of the U.S. EPA and these rules apply nationwide. As mentioned previously, I have enclosed a copy of Missouri's rules for the permitting of the incinerator through the Hazardous Waste Program.

Issue #4: Smoke training operations are not possible in an environmentally sensitive area like Fort Leonard Wood and the Ozarks, including the national forest areas surrounding Fort Leonard Wood.

Discussion: Last year, Fort McClellan used 600,000 lbs. of fog oil for smoke training operations. Missouri would never allow smoke to filter into national forest areas or be used around the sensitive Indiana and Grey Bat feeding areas.

Missouri's Response: Based upon information submitted to the Department of Natural Resources by Fort Leonard Wood, the Army is in the process of establishing numerous test areas and with monitoring of meteorological conditions they propose to ensure that the smoke stays on Army property. We will have to study the issue further. Currently, we are scheduled to observe trial runs of the smoke training exercise to give us a better feel for environmental impacts that can be anticipated.

I hope that this information will assist you in your deliberations. Should you have additional questions, please don't hesitate to call me at 314-751-4422.

Very truly yours,

DEPARTMENT OF NATURAL RESOURCES

David A. Shorr
Director

DAS:esp

Enclosures

c: The Honorable Christopher Bond
The Honorable John Danforth
The Honorable William Clay
The Honorable James Talent
The Honorable Richard Gephardt
The Honorable Ike Skelton
The Honorable Alan Wheat
The Honorable Pat Danner
The Honorable Melton Hancock
The Honorable Bill Emerson
The Honorable Harold Volkmer

Creedon, Madelyn

From: Cook, Bob
To: Creedon, Madelyn
Subject: FW: McClellan/Ft LeonWood
Date: Friday, March 31, 1995 2:30PM

From: Nurre, Deirdre
To: Cook, Bob; Gertler, JJ
Subject: McClellan/Ft LeonWood
Date: Friday, March 31, 1995 10:43AM

FYI -
I now have various people in the Missouri Region 7 office of US EPA looking into the permits questions for Ft. Leonard Wood. I had a discussion with Karen Flournoy, the head of the Federal Facilities group there. The State hasn't consulted EPA Region 7 in making their determinations about the facility; EPA has only recently gotten involved because of concerns expressed by an outside party (private citizen). (The State has no legal requirement to involve US EPA in its permit. But EPA conducts oversight of the State's permitting procedures.)

It's Flournoy's preliminary guess that a RCRA permit would be needed to operate the facility and also possibly to conduct the open air smoke tests. A RCRA representative and an Air Programs representative will be calling me before Wednesday's site visit.

As I learn more about this, I'll pass on the info.

GLEN BROWDER
3D DISTRICT, ALABAMA

COMMITTEE ON NATIONAL SECURITY
COMMITTEE ON THE BUDGET

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House of Representatives
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May 30, 1995

The Honorable Alan J. Dixon
Defense Base Closure and Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, VA 22209

Please refer to this number when responding 950531-3

Dear Chairman Dixon:

The 1993 Defense Base Closure and Realignment Commission in its report to the President recommended that if the Secretary of Defense wants to move the Chemical School from Fort McClellan, Alabama, in the future, the Army should pursue **all** of the required permits and certification for the new site **prior** to the 1995 base closure process. The 1995 Base Closure Commission at the beginning of its deliberations regarding Fort McClellan announced that the Army should have **all** the permits **in place** by June 22, 1995.

While I would trust the Commission is carefully reviewing all permit requirements (including air, water, hazardous waste, nuclear, and endangered species), I am writing today to call your attention to two specific permit issues related to the proposed closure of Fort McClellan which could have serious negative impacts on U.S. military training standards and international treaties.

1. Smoke and Obscurant Training

The enclosed memorandum and attached comments (Tab 1) prepared by Lt. Col. Edward Newing detail how the Army may not be able to meet its smoke and obscurant training requirement if the Chemical School is moved to Fort Leonard Wood, Missouri. If the Army cannot obtain Missouri state environmental permits that allow the same level and types of training permitted now in Alabama, the memorandum states that the Chemical School could conduct only 25% of its training requirement.

I believe the information contained in this memorandum raises serious questions which should be considered under the military value criterion by which the Commission is required to evaluate the Pentagon's recommendation to close Fort McClellan.

2. International Treaties

The State of Alabama has indicated it may not grant the environmental permit necessary to carry out the destruction of

the chemical weapons stockpile at Anniston Army Depot because of the removal of emergency response resources now stationed at Fort McClellan. If this permit is not issued, the United States would not be able to meet the requirements of the Bilateral Destruction Agreement with the former Soviet Union or the Chemical Weapons Convention, which is expected to be ratified by the United States Senate this summer.

The Alabama Department of Environmental Management (ADEM), in a February 13, 1995, letter to me (enclosed, Tab 2) stated that should Fort McClellan be closed, "the Department could not issue the necessary environmental permits to allow construction and operation of the chemical demilitarization activities at Anniston Army Depot unless such time as the Army could demonstrate to our satisfaction that adequate and competent emergency response and backup security capabilities are in place."

In a May 9, 1995, letter (enclosed, Tab 3) to Army Secretary Togo West, ADEM Director John Smith states, "In order for the Army's RCRA [Resource Conservation and Recovery Act] permit application for the chemical weapons destruction facility at Anniston Army Depot to proceed, this Department requires a detailed accounting of how the Army plans to replicate the support assets now available at Fort McClellan for response to a chemical accident/incident at the Depot, should Fort McClellan close." The RCRA permit cited lists the specific resources now stationed at Fort McClellan that will be called upon to respond to a chemical accident or incident involving the nearby stockpile I have enclosed a copy of the section of the permit application listing those resources along with internal Defense Department memoranda instructing that those resources be preserved (Tab 4).

Retired Colonel Kenny W. Whitley, former commander at Anniston Army Depot, in the enclosed unsolicited letter to me (Tab 5) states that "Closing the Fort and moving the Chemical School would reduce the community-wide ability to deal with an accident at the depot."

The Army on May 3 in response to my inquiry requesting a specific definition of the support the Army will provide to the chemical demilitarization operation (Tab 6) stated, "The Army is still trying to determine <u>what, if any</u>, support is required from Fort McClellan." The Army's response further states that the COBRA analysis for closing Fort McClellan includes only a $150,000 annual cost for 1000,000 square feet of facilities space to accommodate the demilitarization support activities.

I would argue that $150,000 hardly covers the cost of the resources cited in the RCRA permit, namely: Decontamination team, medical assistance team, security control team, communications support team, rescue squad, public affairs office, plans and operations office, Noble Army Community Hospital, provost

marshal, traffic control and security force, directorate of plans, training, mobilization and security, directorate of logistics, staff judge advocate, directorate of personnel and community activities, joint information center and emergency operations center.

To my knowledge, the Army to date has not performed a detailed accounting of the resources necessary to support the chemical weapons destruction program. Therefore, I request that the Commission require the Army to provide a detailed outline of how it plans to replicate the Fort McClellan demilitarization support resources and the cost of providing those resources. I believe the costs involved are significant and will have a direct impact on the Fort McClellan COBRA. I also request that the Commission ask the Department of Defense how it plans to meet the obligations of the Bilateral Destruction Agreement and the Chemical Weapons Convention if Fort McClellan is closed.

I respectfully request that the Commission's analysis and review team carefully review all permitting issues associated with the closure of Fort McClellan with the assistance of the General Accounting Office, which addressed this issue in its April 14, 1995, report to the Commission and with which I have met regarding this issue. I also ask that the Commission take the particular issues raised here into consideration when making its decision about whether the Department of Defense has deviated from the closure selection criteria.

Independent organizations of no less stature that the Henry L. Stimson Center and the Center for Strategic and International Studies agree that movement of the Chemical School at this time and the disruption that would result from the closure of Fort McClellan carry serious negative implications for the success of the Chemical Weapons Convention and the Bilateral Destruction Agreement, as well as our nation's chemical defense program. I have enclosed copies of letters these organizations sent to the Commission regarding these two international agreements (Tab 7).

Thank you for your attention to these matters, and I look forward to your response. With kindest regards, I am

Sincerely,

Glen

Glen Browder
Member of Congress

GB/vfp

DEPARTMENT OF THE ARMY
U.S. ARMY CHEMICAL SCHOOL
FORT MCCLELLAN, ALABAMA 36205-5020

REPLY TO ATTENTION OF

ATZN-CM-SAC

16 May 95

MEMORANDUM FOR MAJ TELLER, HQDA, OSJA, ENVIRONMENTAL OFFICE

SUBJECT: Review of Draft Air Permit, Fort Leonard Wood Smoke Training

1. The purpose of this memorandum is to provide comments on the subject document per your request. More detailed comments are found at the enclosure.

2. The State of Missouri smoke permit restrictions, if implemented, will create overwhelming degradation to Chemical Mission readiness. The restrictions will cut back the minimum amount of annual fog oil use by 30%. The daily allowance for smoke training time will be cut by 75%. After suffering these unacceptable losses, it further limits our Joint forces to smoke operations during weather conditions which may exist only 60% of the year. The smoke permit virtually eliminates more than one smoke event per day. The impact would be violations (subject to fines) for 92 days when two events are trained, another 56 days when three events are trained, and another 21 days when four separate events are underway at one time. If allowed to stand, the Missouri smoke permit allows us to conduct roughly 25% of training to standards, these restrictions would kill both the US Army and US Air Force smoke training.

3. During the Chemical Functional Area Analysis on 31 Oct 94, the Vice Chief of Staff challenged the Army to "take the lead on proactive involvement with agencies drafting environmental regulatory requirements that impact on chemical training on Army ranges. Focus on leading towards the least restrictive measures that provide the maximum training opportunities. (Action ODCSOPS)"

4. Under Base Realignment and Closure actions, Fort Leonard Wood, unfortunately without coordination with the Chemical School, applied for a smoke permit and variance. The Missouri smoke permit restrictions will inadvertently squash the VCSA's goal and tragically cripple the capability to conduct smoke training. One of the most stunning restrictions of this permit is the loss of capability to train with smoke hand grenades, vehicular smoke grenades, smoke pots, infrared defeating grenades, riot control agents, and large area infrared obscurants. The Reserve Component smoke training at the Chemical School would also be a casualty.

5. If you have questions regarding this quick assessment of the smoke and obscurants issue, please call me, DSN 865-6228 or commercial 205-848-6228 or Fax 865-6786.

Encl

EDWARD W. NEWING
LTC, CM
Special Assistant to the Commandant

COMMENTS ON DRAFT AIR PERMIT, FORT LEONARD WOOD SMOKE TRAINING, 11 APRIL 1995

1. pg 1, title Fort Wood provided you a draft air permit. Since the issue is now at the variance hearing stage, where is the "final"? Considering the impact this has on Chemical Mission Area training, we need to see the real thing.

2. pg 1, title The basis for permission is to "construct a static and mobile fog oil smoke *training facility*. This nomenclature is not descriptive of what the Army proposes to do. Could it be that Missouri Clean Air laws do not cover field military training and ranges? The only "facility" being constructed is a storage area for fog oil drums. Fort Wood will blaze road networks through some wetland areas and possibly construct some observation towers throughout the maneuver area which is already dedicated to other types of training. This curious interpolation of a smoke training area to a "facility" deceives the public as to what the purpose of the permit is for. Since the permit was gained without public comment, it would be difficult for people to know what this is. Since the variance does require comment, perhaps they will understand smoke will not occur in what could reasonably called a fixed facility.

3. pg 1, title If Missouri has authority for Title V of the Clean Air Act, it would seem prudent to mention the Federal statutes, beyond their laws. They still must comply with federal standards and ensure these activities, especially since it is a Federal installation, meet standards. This legal footing is important and not just a cosmetic touch.

4. pg 2, para 1, The annual throughput of only 65,000 gallons is unacceptable. We do not know how this figure was calculated, but it appears to be an average of sort. Forgot the averages over a five year period. We calculate training requirements on operational tempo, current and projected. The projected consumption needs to be at least 95,000 gallons per year which includes both the Army and Air Force course loads and training plans. Additionally, all US Army Chemical units (70% of the Chemical Corps) are required to mobilize at the Chemical School. The potential to emit must be written into the permit, which as was explained to DNR previously would roughly double the emissions.

5. pg 2, para 2, The limit of 3,700 lbs during a 24 hour period is unacceptable. The Army and Air Force need more than one hour per day on many occasions. As stated in the cover letter the number of two, three, and four events per day is critical to training loads. If not adjusted, this limitation will cut out 75% of our training capability. Additionally, there is no mention of other types of obscurants used by the Chemical School. Smoke hand grenades (various colors), vehicle grenades (red phosphorus and brass flakes), HC smoke pots, safer smoke pots (teraphalic acid), and large area infrared obscurant materials are essential portions of training and qualifying chemical soldiers. This permit excludes this type smoke.

6. pg 2, para 3 The PM10 less than 2,600 lbs per hour cannot ever be met. Even though droplet sizes average about one micron, we would violate this limit every time we turn a generator on, drive through dust, or use infrared obscurants (by design greater than 10-14 microns in size). IR obscuration is a critical skill to countermeasure enemy IR target acquisition devices. It is not possible to simulate this sensor/obscuration phenomenon at this time. It is a learned behavior at the institutional level.

7. pg 2, para 5 Reporting of violations appears to be too slow. At lot of damage could ensue unless a more rapid methodology is adopted. This permit needs to adjust threshold limits beyond 65,000 gallons per year to at least the combined total of current and projected training loads (we could live with a bare bones of 95,000 gal/yr). Scaling back training by 30% is unacceptable to readiness

8. pg 3, para 7 How will the QAPP plan effect the "users" the Chemical School and Air Force Disaster Preparedness Technical Training? The QA plan must be coordinated with potential users.

9. pg 3, para 8 Someone needs to calculate the voluminous record keeping costs. Who is the Permitee: Fort Wood personnel or the Chemical School? How is Fort Wood going to implement this? Why is only fog oil record keeping necessary? Other obscurants need to be tallled and contribute to the entire atmospheric load. The emissions from the diesel engines of HMWWVs and APCs as well as the MOGAS powering the smoke generators are sources. Does this add to the poundage allowed per day? Other military vehicular training, automobiles, electrical generators, construction equipment, railroad activities, on Fort Wood apparently need to be part of the daily total as well.

9. pg 4, para 13 What equipment should be used or is available for MET data? Who collects it? If soldiers and airmen are to do this who certifies them and when, how often? Calculation of mixing height is of particular concern, from where is it measured and how does it apply to each site and length of plume.

10. pg 4, para 14 Limitations on Operations. How often (per month) do these conditions exist? Need to go back at least 5 years to see if we are handcuffed by artificial restraints. This has the potential, when synergistically combined with reduction in annual gallons allowable and only one hour per day could absolutely shut down smoke training.

11. pg 4, para 15 I do not understand how a state agency can dictate the forecasting lead times. They establish a standard and now want to tell the Army how to suck eggs. This State agency is really beyond their authority to tell us *how* to manage compliance with standards.

12. pg 4, para 16 Does this mean MET conditions (air stability and wind direction) are to be continuously monitored/measured or just before the event. Need to evaluate the percent of time wind directions and speeds are unfavorable. Quick reference indicates unfavorable conditions exist around 35% of the time. The only available wind rose is twenty years old.

13. pg 5, para 16c If the Director is meant to be the Director of DNR, this presents an interesting legal situation for the Army. This blanket authority seems to be a catch-all phrase which allows the Director to unilaterally terminate Army smoke operations. This is absurd. If permit violations occur, enforce it, but the Director should have no legal basis terminate smoke for "to be determined" reasons. Perhaps this is the place where an insert can state the Director might be overruled by the EPA or other Federal Agencies. These mysterious powers of the Director place the Army at risk and should be eliminated.

14. pg 6, para 23 We would be automatically in violation if tried to maintain current training levels. The air quality modeling standards need to be addressed in this document. Air models used by the EPA are not as specific for cloud dynamics and concentration as the ones established by the Army (formally the Atmospheric Sciences Laboratory). EPA models use industrial chemical stack emissions and translate that to smoke generator sources, some of which are mobile. No known EPA model is an accurate representation. The Combined Obscurant Model for Battlefield Induced Contaminants (COMBIC) is the worlds best model and should be used, especially since it is possible to model all types of obscurants, not just fog oil. Other sources are the Joint Technical Group for Munitions Effectiveness-Smoke and Aerosols Group assessment reports which have tailored smoke munitions and generators for the past ten years. If we are going to use models, we should do it correctly.

15. pg 6, para 24 Injury to plants and animal life have not been thoroughly documented. Sierra Club and others note (quite accurately) the Army analyses are subjective and most are inconclusive. The Army cannot avoid the challenge that specific tests have not been done at Fort Wood or Fort McClellan. Army references cite known studies which treat flora and fauna with about 5,000 times the amount that might be expected from Army fog oil operations. I intuitively believe it is safe, one cannot measure the downwind deposition, but it is hard to avoid the criticism that it has to go somewhere. The worst case is a challenge of fog oil spillage at the generator sites. Fort Wood will mitigate this with their Installation Spill Contingency Plan. It is difficult to attribute direct or approximate damage to plants and animals if no base line is available. How does the other obscurants affect plants and animals? DNR has the Army assessment data, but chose not to allow these in the air permit. What is different about fog oil? Unreasonable enjoyment of life is another nebulous term. Smoke by its very nature may be considered a nuisance and IR obscurants are defined as nuisance dust. I see big problems here. It is a legal tarpit which places the entire art of smoke generation for the survival of fighting forces at tremendous risk.

16. pg 7, Attachment A These four sites have not been measured. The only data which exists at Fort Wood is measured from the airfield. Historical wind data is ancient. Considering the relation of specificity required to comply with this permit, microclimatic studies should be performed at each of these sites. As stated in Fort McClellan's 1993 Smoke Report (but rejected by Fort Wood) seasonal wind patterns and speeds limit smoke training at these sites because of the potential for offpost migration or interference with other post activities. Conservative estimates are that between 25-50% of the time, smoke operations will be limited. Since we use smoke 250 days of the year, further erosion of training opportunities are certain. Exclude the non trafficable terrain, avoidance of endangered species areas, small ponds, wetlands, impact areas, the infamous million dollar hole area, cantonment area, standoff distances between the installation boundary and smoke areas, the major thoroughfare bisecting the installation, the bombing range and there is less space than it appears. The bottomline is that weather is one of the most limiting factors of all. We can schedule classes, ranges, locations, but we cannot schedule Mother Nature. From someone with over twenty years of smoke generator experience I am telling you this smoke permit is a disaster for the future of the Army's smoke program.

ADEM

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

~~James W. Warr, Director~~
John M. Smith
Director

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~~XXXXXXXX~~
Governor
Fob James, Jr.

February 13, 1995

FEB 22 1995

The Honorable Glen Browder
Member of Congress
2344 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Browder:

Thank you for your letter inquiring about the impact that possible base-closure or realignment action at Fort McClellan or Anniston Army Depot could have on the Department of the Army's currently pending environmental permit application for the chemical demilitarization activities at Anniston Army Depot.

The relationship between the Department of the Army and the State of Alabama with respect to the proposed operation of the chemical demilitarization activities at Anniston Army Depot has been a long and complex one, owing to the nature of the undertaking and the risks associated with that undertaking. Further complicating the relationship has been the research and development necessary to bring this activity to fruition. For all of the difficulties inherent in this industrially difficult and publicly sensitive activity, the relationship between our organizations has been open, frank and productive. We have made progress in overcoming some of the technological and procedural hurdles necessary to satisfy the State of Alabama that the health and safety of our population is adequately protected and that risks related to chemical demilitarization are eliminated, minimized, or controlled.

As you are aware, Fort McClellan and Anniston Army Depot are major components of the Contingency Plan submitted by the Army and required by 40 CFR Part 270.14(b)(7) and Part 264, Subpart D. The purpose of this plan is to minimize hazards to human health and the environment from fires, explosions, or any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents associated with the demilitarization facility at Anniston Army Depot. As acknowledged by the Army in its Resource Conservation and Recovery Act (RCRA) Hazardous Waste Permit Application, the provisions of the Contingency Plan " . . . will be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment."

We see from correspondence provided by your office that the Deputy Secretary of Defense is fully cognizant of the resources at Fort McClellan and Anniston Army Depot that are committed to the chemical demilitarization program through the Army's RCRA permit. We note that the Deputy Secretary in an August 8, 1994, letter to you asked the Secretary of the Army "to work closely with the Alabama Department of Environmental Management to respond to the state requirements and to be fully responsive to their concerns."

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In response, the Principal Deputy Under Secretary for Acquisition and Technology in an August 11, 1994, memorandum to the Secretary of the Army stated, "We must commit appropriate military resources (such as the following, which have been identified at their current location) to support the demilitarization effort:"

> At Fort McClellan: "Decontamination Team, Medical Assistance Team, Security Control Team, Communications Support Team, Rescue Squad, Public Affairs Office, Plans and Operations Office, Explosive Ordnance Detachment, Noble Army Community Hospital, Provost Marshal, Traffic Control and Security Force, Directorate of Plans, Training, Mobilization and Security, Directorate of Logistics, Staff Judge Advocate, Directorate of Personnel and Community Activities, Joint Information Center, Emergency Operations Center."

And the Assistant Secretary of the Army for Installations, Logistics and Environment in a September 23, 1994, letter to the commanders of Fort McClellan and Anniston Army Depot, states:

> "As we approach construction and ultimate demilitarization operations at Anniston Army Depot, the comprehensive response plan will be a significant document subject to review by the Alabama Department of Environmental Management during the permitting process."

A review of the Army's pending application demonstrates that the Army, just as we, has relied heavily on the support available from Fort McClellan and Anniston Army Depot to satisfy the requirements of the Contingency Plan. Nowhere is this more apparent that in the Disaster Control Plan-Chemical Event Response Assistance Submission found in Volume VI A of the Army's application. This submission demonstrates the critical role which has been contemplated for Fort McClellan and Anniston Army Depot in the event of a chemical incident or accident relating to chemical demilitarization activities at Anniston Army Depot. It has been the availability of that emergency infrastructure which has given us the assurance as we reviewed the Army's submission that a chemical accident or incident would result in an immediate, effective, and appropriate response.

We recognize that the support available from Fort McClellan and Anniston Army Depot could be replicated with an appropriate dedication of resources. However, the resources appear to be extraordinarily large and will require extensive training of personnel, construction of facilities, and provision of equipment. This would be true whether the support were provided by Army personnel or through a contract. These required resources are in addition to the Chemical Stockpile Emergency Preparedness Program, which incorporates the use of Fort McClellan and Anniston Army Depot Resources.

A contract for such resources does raise an issue of concern, however. The chemical agents in question include some of the deadliest, most toxic compounds developed for chemical warfare. These include mustard (HD) and nerve agents (VX and GB). The availability of military personnel to respond to a chemical accident or incident gives us a level of confidence that appropriate action will be taken for the simple reasons that soldiers, unlike civilians, are subject to orders, the disobedience of which carries far more serious implications than those to which a civilian would be subject. The Army's plans include the use of deadly force in appropriate circumstances, a matter which also favors the employment of military security forces.

The area adjacent to Anniston Army Depot is a densely populated area, and the prevailing winds could carry an air emission across this populated area. This factor, coupled with the characteristics of the munitions and components to be demilitarized at Anniston Army Depot and our place in the schedule for demilitarization, distinguishes us from other chemical demilitarization sites. The requirement for immediate response to a chemical accident or incident includes extensive communication networks, security personnel to deal with population control, emergency medical personnel trained to deal with chemical injuries, and facilities designed to treat the chemically injured. Not least among our concerns is the potential for unauthorized intrusion at the Depot. Although the risk of such an event may be low, the implications are severe and require a high degree of security and reaction capability. These are not resources which are readily available for immediate response, and they will have to be replicated if Fort McClellan or Anniston Army Depot are closed or realigned substantially and the chemical demilitarization activity at Anniston Army Depot is to be permitted.

Because Fort McClellan is the home of the Army's Chemical School and Military Policy School, it is only natural that Army planners have included the resources at Fort McClellan in developing their Contingency Plan. Furthermore, Noble Army Hospital personnel and facilities are uniquely qualified to address chemical injuries due to the long experience with such risks, as well as the current operation of the Chemical Defense Training Facility (CDTF) at Fort McClellan. This facility also ensures that we will be able to train appropriate personnel at Anniston Army Depot as well as community emergency response personnel in chemical protection and decontamination techniques. I am aware of Army studies which establish the confidence-building aspect of CDTF training and consider such training for our community backup to your Contingency Plan to be an appropriate measure to be undertaken.

Some of the specific support elements to be forthcoming from Fort McClellan resources in the event of a chemical accident or incident include acceptance of casualties at Noble Army Hospital. This is particularly important to us because the operational concept developed by the Army stipulates that patients, attendants, equipment, and vehicles will be decontaminated before they are accepted at local civilian hospitals. Implicit within this concept is the capability to accomplish such decontamination. We are particularly concerned that the significant decrease in trained military health care providers associated with the closure of Noble Army Hospital at Fort McClellan will leave us with a

situation where, in the event of major chemical incident or accident, local hospitals will not accept contaminated personnel for fear of contaminating their own facilities, and the Army will no longer have a facility operational to deal with such circumstances.

Other areas which cause us concern include the availability within the immediate geographic area of an Explosive Ordnance Team. The 142nd Explosive Ordnance Detachment is currently located at Fort McClellan, and the notification procedures in the event of a chemical accident or incident clearly reflect that they have been included in the Army's plans. In addition, support teams from Fort McClellan respond to requirements for security, communications, on-site medical assistance, rescue squad and public affairs are assets which the Army and the State of Alabama have relied upon as available in the event of a chemical accident or chemical incident. If Fort McClellan were to be closed, adequate provision would have to be made to replace these support teams.

In addition to Fort McClellan's extensive resources, the Army's permit application and the Department of Defense's August 11, 1994, memorandum cites the following resources at Anniston Army Depot: "Directorate for Law Enforcement and Security, Directorate for Ammunition Operations, Ammunition Surveillance Division, Depot Equipment Division, Environmental Management Division, Health Clinic, Depot Commander, Electronics Liaison Office."

These are not minor considerations which can be overlooked. Rather, they constitute major concerns because they have significant impact upon the resources immediately available to respond to an emergency situation.

Under these circumstances, I express to you my grave concern about the promised emergency response capability which will be unavailable if Fort McClellan or Anniston Army Depot were to be closed or realigned. This is a substantive concern for the health and safety of the potentially affected populace. Of equal concern to me is the effect which this closure or realignment might have upon our reliance on representations made in the Army's permit application. I certainly would expect to be notified of any such drastic change in circumstances.

The substantive concerns which I call to your attention place at risk the permit which the Army seeks. Should Fort McClellan or Anniston Army Depot be closed or realigned, the Department could not issue the necessary environmental permits to allow construction and operation of the chemical demilitarization activities at Anniston Army Depot unless and until such time as the Army could demonstrate to our satisfaction that adequate and competent emergency response and backup security capabilities are in place.

Sincerely,

John M. Smith

John M. Smith
Director

JMS:SRR:se

BROWDER
DISTRICT, ALABAMA
TTEE ON ARMED SERVICES
OMMITTEE ON THE BUDGET

Congress of the United States
House of Representatives
Washington, DC 20515-0103

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115 EAST NORTHSIDE
TUSKEGEE, AL 36083
PHONE: 727-6490

February 6, 1995

Mr. John M. Smith
Director, Alabama Department
of Environmental Management
PO Box 301463
Montgomery, AL 36130-1463

Dear Mr. Smith:

In less than a month, the Department of Defense will release its proposed list of actions for the 1995 round of base realignments and closures. As you know, Fort McClellan was previously proposed for closure by the Department in 1991 and 1993, but the Defense Base Realignment and Closure Commission found that the Department "substantially deviated" from the required closure criteria and removed Fort McClellan from the closure list.

In 1993 the Alabama Department of Environmental Management in a letter to the then-Acting Secretary of the Army seriously questioned the Department of the Army's ability to meet the requirements of its Resource Conservation and Recovery Act Hazardous Waste Permit Application for the chemical demilitarization activities at Anniston Army Depot should Fort McClellan be closed. As you know, the RCRA permit application includes extensive resources at both Fort McClellan and Anniston Army Depot for responding to a chemical accident/incident at the Depot. These resources are also cited in subsequent Department of Defense and Department of the Army internal correspondence.

With the 1995 round of base closures quickly approaching, I write to inquire how the Alabama Department of Environmental Management would view the viability of the Army's RCRA permit application for chemical demilitarization if Fort McClellan and/or Anniston Army Depot were to be considered for closure or realignment.

I look forward to your response.

Sincerely,

Glen Browder

Glen Browder
Member of Congress

ADEM

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

John M. Smith, Director

Fob James, Jr.
Governor

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May 9, 1995

The Hon. Togo West
Secretary of the Army
Room 3E178 Army Pentagon
Washington, DC 20310

Dear Mr. Secretary:

As you are aware, this Department is the permitting agency which currently has under review the Army's proposal to construct and operate a chemical demilitarization facility at Anniston Army Depot. An integral part of the Army's application, as presently constituted, is a reliance on support from Ft. McClellan. You can imagine our surprise when the Army recently announced its recommendation that Ft. McClellan be closed. The inconsistency in the Army's approach in its application for the chemical demilitarization facility is of considerable concern and has been the subject of previous correspondence to then Acting Secretary Shannon in 1993 when a similar situation developed. At the risk of being somewhat repetitious, the following factors deserve your attention.

As you know, Ft. McClellan is a major component of the Contingency Plan submitted by the Army and required by 40 CFR Part 270.14(b)(7) and Part 264, Subpart D. A review of the Army's pending Resource Conservation and Recovery Act permit application demonstrates that the Army has relied heavily on the support available from Ft. McClellan to satisfy the requirements of the Contingency Plan. This is apparent in the Disaster Control Plan - Chemical Event Response Assistance Submission found in Volume VI A of the Army's application. This submission demonstrates the critical role which has been contemplated for Ft. McClellan in the event of a chemical incident or accident relating to chemical demilitarization activities at Anniston Army Depot. In light of the proposed closure, I am impelled to ask what are the Army's plans to protect the community during the demilitarization operation? My concerns for the community's safety and the permit application's viability are deepened by the Army's recent statement to Congressman Glen Browder that it is "still trying to determine what, <u>if any</u>, support is required from Ft. McClellan."

As recently as March 15, 1995, hospital and emergency personnel from Ft. McClellan participated in the Anniston Community Exercise to test response effectiveness. Indeed, no community exercise has been conducted to date without the assistance of Ft. McClellan personnel. It has been the availability of the extensive emergency infrastructure which has provided assurance that a chemical accident or incident would result in an immediate, effective, and appropriate response.

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Because Ft. McClellan is the home of the Army's Chemical School and Military Police School, it is only natural that Army planners have included the resources at Ft. McClellan in developing their contingency plan. The availability of military personnel to respond to a chemical accident or incident provides a level of confidence that appropriate action will be taken for the simple reason that soldiers, unlike civilians, are subject to orders, the disobedience of which carries far more serious implications than those to which a civilian would be subject. The Army's plans include the use of deadly force in appropriate circumstances, a matter which also favors the employment of military security forces.

Furthermore, Noble Army Hospital personnel and facilities are uniquely qualified to address chemical injuries due to their long experience with such risks, as well as the current operations of the Chemical Defense Training Facility at Ft. McClellan. Some of the specific support elements to be forthcoming from Ft. McClellan resource in the event of a chemical accident or incident include acceptance of casualties at Noble Army Hospital.

In addition, support teams from Ft. McClellan respond to requirements for security, communications, on-site medical assistance, rescue squad and public affairs needs. These are assets which the Army and the State of Alabama have relied upon as available in the event of a chemical accident or incident.

We note that the Army, in its 1995 base closure report, calls only for "minimum essential facilities, as necessary, to provide auxiliary support to the chemical demilitarization operation at Anniston Army Depot." In order for the Army's RCRA permit application for the chemical weapons destruction facility at Anniston Army Depot to proceed, this Department requires a detailed accounting of how the Army plans to replicate the support assets now available at Ft. McClellan for response to a chemical accident/incident at the Depot, should Ft. McClellan close. This accounting should include where these support assets will be located and what facilities and equipment will be provided.

Unless the Army can demonstrate that adequate and competent emergency response and backup security capabilities are in place, the State of Alabama could not issue the necessary environmental permits to allow construction and operation of the chemical demilitarization activities at Anniston Army Depot.

Sincerely,

John M. Smith

John M. Smith
Director

JMS/ssg

DEPUTY SECRETARY OF DEFENSE

1010 DEFENSE PENTAGON
WASHINGTON, DC 20301-1010

8 AUG 1994

Honorable Glen Browder
House of Representatives
Washington, DC 20515

Dear Mr. Browder,

In our meeting on June 16, 1994, you and I discussed Department of Defense policy and intentions on several matters related to the Chemical Demilitarization Project scheduled for Anniston Army Depot. You requested that I provide assurances on these matters, and I am pleased to respond to this request. As you know, the Department is eager to conduct its business in a manner that is open and meets community concerns to the maximum extent possible. The "safeguard" assurances you request serve this purpose and therefore deserve the positive responses provided below.

Please rest assured that we share your concern for safe and environmentally sound destruction of chemical weapons at Anniston. Specifically:

Prohibition against transportation:
As required in section 8075A of Public Law 103-139, no federal funds will be used to study the feasibility of removal or transportation of unitary chemical weapons from or into Anniston Army Depot, except as permitted by that section.

Enhanced stockpile surveillance:
Anniston is already incorporated into the enhanced stockpile surveillance program and will be monitored until completion of the chemical weapons destruction program.

Site-specific risk assessment:
We will perform a site-specific risk assessment at Anniston before construction of the chemical weapons disposal facility begins.

Neutralization research:
We will continue research into neutralization technology and, should breakthroughs occur early which demonstrate improved safety or environmental performance, we will endeavor to apply the new data to destruction design and operation at Anniston.

Lessons learned:
We will incorporate lessons learned from the Johnston Atoll and Tooele Army Depot destruction facilities into the design and operation of the Anniston facility.

Successful JACADS operation/Third facility contract:
As required in section 2106 of Public Law 103-160, none of the funds appropriated, pursuant to an authorization of appropriations in section 2104(a) for construction of the chemical weapons destruction facility at Anniston will be obligated until the Secretary of Defense submits a certification in accordance with that provision.

Carbon filtration system:
We will incorporate the most effective carbon filtration system available into the design of the Anniston disposal facility.

Monitoring for long-term health effects:
We will coordinate with public health agencies to monitor long-term health effects of the destruction program at Anniston.

Anniston Army Depot/Fort McClellan support resources:
By separate correspondence, I am asking the Secretary of the Army to work closely with the Alabama Department of Environmental Management to respond to the state requirements and to be fully responsive to their concerns.

Chemical Stockpile Emergency Preparedness Program:
We will provide for maximum protection for the environment and human health of the community surrounding Anniston Army Depot by providing effective leadership to ensure the successful implementation of the Chemical Stockpile Emergency Preparedness Program.

Destruction of facility upon completion of demilitarization:
The facility constructed at Anniston Army Depot will be used only for destruction of chemical weapons and munitions stored at Anniston Army Depot, and once the elimination of that stockpile is completed, the facility will be dismantled and removed.

Congressional oversight:
We will conduct all operations in full awareness of Congressional oversight through the authorization and appropriations process.

I assure you that the Department of Defense will continue to ensure that the destruction of our chemical weapons stockpile is accomplished in full cognizance of the ongoing need to protect our people and our environment.

Sincerely,

THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION AND TECHNOLOGY

AUG 1 1 1994

MEMORANDUM FOR THE SECRETARY OF THE ARMY
ATTN: ASA(ILE)

SUBJECT: Chemical Weapons Demilitarization Facility at Anniston Army Depot, Anniston, Alabama

Efforts are ongoing to ensure the successful start of chemical weapons demilitarization operations at Anniston Army Depot. In order to gain the requisite support for these operations, we must ensure the application of certain safeguards which will satisfy local concerns and enhance the safety of the demilitarization process.

We need to be fully responsive to the Alabama Department of Environmental Management, and we must commit appropriate military resources (such as the following, which have been identified at their current location) to support the demilitarization effort:

<u>Anniston Army Depot</u>:

Directorate for Law Enforcement and Security
Directorate for Ammunition Operations
Ammunition Surveillance Division
Depot Equipment Division
Environmental Management Division
Health Clinic
Depot Commander
Electronics Liaison Office

<u>Fort McClellan</u>:

Decontamination Team
Medical Assistance Team
Security Control Team
Communications Support Team
Rescue Squad
Public Affairs Office
Plans and Operations Office
Explosive Ordnance Detachment
Noble Army Community Hospital
Provost Marshal
Traffic Control and Security Force
Directorate of Plans, Training, Mobilization and Security

Directorate of Logistics
Staff Judge Advocate
Directorate of Personnel and Community Activities
Joint Information Center
Emergency Operations Center

I will appreciate your timely attention in this matter. I hope that you will be able to report to me in the very near future that the coordination required to ensure commitment of appropriate resources has been accomplished.

Please inform Dr. Ted Prociv, Deputy Assistant to the Secretary of Defense (Chemical and Biological Matters) on the status of your coordination efforts. Dr. Prociv can be reached at Extension #51097.

Noel Longuemare

R. Noel Longuemare
Principal Deputy Under Secretary of
Defense (Acquisition & Technology)

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
INSTALLATIONS LOGISTICS AND ENVIRONMENT
110 ARMY PENTAGON
WASHINGTON DC 20310-0110

September 23, 1994

Major General Alfonso E. Lenhardt
Commanding General
U. S. Army Chemical and Military
Police Centers
Fort McClellan, Alabama 36205

Dear General Lenhardt:

Fort McClellan and Anniston Army Depot have historically maintained an outstanding relationship. This relationship has resulted in cooperative agreements and mutual support for each installation's unique roles and missions.

Since March 1989, a response plan has provided the basis for procedures and actions to be employed by Fort McClellan in support of a chemical accident/incident should such an event occur at Anniston Army Depot. As we approach construction and ultimate demilitarization operations at Anniston Army Depot, the comprehensive response plan will be a significant document subject to review by the Alabama Department of Environmental Management during the permitting process. It will also become visible to elected officials and local citizens as they evaluate the emergency preparedness posture of Anniston and the surrounding communities.

The commitment to provide appropriate Department of Defense resources is demonstrated in the attached memorandum from the Principal Deputy Under Secretary of Defense for Acquisition and Technology. Request the Memorandum of Agreement between the U. S. Army Chemical and Military Police Centers and Fort McClellan and Anniston Army Depot be reviewed and updated to assure the resources referenced in the attached memorandum are specifically addressed. Also, request a copy of the revised contingency plan be provided to my Deputy for Chemical Demilitarization, Colonel James Coverstone, after revision.

I appreciate your cooperation on this extremely important matter.

Sincerely,

Robert M. Walker
Assistant Secretary of the Army
(Installations, Logistics & Environment)

Attachment

CF:
Commanding General, U. S. Army
Training and Doctrine Command

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
INSTALLATIONS LOGISTICS AND ENVIRONMENT
110 ARMY PENTAGON
WASHINGTON DC 20310-0110

September 23, 1994

Major General Dennis L. Benchoff
Commanding General
U. S. Army Industrial Operations Command
Rock Island, Illinois 61299

Dear General Benchoff:

Anniston Army Depot and Fort McClellan have historically maintained an outstanding relationship. This relationship has resulted in cooperative agreements and mutual support for each installation's unique roles and missions.

Since March 1989, a response plan has provided the basis for procedures and actions to be employed by Fort McClellan in support of a chemical accident/incident should such an event occur at Anniston Army Depot. As we approach construction and ultimate demilitarization operations at Anniston Army Depot, the comprehensive response plan will be a significant document subject to review by the Alabama Department of Environmental Management during the permitting process. It will also become visible to elected officials and local citizens as they evaluate the emergency preparedness posture of Anniston and the surrounding communities.

The commitment to provide appropriate Department of Defense resources is demonstrated in the attached memorandum from the Principal Deputy Under Secretary of Defense for Acquisition and Technology. Request the Memorandum of Agreement between Anniston Army Depot and the U. S. Army Chemical and Military Police Centers and Fort McClellan be reviewed and updated to assure the resources referenced in the attached memorandum are specifically addressed. Also, request a copy of the revised contingency plan be provided to my Deputy for Chemical Demilitarization, Colonel James Coverstone, after revision.

I appreciate your cooperation on this extremely important matter.

Sincerely,

Robert M. Walker
Assistant Secretary of the Army
(Installations, Logistics & Environment)

Attachment

CF:
Commander, Anniston Army Depot
Assistant Deputy Chief of Staff
for Chemical and Biological Matters,
U. S. Army Materiel Command

May 7, 1995

Colonel(R) Kenny W. Whitley
501 12th Street NE
Jacksonville, Alabama 36265

Congressman Glen Browder
US House of Representatives
Washington, D.C. 20515

Dear Congressman Browder,

The following is unsolicited.

When I retired after 28 years' service in 1994, I hoped to not look back, but rather to focus on a future in education. However, I feel compelled to speak out on the issue of closing Fort McClellan and moving the Chemical School and other tenants to new locations. I say, "compelled" because I believe I have unique credentials and experience that ought to lend credence to what I have to say. Those credentials are:

- I commanded Anniston Army Depot from 1989 to 1991, to include its chemical weapons storage facility, so I know the risk in storing these terrible weapons, and I know the capabilities of the depot to deal with a disaster.
- Immediately thereafter, I served as the Director of Training and Doctrine, US Army Chemical School, so I know the capabilities and importance of that school (though I was an Ordnance Officer, not a Chemical Corps officer).
- Then I served for two years in the Kingdom of Saudi Arabia as the Senior Logistics Advisor to the Saudi Land Forces, next to the major chemical threats of the world. I know the threat.
- I live in Jacksonville, Alabama, so I know the confidence that having the Fort near the depot gives to residents of this area.

What I have to say, and you may forward these comments to whomever you think might benefit from them, is:

- In the event of an accident at the depot, the personnel of Ft. McClellan and in particular those of the Chemical School and MP School would be invaluable assets to the depot and the surrounding community. The depot is very good, but there is no doubt in my mind that as its Commander I felt even better knowing those resources of the Fort were close at hand. If I had made the foregoing statement while in command I would in all probability have been relieved, as I was specifically ordered not to comment on matters concerning the Fort.

(continued)

- The Chemical School provides our Armed Forces and those of many friendly countries with the ability to detect, decontaminate, and, if need be, operate in a chemical environment, whether that environment comes from another Army or terrorists, or from an accident.

- The threats of any of the above three causes for a need of chemical skills are very real. Now is no time to be moving the Chemical School, as inevitably a new learning curve would ensue. I can say unequivocally that Saudi Arabia is not capable of dealing with a Chemical attack, and that if such an even occurred during the learning curve, the results would be disastrous.

Closing the Fort and moving the Chemical School would reduce the community-wide ability to deal with an accident at the depot. Closing the Fort and moving the Chemical School would reduce our training abilities at a time when the threat of military use of Chemical weapons remains, and terrorist use of such weapons is a rising threat.

Sincerely,

Kenny W. Whitley
Colonel, USA, Retired

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF LEGISLATIVE LIAISON
1600 ARMY PENTAGON
WASHINGTON DC 20310-1600

May 3, 1995

Honorable Glen Browder
House of Representatives
Washington, D. C. 20515

Dear Congressman Browder:

This replies to your April 17 and 18, 1995, letters to Lieutenant Colonel Dave Reed, concerning Fort McClellan and the 1995 Base Realignment and Closure process.

Officials in the Army Basing Study office prepared the enclosed information papers in response to your questions.

I trust this information will be of assistance.

Sincerely,

George T. Greiling
Lieutenant Colonel, U. S. Army
Chief, Special Actions Branch
Congressional Inquiry Division

Enclosure

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Please provide:

1. A specific definition of the support the Army will provide to the chemical demilitarization operation.

The Army is still trying to determine what, if any, support is required from Fort McClellan. The contingency plan that was included in the Army's Comprehensive Environmental Response Compensation and Liability Act (CERCLA) permit application did contemplate the provision of certain support from Fort McClellan; however, such support can now be made available from other sources, which the Alabama Department of Environmental Management has itself recognized. As part of the COBRA analysis closing Fort McClellan, 100K square feet of facilities space ($150K/yr.) were left open to accommodate personnel support which may be required. Additionally, the Army intends to relocate the 142d Explosives Ordnance Detachment (EOD) from Fort McClellan to support the chemical demilitarization mission at Anniston Army Depot.

2. Where this support will be located and what facilities and equipment it will involve.

The COBRA analysis closing Fort McClellan relocates the 142d Explosives Ordnance Detachment (EOD) with all of its equipment and personnel to Anniston Army Depot. The 100K square feet of facilities space left open at Fort McClellan is to accommodate other support which may be determined necessary. The exact facilities to be left open will be determined during the implementation phase.

3. The annual cost of this support.

The base operating support dollars remaining at Fort McClellan for leaving 100K square feet of space open is $150K per year.

4. How this cost is figured into the return on investment for closure of Fort McClellan.

The $150K mentioned in question 3 is a percentage of the base operating cost for Fort McClellan. When facilities are left open at an installation the amount of savings obtained from the closure is reduced. Therefore, the $316 million dollar twenty year net present value for the COBRA analysis closing Fort McClellan would increase if the 100K square feet of facilities in question were also closed.

THE HENRY L. STIMSON CENTER

Pragmatic steps toward ideal objectives

May 5, 1995

The Honorable Alan J. Dixon
Chairman
The Defense Base Closure and Realignment Commission
1700 North Moore Street
Suite 1425
Arlington, Virginia 22209

Dear Mr. Dixon:

We are writing to call your attention to the possible ramifications of the proposed closure of the Army base at Fort McClellan in Alabama on the successful ratification and implementation of the Chemical Weapons Convention (CWC) and on the effective training of U.S. forces to operate in a chemical environment. The Army plans to move its Chemical Defense Training Facility to Fort Leonard Wood, Missouri. This transfer will be quite difficult to accomplish, however, as it could take considerable time given the constraints of public opinion.

First, the Army's inability to relocate McClellan's Chemical Defense Training Facility to Fort Leonard Wood could disrupt the continuity of operations at a facility that is the core of the nation's chemical weapons defenses. The crucial elements of an effective defense against a chemical weapons attack are well-tested equipment and well-trained troops. Fort McClellan is the sole facility in the United States, indeed, among all of our allies, where soldiers can train using live chemical agents. Just as confidence in our equipment and training stood us well in the face of Iraq's threat to use chemical weapons during the Persian Gulf, this capability will be the bulwark of future U.S. deterrence of and defense against a chemical weapons attack.

We understand that permits have been issued for construction and operation of a replacement facility at Fort Leonard Wood. However, public opposition near Fort Leonard Wood is increasing and could result in a significant delay in this site's availability. Common sense dictates that the Commission not approve a proposal to close Fort McClellan until <u>all</u> hurdles at Fort Leonard Wood -- public hearings about permits, possible legal challenges, and completion of construction -- have been cleared.

Second, the Army's plans to move the Chemical Defense Training Facility to Fort Leonard Wood could derail the program to destroy the U.S. chemical weapons stockpile. Our study on the status of the U.S. chemical weapons destruction program (<u>The U.S. Chemical Weapons Destruction Program: Views, Analysis, and Recommendations</u>, September 1994) revealed a lack of public trust to be a significant

21 Dupont Circle, NW Fifth Floor Washington, DC 20036 *tel* 202/223-5956 *fax* 202/785-9034

problem facing the Army in its execution of this program. Trust is again an issue, and a vital one at that, because the Army has explicitly linked the availability of resources at Fort McClellan to the safety of chemical weapons destruction in nearby Anniston.

When speaking to the citizens of Anniston, Army officers and Pentagon civilians have frequently portrayed Fort McClellan as a safety net -- a cache of expertise and equipment -- that would be available throughout the operation of Anniston's chemical weapons destruction facility. This promise has been a principal reason that this community has grudgingly gone along with Army plans that many of its citizens fear greatly. Among the numerous Fort McClellan resources that the Army lists in its Anniston permit request as integral to assuring safety during destruction operations are the Decontamination Team, Medical Assistance Team, Security Control Team, Rescue Squad, Explosive Ordnance Detachment, Emergency Operations Center, and Noble Army Community Hospital. In a 13 February 1995 letter, the Director of Alabama's Department of Environmental Management John M. Smith stated that closure of Fort McClellan would undercut his department's "reliance on representations made in the Army's permit application" and "place at risk the permit which the Army seeks."

The Army has clearly stated that the risks to public health and the environment will only increase the longer these chemical weapons are stored. If citizen resistance blocks the Army's effort to build and operate a destruction facility at Anniston, its plans for the subsequent construction of similar facilities at six other sites in the United States will be placed in jeopardy. Delay in this program could have serious consequences for public health and the environment in several U.S. communities.

In addition, the premature transfer of the Chemical Defense Training Facility to Fort Leonard Wood could result in the Army being derelict in its duty to fulfill a Congressional mandate to destroy the chemical weapons stockpile by 2004. The Army's inability to destroy the stockpile in a timely fashion would place the United States in violation of the CWC. The CWC, which awaits U.S. Senate approval, requires destruction of chemical arsenals within a ten-year timeframe and is likely to enter into force early in 1996.

While we applaud the streamlining of America's defense facilities, our nation's ability to defend itself against a chemical weapons attack and the safety and viability of destruction operations at Anniston must not, in our view, be sacrificed amidst downsizing efforts. At a minimum, we ask that the Commission hold a treaty hearing, as it has done in the past, so that it might receive testimony and might more thoroughly consider these important issues.

In closing, we believe that it would be wise for the Commission to once again reject the recommendation to close Fort McClellan, keeping this facility open until a replacement facility is constructed at Fort Leonard Wood and the destruction operations at Anniston are completed. To do otherwise would jeopardize important national security objectives and international arms control treaty obligations.

Best wishes,

Amy E. Smithson
Director, CWC Implementation Project

Michael Krepon
President

Center for Strategic & International Studies
Washington, DC

May 10, 1995

The Honorable Alan J. Dixon
Chairman
The Defense Base Closure and Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, Va. 22209

Dear Mr. Dixon:

I am writing with regard to the proposed closure of the Army base at Fort McClellan, Alabama. As you know, this base has previously been targeted for closure and the commission has previously acted to reverse that decision. The commission should again act to keep Fort McClellan open.

In prior correspondence with the commission, I raised my principal concerns which I will not detail here for the sake of brevity. But the punchline is simple. At a time when chemical weapons are proliferating, the United States cannot create new vulnerabilities in the training and competence of its forces in chemical warfare. At a time when a major new international chemical disarmament convention is entering into force, the United States cannot lose one of its major tools for making that convention succeed.

The army's proposal to reshuffle its chemical defense assets in the wake of the closure of Fort McClellan is unlikely to be able to accomplish what the national interest requires. The arguments made to you by Amy Smithson and Michael Krepon in a letter dated May 5 explain this more fully. I wish to align myself with their arguments, although I would go further in emphasizing the existing deficiencies in the U.S. defense posture as revealed so starkly in the Desert Shield operation.

Thank you for the opportunity to raise these points for consideration.

Sincerely,

Brad Roberts
Research Fellow
Editor, *The Washington Quarterly*

1800 K Street Northwest • Washington DC 20006 • Telephone 202/887-0200

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF
WASHINGTON, DC 20310-0200

May 23, 1995

REPLY TO
ATTENTION OF

The Honorable Alan J. Dixon, Chairman
Defense Base Closure and Realignment Commission
1700 North Moore Street Suite 1425
Arlington, Virginia 22209

Please refer to this number
when responding 950524-11

Dear Chairman Dixon:

I would like to comment on a memorandum dated May 16, 1995, subject: Review of Draft Air Permit, Fort Leonard Wood Smoke Training (Encl 1). Regrettably, it has caused some confusion over the Army's ability to conduct smoke training at Fort Leonard Wood. Statements made in this memorandum are unsubstantiated and represent the author's personal views. They do not represent the official position of the Chemical School, Training and Doctrine Command or Headquarters, Department of the Army.

A point/counterpoint paper discussing the memorandum is enclosed (Encl 2). Presently, no final smoke permit has been issued by the State of Missouri. Therefore, it is premature to speculate on its impact on training.

Smoke modeling has been conducted since May 1993 and a full smoke test was conducted during May 1993. It is the Army's view that smoke training can be accomplished at Fort Leonard Wood. There has been extensive coordination between Fort McClellan and Fort Leonard Wood regarding all issues, including smoke and obscurant training.

The views expressed in LTC Newing's memorandum should not be misconstrued as the Army's position nor should you assume they are factual. The Army is confident it will be able to conduct smoke training at Fort Leonard Wood, Missouri. We can assure you there will be no degradation in chemical training and readiness.

Sincerely,

JAMES E. SHANE, JR
Brigadier General, GS
Director of Management

Enclosures

CF:
CoS TRADOC
David A. Shorr, MDNR
Representative Ike Skelton

DEPARTMENT OF THE ARMY
U.S. ARMY CHEMICAL SCHOOL
FORT McCLELLAN, ALABAMA 36205-5020

REPLY TO ATTENTION OF

ATZN-CM-SAC

16 May 95

MEMORANDUM FOR MAJ TELLER, HQDA, OSJA, ENVIRONMENTAL OFFICE

SUBJECT: Review of Draft Air Permit, Fort Leonard Wood Smoke Training

1. The purpose of this memorandum is to provide comments on the subject document per your request. More detailed comments are found at the enclosure.

2. The State of Missouri smoke permit restrictions, if implemented, will create overwhelming degradation to Chemical Mission readiness. The restrictions will cut back the minimum amount of annual fog oil use by 30%. The daily allowance for smoke training time will be cut by 75%. After suffering these unacceptable losses, it further limits our Joint forces to smoke operations during weather conditions which may exist only 60% of the year. The smoke permit virtually eliminates more than one smoke event per day. The impact would be violations (subject to fines) for 92 days when two events are trained, another 56 days when three events are trained, and another 21 days when four separate events are underway at one time. If allowed to stand, the Missouri smoke permit allows us to conduct roughly 25% of training to standards, these restrictions would kill both the US Army and US Air Force smoke training.

3. During the Chemical Functional Area Analysis on 31 Oct 94, the Vice Chief of Staff challenged the Army to "take the lead on proactive involvement with agencies drafting environmental regulatory requirements that impact on chemical training on Army ranges. Focus on leading towards the least restrictive measures that provide the maximum training opportunities. (Action ODCSOPS)"

4. Under Base Realignment and Closure actions, Fort Leonard Wood, unfortunately without coordination with the Chemical School, applied for a smoke permit and variance. The Missouri smoke permit restrictions will inadvertently squash the VCSA's goal and tragically cripple the capability to conduct smoke training. One of the most stunning restrictions of this permit is the loss of capability to train with smoke hand grenades, vehicular smoke grenades, smoke pots, infrared defeating grenades, riot control agents, and large area infrared obscurants. The Reserve Component smoke training at the Chemical School would also be a casualty.

5. If you have questions regarding this quick assessment of the smoke and obscurants issue, please call me, DSN 865-6228 or commercial 205-848-6228 or Fax 865-6786.

Encl

EDWARD W. NEWING
LTC, CM
Special Assistant to the Commandant

Encl 1

Point / Counterpoint

Point #1. "The State of Missouri smoke permit restrictions, if implemented, will create overwhelming degradation to Chemical Mission readiness. the restrictions will cut back the minimum amount of annual fog oil use by 30%. The daily allowance for smoke training time will be cut by 75%. After suffering these unacceptable losses, it further limits our Joint forces to smoke operations during weather conditions which may exist only 60% of the year. The smoke permit virtually eliminates more than one smoke event per day. The impact would be violations (subject to fines) for 92 days when two events are trained, another 56 days when three events are trained, and another 21 days when four separate events are underway at one time. If allowed to stand, the Missouri smoke permit allows us to conduct roughly 25% of training to standards, these restrictions would kill both the US Army and US Air Force smoke training."

The draft permit provides a comfortable range of training opportunities for required smoke generation training, to include joint service requirements. The permit conditions set a limit on pollution tonnage per year and per day - not restrictions on training operations. Multiple training events/scenarios are permissible per day, not to exceed a total of 3700 pounds of fog oil in a 24-hour period. These criteria were selected after extensive review of training programs of instruction, range use data, smoke generation equipment maintenance records, and legal annual fog oil pollution reports. All of this information was provided by Fort McClellan.

Point #2. "During the Chemical Functional Area analysis on 31 Oct 94, the Vice Chief of Staff challenged the Army to "take the lead on proactive involvement with agencies drafting environmental regulatory requirements that impact on chemical training on Army ranges. Focus on heading toward the least restrictive measures that provide the maximum training opportunities (Action ODCSOPS)"

Fort Leonard Wood has long been an installation of excellence in environmental stewardship. Their approach to permitting smoke generation training with Missouri's Department of Natural Resources is very supportive in meeting training requirements, but sets standards in place to prevent environmental degradation and ensure maintenance of National Ambient Air Quality Standards.

Point #3. "Under Base Realignment and Closure actions, Fort Leonard Wood, unfortunately without coordination with the Chemical School, applied for a smoke permit and variance."

This is not true. Fort Leonard Wood has, in fact, coordinated every conceivable detail in matters relative to smoke training since 1991, to include extensive on-site smoke training trials at Fort Leonard Wood. Two previous

Encl 2

BRAC recommendations have afforded numerous opportunities for understanding permit requirements. The attached calendar of events depicts the level of coordination which bears witness to the exhaustive efforts to date.

Point #4. "One of the most stunning restrictions of this permit is the loss of capability to train with smoke hand grenades, vehicular smoke grenades, smoke pots, infrared defeating grenades, riot control agents, and large area infrared obscurants. The Reserve Component smoke training at the Chemical School would also be a casualty."

These activities are not restricted or lost due to a fog oil permit. These are basically current operations and simply are not included in a specific fog oil permit. MDNR has indicated the following:

> **I find it an incredible leap of logic for a Lt. Col. in the Army to determine that because an item does not exist in a permit, that it is restricted. If this is the case, then no activities can occur at Fort McClellan because none are permitted.**
>
> **Fort Leonard Wood applied for and is in the process of securing a permit for change in mission assignment that would add new activities. Unless otherwise dictated in statute, only those activities requiring a permit receive permitting approval and review. Lt. Col. Newing's theory of law is completely incorrect.**
>
> **I hope this clarifies the Department's position on "stunning restrictions" existing because of their absence from a permit. You and your staff may continue to breathe even though breathing is not permitted under Lt. Colonel Newing's theory of law.**

These activities are obviously not restricted.

Calendar of Events
Smoke Training Permit Coordination Timeline
Fort McClellan (FMC) & Fort Leonard Wood (FLW)

29 Apr 93	Received electronic mail from COL Nelson, Ft McClellan, indicating 62,800 gal fog oil training mission level consumed on 2 ranges (56, 24A)
Apr 93	FLW field trip to FMC on smoke training and other matters
May 93	Smoke trials at FLW
May 93	FMC, including key personnel from the Chemical School, conducted field trip to FLW reference smoke training to discuss requirements
May 93	Obtained FMC Environmental Impact Statement for Chemical School move from Aberdeen Proving Ground to FMC; reviewed smoke training pollution data
19 May 93	Training & Doctrine Command validated fog oil mission load at max 60,000 gal with expected decrease due to Army downsizing
May 93	Smoke trial
Jun 93	FLW BRAC team field trip to FMC to finalize requirements
15-17 Mar 95	FMC (MP School Direcector of Training, Chemical School's LTC Newing, and other senior representatives) visit FLW to review requirements
3-7 Apr 95	FLW visited Fort McClellan with BRAC Team Vhief, Environmental Staff, DOT, DPTM, Range Control Chief

- visited smoke training ranges
- discussed training requirements / frequencies with LTC Newing & LTC Sutton
- visited POL yards
- questioned LTC Newing / Sutton on training requirements per course OSUT, BNCOC, ANCOC, OBC, etc. including training scenario, equipment, training durations
- visited / discussed with FMC environmental staff
- received copies of all current POI's and reviewed smoke training requirements
- obtained smoke range use data from FMC range control
- FLW BRAC Team Chief / Environmental staff visted Pelham Range at invitation of LTC Newing and participated in BNCOC smoke training on

wheeled and track vehicle - discussed typical training scenario with numerous instructors including number of vehicles / generators used and number of hours actual smoke generation time

- visited maintenance facilities - obtained smoke generation usage data
- discussions with FMC environmental staff; Mr. Levy informed Mr McCarthy of FLW that FMC was planning to submit a minor source (less than 100 tons per year pollution) Title V permit application for smoke training which equates to 26,000 gal usage
- obtained 1992 air emissions inventory dated Nov 93, showing 230 tons/year pollution

12-13 Apr 95 FMC MP/Chemical School staff visited FLW to validate operational concept

1 May 95 Received spreadsheet from LTC Newing and COL Caughlin on smoke training program of instruction requirements and range-use days

3-5 May 95 MP & Chemical School Directors of Training visit FLW to validate construction requirements and Operational Concept

Congress of the United States
Washington, DC 20515

Please refer to this number when responding 950328-1

March 24, 1995

Re: Environmental Permit Requirements to Relocate the Chemical Defense Training Facility (CDTF)

Ms. Madeline Creeden
General Counsel
Defense Base Closure and Realignment Commission
1700 North Moore Street
Arlington, VA 22209

Dear Ms. Creeden:

During Commissioner Davis's site visit to Fort McClellan, Alabama, the state congressional delegation and representatives from the community raised the military value issues that justify the retention of the Fort. We believe the military value issues by themselves mandate a decision to retain Fort McClellan; nevertheless, the question of environmental permitting of a new Chemical Defense Training Facility (CDTF) at Fort Leonard Wood, Missouri, has been raised repeatedly throughout this process.

As you know, the 1993 Commission investigated the question very closely and recommended in its final report:

> "... that if the Secretary of Defense wants to move the Chemical Defense School and Chemical Decontamination (sic.) Training Facility in the future, the Army should pursue all of the required permits and certification for the new site prior to the 1995 Base Closure Process."

On May 19, 1993, in response to a request from then-Chairman Courter, the Director of the Missouri Department of Natural Resources, David A. Shorr, stated:

> "... we anticipate that the Chemical Defense Training Facility would require permits from Missouri's Air Pollution Control Program, Water Pollution Control Program (NPDES), and the Hazardous Waste Program." (Letter enclosed as Tab A)

On December 23, 1994, Mr. Shorr wrote to Secretary of Defense Perry confirming his 1993 decision:

> "As I indicated on June 4, 1993, we anticipate the construction will require air pollution control, water

pollution control, and hazardous waste program-related permits." (Letter enclosed as Tab B)

As summarized in the chart shown to Commissioner Davis at the Fort McClellan site visit (enclosed as Tab C), we believe that in order to operate a CDTF, the Department of the Army must obtain not only an air permit to construct the facility, but an air permit to operate the facility as well as Resource Recovery and Conservation Act (RCRA) and NPDES permits.

As of March 1 of this year, the Army had not applied for any of the required permits. On March 1, the Army did apply for the easy-to-obtain air permit to construct the facility but did not apply for the more-difficult-to-obtain air permit to operate the facility. Moreover, the Army has not sought to obtain a hazardous waste program permit for the incinerator which, as Mr. Shorr states in his May 19, 1993, letter, "the permit for the incinerator from the hazardous waste program will, no doubt, take the most time to obtain."

It seems clear that the Army has not followed the 1993 Commission's clear guidance and is not making a good faith effort to meet the standard set by the Commission.

Sincerely,

Howell Heflin
United States Senator

Richard Shelby
United States Senator

Glen Browder
Member of Congress

/vfp

Enclosures: as stated

cc w/enclosures: Mr. Walt Phillips
Mr. Pete Hidalgo
Mr. Rick Zehrer
Mr. George R. Schlossberg

TAB A

STATE OF MISSOURI
Mel Carnahan, Governor • David A. Shorr, Director
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF THE DIRECTOR
P.O. Box 176 Jefferson City, MO 65102-0176 (314)751-4422
FAX (314)751-7627

May 19, 1993

Please refer to this number when responding 930520-2

Mr. Jim Courter
Chairman, Defense Base Closure and Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, VA 22209

Dear Mr. Courter:

In your letter of May 7, concerning the relocation of the Chemical Defense Training Facility at Fort McClellan to Fort Leonard Wood in Missouri, you presented four issues for discussion by the State of Missouri. The Missouri Department of Natural Resources is still in the process of reviewing the applicable Environmental Impact Statement and permitting information from Fort McClellan for the Chemical Defense Training Facility. Below I have provided you with Missouri's initial response to the issues. We will continue to review documents recently received and will provide additional information within two weeks as appropriate.

Issue #1: The Chemical Defense Training Facility will require nine years to put into operation.

Discussion: (See enclosed timeline.) An Environmental Impact Statement will require four years to complete, based on experience at Lexington-Bluegrass Army Depot with chemical weapons demilitarization facility, and the Gaithersburg, MD chemical weapons research facility. There was no inkling of opposition until the Environmental Impact Statement scoping meeting.

Missouri's Response: We understand that it is the Department of Defense's intent to prepare an Environmental Impact Statement (EIS) for the movement of all operations to Fort Leonard Wood. The Chemical Defense Training Facility will be included in this package and not result in an additional document. All correspondence regarding the EIS should be directed to my office to ensure timely response. We are willing to cooperate to the maximum extent possible in the identification of issues for purposes of the EIS related to compliance with state environmental laws and permitting requirements.

Issue #2: The Resource Conservation Recovery Act (RCRA) permits required for the Chemical Defense Training Facility and smoke operations will take two-four years to obtain, with most probable timeframe being closer to four years.

RECYCLED PAPER

Discussion: Based on Army guidance, which provides a planning figure of two-four years (reference not stated). As an example, chemical demilitarization facility at Johnston Island took four years to obtain a RCRA permit, and it isn't even in the continental U.S. It is Army policy that construction cannot commence without a completed RCRA permit. This will also hold up the move of the Chemical School until 1998, after the RCRA permit is received.

Missouri's Response: Currently, we anticipate that the Chemical Defense Training Facility would require permits from Missouri's Air Pollution Control Program, Water Pollution Control Program (for NPDES), and the Hazardous Waste Program. The permit for the incinerator from the Hazardous Waste Program will, no doubt, take the most time to obtain. Air and water permits typically require six months or less. The original NPDES water quality permit issued to Lake City Army Ammunition was issued within seven months of receiving all necessary information. Depending on the complexity of the permit and the complexity of the incinerator, the Part 1 application will take nine to fourteen months to complete. Part 2 of the permit (after construction is complete), will take an additional eight months to a year to complete. I have enclosed a typical review schedule for your use in this matter. Please note the items with an asterisk on the schedule are dependent on Department of Defense, and the timeliness and completeness of their response can either accelerate or delay the process.

I have also included for your review Missouri's applicable hazardous waste rules for incinerators and a brief history of the permitting of a hazardous waste incinerator at Lake City Army Ammunition Plant, which took nine months to complete.

Issue #3: The Chemical Defense Training Facility will be more costly to build in Missouri because a technology upgrade will be required. This will add $20-25 million dollars to construction costs.

Discussion: Missouri will require a more advanced incineration system in order to obtain a RCRA permit.

Missouri's Response: At this time I see no reason to believe that construction of an incinerator in Missouri would be any more costly or time consuming than construction in any other state. Missouri's rules on hazardous waste incinerators parallel those of the U.S. EPA and these rules apply nationwide. As mentioned previously, I have enclosed a copy of Missouri's rules for the permitting of the incinerator through the Hazardous Waste Program.

Issue #4: Smoke training operations are not possible in an environmentally sensitive area like Fort Leonard Wood and the Ozarks, including the national forest areas surrounding Fort Leonard Wood.

Discussion: Last year, Fort McClellan used 600,000 lbs. of fog oil for smoke training operations. Missouri would never allow smoke to filter into national forest areas or be used around the sensitive Indiana and Grey Bat feeding areas.

Missouri's Response: Based upon information submitted to the Department of Natural Resources by Fort Leonard Wood, the Army is in the process of establishing numerous test areas and with monitoring of meteorological conditions they propose to ensure that the smoke stays on Army property. We will have to study the issue further. Currently, we are scheduled to observe trial runs of the smoke training exercise to give us a better feel for environmental impacts that can be anticipated.

I hope that this information will assist you in your deliberations. Should you have additional questions, please don't hesitate to call me at 314-751-4422.

Very truly yours,

DEPARTMENT OF NATURAL RESOURCES

David A. Shorr
Director

DAS:esp

Enclosures

c: The Honorable Christopher Bond
The Honorable John Danforth
The Honorable William Clay
The Honorable James Talent
The Honorable Richard Gephardt
The Honorable Ike Skelton
The Honorable Alan Wheat
The Honorable Pat Danner
The Honorable Melton Hancock
The Honorable Bill Emerson
The Honorable Harold Volkmer

TAB B

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF THE DIRECTOR
P.O. Box 176 Jefferson City, MO 65102-0176 (314)751-4422
FAX (314)751-7627

December 23, 1994

The Honorable William J. Perry
Secretary
Department of Defense
The Pentagon
Washington, D.C. 20301

RE: Fort Leonard Wood, Missouri

Dear Secretary Perry:

Enclosed you will find two letters regarding Fort Leonard Wood and the Defense Base Closure and Re-Alignment Commission. The letters relate Missouri's position regarding the transfer of the Chemical School and its Chemical Defense Training Facility (CDTF) from Fort McClellan to Fort Leonard Wood. This letter is to reiterate our position regarding permitting at Fort Leonard Wood.

As expressed in prior letters, the Missouri Department of Natural Resources has indicated that the CDTF is a permitable facility under Missouri law.

As I indicated on June 4, 1993, we anticipate the construction of this facility will require air pollution control, water pollution control and hazardous waste program-related permits. To date, we have not received applications for such permits and eagerly await their submittal so that we can timely review and approve if appropriate.

Missouri is prepared to expedite the review processes for these facilities.

We have an excellent working relationship with the environmental staff at Fort Leonard Wood and the bases' command. Fort Leonard Wood has and continues to demonstrate a commitment to sound environmental stewardship. That relationship certainly will add to our ability to have a prompt review with quick responses.

Should you have any questions, please feel free to contact me directly about any environmental activities at Fort Leonard Wood.

Very truly yours,

DEPARTMENT OF NATURAL RESOURCES

David A. Shorr
Director

DAS:sh

Enclosure

Permit Summary

CDTF Permits	Required	Application Before 1 March	Application After 1 March	Granted
Air Permit to Construct	Yes	No	Yes	No
Air Permit to Operate	Yes	No	No	No
RCRA	Yes	No	No	No
NPDES	Yes	No	No	No
EIS	Yes	Not Initiated		
Smoke Permits				
Air Permit	Yes	No	Limited to Fog Oil	No
EIS	Yes	Not Initiated		

TAB C

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ATLANTA
DENVER
KANSAS CITY
LITTLE ROCK
NEW YORK
OKLAHOMA CITY
OMAHA
PHOENIX
PITTSBURGH

May 26, 1995

Madelyn R. Creedon, General Counsel
Defense Base Closure and Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, Virginia 22209

Re: Environmental Permitting at Fort Leonard Wood, Missouri

Dear Ms. Creedon:

On May 18, 1995, Mr. Barry Steinberg sent you a letter with accompanying analyses which summarized the status of the environmental permits which the Army has requested from the State of Missouri for the proposed relocation of the Army's Chemical School from Fort McClellan, Alabama, to Fort Leonard Wood, Missouri.

Attached for your review and use is a copy of the Technical Comments for the permit issues associated with the Chemical School's proposed move which were submitted to the Missouri Department of Natural Resources ("MDNR") on May 12, 1995. These technical comments were prepared by the St. Louis environmental engineering firm of Schreiber, Grana & Yonley, Inc., for the Missouri Coalition for the Environment and were submitted to MDNR as part of the various state permit appeal challenges described in Mr. Steinberg's May 18th letter to you.

Based upon the Schreiber, Grana & Yonley, Inc. report, the Army has not provided the State of Missouri with the necessary information to grant permits with regard to the activities performed at the Chemical School, nor has the Army attempted to ferret out the necessary information to give the MDNR.

Also enclosed for your reference is a copy of the applicable section of Missouri's Air Conservation Law delineating the requirements which must be met in order for a fog oil variance to be granted from the state's air regulations.

We are available to discuss these matters further, if you should so desire. If you have any questions please do not hesitate to call Barry Steinberg at (703) 351-5273 or myself at (202) 828-2418.

Sincerely,

George R. Schlossberg

MISSOURI ENVIRONMENTAL LAW HANDBOOK

SECOND EDITION

Armstrong, Teasdale, Schlafly & Davis

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2.8.7 **Confidentiality**. Any member of the Commission or employee who is convicted of willful disclosure or conspiracy to disclose confidential information is guilty of a Class A misdemeanor and upon conviction shall be punished by a fine of not more than $1,000.[166]

2.8.8 **No Impact On Other Criminal Statutes**. Section 643.170 is a clarifying section which states that nothing in the Missouri air law shall impact any other criminal provisions of the Missouri statutes.

2.8.9 **No Private Cause of Action**. The law provides that it should not be construed "to create or imply a private cause of action for a violation" of the Missouri air law.[167]

2.9 Procedures

The law provides for procedures at public hearings, including who may be heard, subpoenas, transcripts and for hearings before a single Commissioner or a hearing officer. All final orders of the Commission require the concurrence of four members.[168]

2.10 Variances

The law provides authority to the Commission to grant exceptions and variances from the rules which are promulgated pursuant to the Clean Air Act. The grounds for variances are that compliance with the Rules

> "(1) would cause economic hardship; or (2) is physically impossible; or (3) is more detrimental to the environment than the variance would be; or (4) is impractical or of insignificant value under existing conditions."[169]

---

[166] Mo. Rev. Stat. § 643.151(4) Laws 1992. See Section 2.15.6, infra.

[167] Mo. Rev. Stat. § 643.170 (Laws 1992).

[168] Mo. Rev. Stat. § 643.100 (Laws 1992).

[169] Mo. Rev. Stat. § 643.055.2 (Laws 1992).

> "The Commission is empowered to grant individual variances beyond the limitations described by the law whenever it is found upon presentation of adequate proof that compliance with any provision of the law or any rule or order of the Commission or Director will result in a taking of property without just compensation or in the closing and elimination of any lawful business, occupation or activity without sufficient corresponding benefit or advantage to the people."

No variance may be granted where the effect will be to permit the continuance of a health hazard, and no variance granted may be construed to relieve the person of liability imposed by other law for the maintenance of a nuisance.[170]

The Director must take action within 30 days after a request for a variance has been filed and make a recommendation to grant or deny the petition for a variance within 120 days. If the Director fails to make a recommendation within 120 days, the applicant may request a hearing before the Commission.[171]

The Commission is required to act promptly upon any request for a hearing or appeal and must set a hearing within 60 days of a request for a hearing or an appeal from the action of the Director. A hearing may be held by a designated Commission member. The Commission as a whole must render a decision within 60 days after submission of the record. A party aggrieved by failure of the Commission to meet the time limits may file an action in the Circuit Court of Cole County to compel completion of the administrative proceeding and to obtain a final decision. The applicant may also recover from the Commission "all attorneys fees reasonably incurred as a result of the delay".[172]

---

[170] Mo. Rev. Stat. § 643.110 (Laws 1992).

[171] Id.

[172] Mo. Rev. Stat. § 643.120 (Laws 1992).

MISSOURI AIR CONSERVATION LAW

(Annotated Missouri Statutes, Title 40 — Additional Executive Departments, Chapter 643 — Air Conservation; Enacted by Laws of 1965, Page 335; Amended by Laws of 1967, p. 296; Laws of 1971, HB 66; Laws of 1972, HB 1184; Laws of 1979, SB 21; Laws of 1988, HB 1187; Laws of 1989, HB 77, 78, 356; Laws of 1991, SB 45; Laws of 1992, SB 544)

Administering Agency: Missouri Air Conservation Commission
P.O. Box 1002
Jefferson City, Missouri 65101

643.010. This chapter shall be known and may be cited as the "Missouri Air Conservation Law".

Generally

643.020. When used in this chapter and in standards, rules and regulations promulgated under authority of this chapter, the following words and phrases mean:

(1) "AHERA", Asbestos Hazard Emergency Response Act of 1986 (P.L. 99-519);

(2) "Abatement project designer", an individual who designs or plans AHERA asbestos abatement;

(3) "Air cleaning device", any method, process, or equipment which removes, reduces, or renders less obnoxious air contaminants discharged into ambient air;

(4) "Air contaminant", any particulate matter or any gas or vapor or any combination thereof;

(5) "Air contaminant source", any and all sources of air contaminants whether privately or publicly owned or operated;

(6) "Air pollution", the presence in the ambient air of one or more air contaminants in quantities, of characteristics and of a duration which directly and proximately cause or contribute to injury to human, plant, or animal life or health or to property or which unreasonably interferes with the enjoyment of life or use of property;

(7) "Ambient air", all space outside of buildings, stacks, or exterior ducts;

(8) "Area of the state", any geographical area designated by the commission;

(9) "Asbestos", the asbestiform varieties of chrysotile, crocidolite, amosite, anthophyllite, tremolite and actinolite;

(10) "Asbestos abatement", the encapsulation, enclosure ore removal of asbestos containing materials in or from a building or air contaminant source, or preparation of friable asbestos containing material prior to demolition;

(11) "Asbestos abatement contractor", any person who by agreement, contractual or otherwise, conducts asbestos abatement projects at a location other than his own place of business;

(12) "Asbestos abatement projects", an activity undertaken to enacapsulate, enclose or remove ten square feet or sixteen linear feet or more of friable asbestos containing materials from buildings and other air contaminant sources, or to demolish buildings and other air contaminant sources containing ten square feet or sixteen linear feet or more;

(13) "Asbestos abatement supervisor", an individual who directs, controls, or supervises others in asbestos abatement projects;

(14) "Asbestos abatement worker", an individual who engages in asbestos abatement projects;

(15) "Asbestos containing material", any material or product which contains more than one percent asbestos, by weight;

(16) "Asbestos air sampling professional", an individual who by qualifications and experience is proficient in asbestos abatement air monitoring. The individual shall conduct, oversee or be responsible for air monitoring of asbestos abatement projects before, during and after the project has been completed;

(17) "Asbestos air sampling technician", an individual who has been trained by an air sampling professional to do air monitoring. Such individual conducts air monitoring of an asbestos abatement project before, during and after the project has been completed;

(18) "Class A source", either a class A1, A2 or A3 source as defined in this section;

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shops or to affect any aspect of employer-employee relationships as to health and safety hazards.

4. Any information relating to secret processes or methods of manufacture or production discovered through any communication required under this section shall be kept confidential.

643.055. 1. Other provisions of law notwithstanding, the Missouri air conservation commission shall have the authority to promulgate rules and regulations, pursuant to chapter 536, RSMo, to establish standards and guidelines to insure that the state of Missouri is in compliance with the provisions of the federal "Clean Air Act," as amended (42 USC Section 7401 et seq.). The standards and guidelines so established shall not be any stricter than those required under the provisions of the federal Clean Air Act, as amended; nor shall those standards and guidelines be enforced in any area of the state prior to the time required by the federal Clean Air Act, as amended.

2. The Missouri air conservation commission shall also have the authority to grant exceptions and variances from rules set under subsection 1 of this section when the person applying for the exception or variance can show that compliance with such rules:

(1) Would cause economic hardship; or

(2) Is physically impossible; or

(3) Is more detrimental to the environment than the variance would be; or

(4) Is impractical or of insignificant value under the existing conditions.

643.060. In addition to any other powers vested by law, the director shall have the following powers and duties:

(1) Retain, employ, provide for, and compensate, within appropriations available therefor, such consultants, assistants, deputies, clerks, and other employees on a full- or part-time basis as may be necessary to carry out the provisions of sections 643.010 to 643.190 and prescribe the times at which they shall be appointed and their powers and duties;

(2) Accept, receive and administer grants or other funds or gifts from public and private agencies including the federal government for the purpose of carrying out any of the functions of sections 643.010 to 643.190. The director shall apply for all available grants and funds authorized and distributed pursuant to Title XI of the federal Clean Air Act, as amended, 29 U.S.C. 1662e, for training, assistance and payments to eligible individuals. The director shall report annually to the governor and the general assembly, the amount of revenue received under Title XI of the Clean Air Act and the distribution of such funds to eligible persons. Funds received by the director pursuant to this section shall be deposited with the state treasurer and held and disbursed by him in accordance with the appropriations of the general assembly. The director is authorized to enter into contracts as he may deem necessary for carrying out the provisions of sections 643.010 to 643.190;

(3) Budget and receive duly appropriated moneys for expenditures to carry out the provisions and purposes of sections 643.010 to 643.190;

(4) Administer and enforce sections 643.010 to 643.190, investigate complaints, issue orders and take all actions necessary to implement sections 643.010 to 643.190;

(5) Receive and act upon reports, plans, specifications and applications submitted under rules promulgated by the commission. Any person aggrieved by any action of the director under this provision shall be entitled to a hearing before the commission as provided in section 643.080. The commission may sustain, reverse, or modify any action of the director taken under this provision, or make such other order as the commission shall deem appropriate under the circumstances;

643.070. 1. The commission shall adopt rules pursuant to chapter 536, RSMo. The commission shall notify any air pollution control agency with a certificate of authority which may be affected by the rule and any person who has previously requested notice when the proposed rulemaking is submitted to the secretary of state for publication in the Missouri Register. In addition, any interested persons, whether or not heard, may submit, within seven days subsequent to the hearings, a written statement of their views. The commission may solicit the views, in writing, of persons who may be affected by, or interested in, proposed rules and regulations, or standards. Any person heard or represented at the hearing or making written request for notice shall be given written notice of the action of the commission with respect to the subject thereof.

2. Rules shall be approved after public hearing and shall be approved in writing by at least four members of the commission.

3. Any rule or any amendment or repeal thereof which is adopted by the commission may differ in its terms and provisions for particular types and conditions of air pollution or air contamination, for particular air contaminant sources, and for particular areas of the state.

4. No rule or portion of a rule promulgated under the authority of section 643.010 to 643.190 shall become effective until it has been approved by the joint committee on administrative rules. Upon filing any proposed rule with the secretary of state, the commission shall concurrently submit such proposed rule to the committee which may hold hearings upon any proposed rule or portion thereof at any time. In the event the committee disapproves any proposed rule or portion thereof, the committee shall notify the commission and the secretary of state. If any proposed rule or portion thereof is disapproved by the committee, the secretary of state shall publish in the Missouri Register, as soon as practicable, an order that such rule or portion thereof has been disapproved.

5. The commission shall not file any final order of rulemaking with the secretary of state until twenty days after such final order of rulemaking has been received by the committee. The committee may hold one or more hearings upon such final order of rulemaking during the twenty day period. If the committee neither approves or disapproves any order of rulemaking within the twenty day period, the commission may file such order of rulemaking with the secretary of state and the order of rulemaking shall be deemed approved, subject to subsequent suspension by the committee. In the event the committee disapproves any order of rulemaking or portion thereof, the committee shall notify the commission and the secretary of state.

6. Any rule or portion of a rule promulgated under the authority of section 643.010 to 643.190 may be suspended by the committee at any time after a hearing conducted thereon. If any rule is suspended by the committee, the secretary of state

or the environment, the commission or the director shall issue a written cease and desist order to said person to discontinue immediately such activity or discharge; provided, however, the commission may countermand such order of the director. If such person, notwithstanding such order, continues the activity or discharge of such contaminants into the atmosphere, the commission or the director shall cause to be filed by the attorney general or other counsel in the name of this state, suit for a temporary restraining order, temporary injunction, and permanent injunction. Any such action shall be given precedence over all other matters pending in the circuit courts.

643.100. 1. At any public hearing all testimony taken before the commission shall be under oath and recorded. The transcript so recorded shall be made available to any member of the public or to the respondent or party to any hearing.

2. In any such hearing, any member of the commission or the hearing officer shall issue in the name of the commission notice of hearing and subpoenas. Subpoenas shall be issued and enforced as provided in section 536.077, RSMo. The rules of discovery that apply to any civil case apply to hearings held by the commission.

3. (1) All hearings to promulgate rules and to establish areas of the state shall be held before at least four members of the commission.

(2) All other hearings may be held before one commission member designated by the commission chairman or by a hearing officer who shall be a member of the Missouri bar and shall be appointed by the commission. The hearing officer or commission member shall preside at the hearing and hear all evidence and rule on the admissibility of evidence. The hearing officer or commission member shall make recommended findings of fact and may make recommended conclusions of law to the commission.

(3) All final orders or determinations or other final actions by the commission shall be approved in writing by at least four members of the commission. Any commission member approving in writing any final order or determination or other final action, who did not attend the hearing, shall do so only after reviewing all exhibits and reading the entire transcript.

643.110. 1. The commission may grant individual variances beyond the limitations prescribed in this chapter whenever it is found, upon presentation of adequate proof, that compliance with any provision of this chapter or any rule requirement, or order of the commission or director will result in taking of property without just compensation or in the closing and elimination of any lawful business, occupation or activity, without sufficient corresponding benefit or advantage to the people; except, that no variance shall be granted where the effect of the variance will permit the continuance of a health hazard; and except, also, that any variance so granted shall not be so construed as to relieve the person who receives the variance from any liability imposed by other law for the commission or maintenance of a nuisance.

2. In determining under what conditions and to what extent a variance may be granted, the commission shall exercise a wide discretion in weighing the equities involved and the advantages and disadvantages to the applicant and to those affected by air contaminants emitted by the applicant.

3. Variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission.

4. Any person seeking a variance shall do so by filing a petition for variance with the director. The director shall promptly investigate the petition and make a recommendation to the commission as to the disposition thereof. Upon receiving the recommendation of the director, if the recommendation is against the granting of a variance, a hearing shall be held if requested as provided in section 643.100. If the recommendation of the director is for the granting of a variance, the commission may do so without a hearing; except, that upon the petition of any person aggrieved by the granting of the variance, a hearing shall be held as provided in section 643.100. In any hearing under this section, however, the burden of proof shall be on the person petitioning for a variance.

5. Upon failure to comply with the terms and conditions of any variance as specified by the commission, the variance may be revoked or modified by the commission after a hearing held upon not less than thirty days' written notice. The notice shall be served upon all persons who will be subjected to greater restrictions if the variance is revoked or modified and all persons who have filed with the director a written request for notification.

6. The director shall take action within thirty days after a petition has been filed and shall make a recommendation to grant or deny the petition for a variance within one hundred twenty days. If the director fails to make a recommendation within the time period specified, the person seeking the variance may request a hearing as provided in section 643.100.

643.120. The commission shall promptly act upon any request for a hearing or appeal which is filed pursuant to the provisions of this chapter. The commission shall cause a hearing to be set within sixty days of a request for hearing or appeal. The record, which shall consist of a transcript of all testimony taken, all exhibits, final arguments or briefs of the parties and recommended findings of fact and conclusions of law if required of a designated commission member or hearing officer pursuant to section 643.100.3, shall be submitted to the commission within sixty days after the hearing. The commission shall render a decision within sixty days after the submission of the record. The time limitations in this section may be shortened or enlarged by consent of the parties and the commission as justice may require. A party aggrieved by unreasonable delay on the part of the commission or member or hearing officer designated to conduct the proceedings may file an action in the circuit court of Cole County to compel the completion of the administrative proceedings and a final decision by the commission and to recover from the commission all attorney fees reasonably incurred as a result of the delay.

643.130. All final orders or determinations of the commission or the director hereunder shall be subject to judicial review pursuant to the provisions of sections 536.100 to 536.140, RSMo. No judicial review shall be available hereunder, however, unless and until all administrative remedies are exhausted.

643.140. 1. Except as provided under this section, the legislature does not intend by the provisions of sections 643.010 to 643.190 to occupy the field by preemption.

BRAC IS AN OPPORTUNITY

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF

THE ARMY BASING STUDY

TO: Ed Brown J. J. Gertler (ARMY TEAM)	HQDA, DACS-TABS THE PENTAGON, ROOM 2A684 WASHINGTON, DC 20310-0200	DATE-TIME-GROUP
	POC:	NUMBER OF PAGES
	VOICE TELEPHONE: DSN 227-1765COM (703) 697-1765/6 TABS FAX TELEPHONE: (703) 693-9322/DSN 223-9322	3

For Madelyn Creedon's trip next week

John Nerger

DEPARTMENT OF THE ARMY
HEADQUARTERS
U.S. ARMY ENGINEER CENTER AND FORT LEONARD WOOD
FORT LEONARD WOOD, MISSOURI 65473-5000

REPLY TO
ATTENTION OF

26 May 1995

ATZT-CS

MEMORANDUM FOR U.S. Army Training and Doctrine Command, ATTN: ATCS-OR (COL Roszkowski), Fort Monroe, VA 23651-5000

SUBJECT: Fort Leonard Wood (FLW) Review of Letter from Barry Paul Steinberg to Ms. Madelyn R. Creedon, General Counsel, Defense Base Closure and Realignment Commission, dated May 18, 1995, Subject: Environmental Permitting at FLW, MO

1. Issue: Is the permit process fraught with procedural and substantive errors?

Response: The Missouri Department of Natural Resources (MDNR) has advised FLW as to the type of permits needed for operations currently conducted at Fort McClellan and the process to be followed in obtaining those permits. We believe MDNR to be the most credible source of guidance with regard to Missouri Environmental requirements. Based on MDNR guidance, four permit applications were delivered to MDNR in early March. These were:

a. Non-Point Source Water Discharge Permit

b. Fog Oil Training Permit

c. Chemical Defense Training Facility (CDTF) Incinerator Permit

d. CDTF Hazardous Waste Permit

These permits were all provided with general information about the proposed activity and the expectation that MDNR would request more specific information as the permit review progressed. This is the standard process used by most permit applications.

2. Issue: Has the review process been conducted too quickly by DNR?

Response: Since 1993, MDNR has been conducting an in-depth, intensive review of the missions proposed for transfer from Fort McClellan to FLW. This review has fully considered the regulatory history in Alabama, as well as technical data about the missions. Based on this knowledge, MDNR determined that a hazardous waste permit was not required for the CDTF.

ATZT-CS
SUBJECT: Fort Leonard Wood (FLW) Review of Letter from Barry Paul Steinberg to Ms. Madelyn R. Creedon, General Counsel, Defense Base Closure and Realignment Commission, dated May 18, 1995, Subject: Environmental Permitting at FLW, MO

3. Issue: Was the CDTF incinerator permit properly prepared?

Response: As is common practice, the CDTF incinerator permit was submitted prior to completion of the engineering design of that facility. Information supplied in the permit application is general in nature and is based on a similar type of incinerator used elsewhere. This meets MDNR requirements for the application and results in MDNR issuing performance specifications for the incinerator to be constructed. There is no requirement for final design details to be initially submitted with the application. After the incinerator is constructed, compliance with MDNR's performance specifications is demonstrated by test results. The permit to construct also serves as the permit to operate. In the future, Missouri, and all other states, will implement a system of separate operating permits. The proposed CDTF incinerator was correctly described, properly reviewed, and will be built and operated in accordance with Missouri requirements.

4. Issue: Is a hazardous waste permit required for the CDTF?

Response: FLW has furnished MDNR with full and complete information about the waste stream to be processed in the CDTF, as it is to be designed, built and operated in Missouri. MDNR has independently obtained technical information about operations and waste streams at Fort McClellan. Operation of the CDTF in Missouri will not require a Resource Conservation and Recovery Act (RCRA) Hazardous Waste Permit. This is true even if Fort McClellan, through failure to implement Best Management Practices, violates RCRA requirements in their present operation.

5. Issue: Is the Army considering non-permit related issues?

Response: In addition to obtaining the permits required by MDNR, FLW is preparing to conduct a more extensive, in-depth review of environmental impacts of the proposed move. In accordance with the BRAC law, the review required by the National Environmental Policy Act (NEPA) cannot begin until the BRAC decision has been made. Once this happens, an Environmental Impact Statement will be prepared and a Section 7 consultation conducted with the U.S. Fish and Wildlife Service (USFWS). FLW is already conducting a biological assessment of its endangered species with regard to its present mission. Informational meetings with regard to the proposed Chemical School mission have already been held with the USFWS.

ATZT-CS
SUBJECT: Fort Leonard Wood (FLW) Review of Letter from Barry Paul Steinberg to Ms. Madelyn R. Creedon, General Counsel, Defense Base Closure and Realignment Commission, dated May 18, 1995, Subject: Environmental Permitting at FLW, MO

6. Issue: Has the application and process for the fog oil air permit been conducted properly?

Response: The fog oil permit application relates only to fog oil generation, not to the use of other obscurant smokes (which are currently used on FLW). The information supplied to MDNR about fog oil training has been based on TRADOC's estimate of the amount of training to be done and the latest military specifications describing fog oil. The permit review process, which is on-going, has been conducted in accordance with DNR's guidance and state and federal requirements.

7. Issue: Was the application and review process for the storm water permit properly conducted?

Response: FLW applied for and received a storm water permit after a public notification and a public comment period. MDNR considered all aspects of the proposed move of the Chemical School, including smoke and flame training, and wrote permit conditions based on those considerations. These conditions include monitoring for several contaminants associated with smoke and flame training.

8. Issue: Will the requirements to obtain Nuclear Regulatory Commission (NRC) licenses cause an interruption in training?

Response: NRC licenses are granted based on designs and specifications for facilities to be built and procedures to be followed in the operations of those facilities. The preparation of applications for those licenses would begin in 1995 with the full license obtained in 1998, prior to the move of the Chemical School. The Energy and Environment Committee of the Missouri State Legislature, charged with oversight of nuclear energy for Missouri, has unanimously endorsed the move. In addition, no serious obstacles to granting the NRC licenses have been identified.

ANDERS B. AADLAND
COL, EN
Chief of Staff

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF
200 ARMY PENTAGON
WASHINGTON DC 20310-0200

REPLY TO ATTENTION OF

12 June 1995

Honorable Alan J. Dixon, Chairman
Defense Base Closure and
Realignment Commission
1700 North Moore Street Suite 1425
Arlington, Virginia 22209

Dear Mr. Chairman:

I am pleased to forward the third and final environmental permit for Fort Leonard Wood in support of the training missions realigning from Fort McClellan, as recommended by DoD (enclosure 1). I am also forwarding a document from U.S. Army Training and Doctrine Command as the Army's official assessment regarding the ability to conduct smoke training (enclosure 2). For your information, I have included a copy of a letter on this subject to Representative Glen Browder (enclosure 3). There are several points I would like to make:

1. **We have the environmental permits.** The Army has taken extraordinary efforts to comply fully with the 1993 Commission's direction that the Army "pursue all of the required permits" in order to propose Fort McClellan for closure again.

2. **The smoke training permit has no impact on unit readiness.** Headquarters, Training and Doctrine Command expresses confidence that the Army can accomplish its smoke mission. The Army can exercise environmental stewardship while at the same time accomplishing its smoke training mission.

3. **Relocating the military police and chemical schools is an integral component of the Army's strategic vision.** This is the third time DoD has tried to achieve substantial savings while seeking the synergistic advantages of conducting training for three schools at a single site. I cannot state strongly enough how important this recommendation is to helping us transition to the Army of the 21st century.

4. **The relocation will cause minimal disruption, if any, to training.** The Army has plenty of successful experience in relocating schools without degradation to training. The Intelligence School and Soldier Support Center are two excellent examples.

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5. **No linkage exists between Fort McClellan and international treaties, such as the (still unratified) Chemical Weapons Convention.** Staff from the Office of the Secretary of Defense briefed the Commission's General Counsel on June 2d and explained that Fort McClellan is not required to meet any treaty obligations. If the CWC were to be ratified in the near future, OSD indicated the Chemical School could train inspectors at either Fort McClellan or Fort Leonard Wood.

6. **Care should be taken not to confuse the installation (Fort McClellan) with the institution (Chemical School).** The Chemical School will continue to perform its vital mission wherever it happens to reside.

Thank you for your consideration. I urge you to support the Secretary of Defense's recommendation.

Sincerely,

James E. Shane, Jr
Brigadier General, U.S. Army
Director of Management

Enclosures
1 - smoke training permit
2 - TRADOC assessment
3 - TRADOC letter to Rep. Browder

Copy furnished:
Assistant Secretary of the Army
(Installations, Logistics & Environment)
Chief of Staff, Headquarters
Training and Doctrine Command
Chief of Legislative Liaison

DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
OFFICE OF THE CHIEF OF STAFF
FORT MONROE, VIRGINIA 23651-5000

June 12, 1995

REPLY TO
ATTENTION OF
Operations Directorate

Honorable Glen Browder
House of Representatives
Washington, D.C. 20515-0103

Dear Mr. Browder:

This is in response to your correspondence to the Chemical School requesting an assessment of their ability to conduct smoke training at Fort Leonard Wood under the air permit issued by Missouri.

The smoke training permit issued by the Missouri Department of Natural Resources does not allow the Chemical School to train as it currently does at Fort McClellan, but this should not preclude the Chemical School from accomplishing its smoke training mission. We understand the challenge of moving the training mission and maintaining the established environmental standards at Fort Leonard Wood. Headquarters Training and Doctrine Command, in conjunction with the Chemical School, is reviewing the smoke training program to assess overall effectiveness and determine modifications which could allow them to operate within the established guidelines, all of which we feel can be accommodated. We are committed to ensuring that courses and tasks will achieve the required military occupational specialty qualifications.

Increased environmental concerns and regulations nationwide are causing the Army to seek alternative training methodologies in order to protect the environment. The Chemical School is already aggressively pursuing the use of computer simulations to teach the smoke planning process to officers and non-commissioned officers, thus reducing the requirement for field training. Additionally, we at Training and Doctrine Command intend to work with the Missouri Department of Natural Resources to modify the smoke training permit, if necessary, to better accommodate chemical training upon its relocation to Fort Leonard Wood.

Programs of Instruction are routinely reviewed and modified for relevancy and changing conditions to ensure units are provided with trained soldiers. The Chemical School

ENCL 3

provides individual training in an institutional environment. Modifications to Chemical School training should not impact unit readiness.

Sincerely,

John P. Herrling
Major General, U.S. Army
Chief of Staff

DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
OFFICE OF THE CHIEF OF STAFF
FORT MONROE, VIRGINIA 23651-5000

REPLY TO
ATTENTION OF

JUN 12 1995

ATCS-OR (5-10c)

MEMORANDUM FOR BG James E. Shane, Jr., Director of Management, Office of the Chief of Staff, United States Army ATTN: DACS-DM, 200 Army Pentagon, Washington, D.C. 20310-0200

SUBJECT: Fort Leonard Wood Permit for Chemical School Smoke Operations

1. We have evaluated the smoke training permit issued by Missouri Department of Natural Resources and conclude that it does not allow Chemical School to train as it currently does at Fort McClellan. However, we understand the challenge of moving the training mission and maintaining the established environmental standards at Fort Leonard Wood. This Headquarters is reviewing the smoke training program to assess overall effectiveness and determine modifications which could allow them to operate within established guidelines. We are committed to ensuring that courses and tasks will achieve the required military occupational specialist qualifications. TRADOC also intends to work with Missouri Department of Natural Resources to modify the smoke training permit, if necessary, to accommodate chemical training at Fort Leonard Wood.

2. The relocation of the Chemical and Military Police Schools is the first piece in the TRADOC Commanding General's strategic vision for the future structure of the Command. We must garner the savings of this move through innovative changes in organizational structure and maximize the use of our facilities. This relocation will fill underutilized facilities at Fort Leonard Wood and reduce total BASOPS costs. This is a critical action given the resource constraints faced by the Command.

3. TRADOC is reviewing all training to reduce costs and the impact on the environment. Increased environmental concerns and regulations nationwide are causing the Army to seek alternative training methodologies. The Chemical School is already aggressively pursuing the use of computer simulations to teach the smoke planning process to officers and NCOs, thus reducing the requirement for field training. As we migrate further into computer simulation, the impact of Army training on the environment, in general, will be reduced.

ENCL 2

ATCS-OR
SUBJECT: Fort Leonard Wood Permit for Chemical School Smoke Operations

4. Programs of Instruction are routinely reviewed and modified for relevancy and changing conditions to ensure units are provided with trained soldiers. The Chemical School provides individual training in an institutional environment. Modifications to the Chemical School training will not impact readiness measured at the unit level.

John P. Herrling

JOHN P. HERRLING
Major General, GS
Chief of Staff

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the facility described below, in accordance with the laws, rules, and conditions as set forth herein.

Permit Number: 0695-010 Facility I.D. Number: 3860-0004-015

Owner: U. S. Army Engineer Center and Fort Leonard Wood

Owner's Address: Department of Defense

Facility Name: U. S. Army Engineer Center and Fort Leonard Wood

Facility Address: ATTN: ATZT-DPW-EE; Ft. Leonard Wood, MO 65473

Legal Description: Pulaski County, All or parts of T33, 34, 35N, R10, 11, 12W

Application for Authority to Construct was made for:

**** Permission to construct a static and mobile fog oil smoke training facility. This review was conducted in accordance with Section (8), Missouri State Rule 10 CSR 10-6.060, "Construction Permits Required." ****

☐ Special Conditions are not applicable to this permit.

☒ Special Conditions do apply to this permit and are listed as attachments starting on page 2.

June 7, 1995
EFFECTIVE DATE

John A. Young
DIRECTOR
DIVISION OF ENVIRONMENTAL QUALITY

ENCL 1

MO 780-1204 (6-93)

RECYCLED PAPER

PERMIT NUMBER
0695-010

FACILITY I.D NUMBER
3860-0004-015

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

Emissions Limitations

1. *Annual Throughput*. The U.S. Army Engineering Center, Fort Leonard Wood, (the "Permittee") shall process no more than 65,000 gallons of SGF-2 fog oil for smoke training during any 12-month period. This total shall include the fog oil used in the mobile (valley) operations and the static (introductory) operations.

2. *Daily Throughput*. The Permittee shall process no more than 3700 pounds of SGF-2 fog oil during any 24-hour period. This total shall include the fog oil used in the mobile (valley) operations and the static (introductory) operations. Fog oil shall not be processed at a rate in excess of 3700 pounds per hour.

3. *SGF-2 Fog Oil Material Requirements*. The Permittee shall only use the fog oil designated SGF-2 (CAS# 64742-52-5) to generate smoke during smoke training. The fog oil shall contain no additives nor any rerefined oils.

   In addition, the fog oil shall have the following properties and characteristics:

   a. The fog oil shall be severely hydrotreated to remove polycyclic aromatic hydrocarbons (PAHs) and their nitrogen and oxygen analogues, and

   b. The fog oil shall contain no carcinogenic or potentially carcinogenic constituents as defined under the Hazard Communication Standard (HCS) 29 CFR 1910.1200, and

   c. The fog oil shall contain no more than 0.5% (one-half percent) by weight of any single hazardous air pollutant (HAP) as defined by 10 CSR 10-6.020(2)(C), "Table 3 – Hazardous Air Pollutants." The combination of all HAPs in the fog oil shall comprise no more than 1% (one percent) by weight of the fog oil.

   The Permittee is prohibited from using to create smoke for

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

smoke training any fog oil designated PY8035000 on the Registry of Toxic Effects of Chemical Substances (RTECS) of the National Institute for Occupational Safety and Health (NIOSH).

The Permittee may not introduce any other substance into the fog oil used to generate smoke, e.g., kerosene to reduce viscosity in cold temperatures, graphite or brass to change or enhance obscurant effectiveness, etc.

4. *Fog Oil Material Certification*. The Permittee shall maintain fog oil Military Specifications, Material Safety Data Sheets (MSDS), and records of quantitative analytical chemical test data demonstrating compliance with Condition 3.

Said military specifications, test data, MSDSs, and certifications shall be maintained by the Permittee and made available to Missouri Department of Natural Resources (MDNR) personnel on request.

The Permittee shall certify in writing no less frequently than annually that all fog oil used in smoke training complies with Condition 3.

5. *Reporting of Violations*. The Permittee shall report to the Enforcement Section, Air Pollution Control Program (APCP), MDNR, no later than ten days after any fog oil not complying with Condition 3 or not certified in compliance with Condition 4 is used to create smoke for smoke training.

6. *Smoke Generating Equipment*. The Permittee shall use only the pulse jet mechanical smoke generator, Model M3A3 ("emm-three-A-three"). The smoke generators shall only be fueled with unleaded gasoline. The Permittee shall only generate smoke with smoke generators maintained in good working condition and operated in accordance with the manufacturer's specifications.

7. *Emissions Limitation*. The Permittee shall not emit particulate matter less than 10 microns (PM_{10}) at a rate in

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

excess of 2600 pounds per hour: This rate corresponds to processing fog oil at the maximum rate of 3700 pounds per hour with a particulate conversion factor of 70%.

8. *Recordkeeping*. The Permittee shall record the amount of fog oil processed by the smoke generators during the previous month and the previous twelve months. During any month in which smoke training occurs, the Permittee shall record daily and hourly consumption of fog oil. The Permittee shall maintain said records and provide them to MDNR personnel on request.

9. *Reporting of Violations*. The Permittee shall report to the Enforcement Section, APCP, no later than ten days after the end of each month during which the preceding 12-month cumulative total of fog oil processed exceeds 65,000 gallons of fog oil (Condition Number 1).

10. *Reporting of Violations*. The Permittee shall report to the Enforcement Section, APCP, no later than ten days after an exceedance of the 3700 pound daily limit or the 3700 pound/hour maximum rate limit of fog oil (Condition 2).

Ambient Air Monitoring

11. *Quality Assurance Project Plan*. The Permittee shall file two copies of a Quality Assurance Project Plan (QAPP) within 90 days of issuance of this permit for review and approval by the Staff Director, APCP. The QAPP shall describe the method and manner for collecting air quality monitoring data for PM_{10} and ozone required by this permit.

12. *Pre-Startup Monitoring*. Beginning as soon as possible after this permit is issued, the Permittee shall collect at least one year of continuous air quality monitoring data for PM_{10} and ozone in a manner and at locations to be determined by the Permittee with review and approval by the APCP. Collection of monitoring data shall begin no later than eighteen months immediately prior to the beginning of smoke training. Ozone monitoring is only required from April 1

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

through October 31.

13. *Reporting*. The Permittee shall submit to the APCP no less frequently than quarterly the air quality monitoring data collected pursuant to Condition 12. All air quality monitoring data collected pursuant to Condition 12 shall be submitted to APCP no later than 60 days prior to the commencement of smoke training.

14. *Corrective Action*. If the air quality monitoring data of Condition 12 does not substantially conform with the assumptions and conclusions of air quality modeling or if the smoke training is shown to cause or contribute to a violation of National Ambient Air Quality Standards (NAAQS), the Director, MDNR, may require the Permittee to take corrective action or may revoke the permit.

15. *Post-Startup Monitoring*. Beginning with the commencement of smoke training, the Permittee shall collect at least two years of continuous air quality monitoring data for PM_{10} and ozone in a manner and at locations to be determined by the Permittee with review and approval by the APCP. Ozone monitoring is only required from April 1 through October 31.

16. *Reporting*. The Permittee shall submit to the APCP no less frequently than quarterly the air quality monitoring data collected pursuant to Condition 15.

Meteorological Monitoring

17. *Observers*. At all times during the operation of the smoke generators, a network of observers shall be stationed at locations from which they can observe the behavior of generated smoke and whether smoke crosses the Fort Leonard Wood property boundary. The observers shall maintain continuous electronic or visual communications with the smoke generator operators.

18. *Meteorological Monitoring*. For the entire period beginning no less than one hour prior to generating smoke and ending

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0695-010

FACILITY I D NUMBER
3860-0004-015

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

no less than one hour after ceasing generating smoke, the Permittee shall measure and record no less frequently than every sixty seconds meteorological data including ambient air temperature, atmospheric pressure, relative humidity, atmospheric stability, mixing height, and wind speed and direction at each training site at which smoke training is conducted. The monitoring records shall indicate those periods during which smoke is generated. Meteorological monitoring records shall be maintained by the Permittee and made available to the MDNR personnel on request.

19. *Limitations on Operations*. Smoke training shall only be conducted at the locations and under the meteorological conditions as described in Attachment A.

The Permittee may conduct smoke training operations at more than one location listed in Attachment A during any 24-hour period. However, smoke training operations may not occur at more than one location simultaneously, and the smoke training operations at multiple sites may not exceed the limitations of Condition 2.

20. *Meteorologist*. Meteorological monitoring and forecasting activities required by this permit shall be coordinated and supervised by a person (the "Meteorologist") with at least a Bachelor of Science degree in meteorology or atmospheric science from an accredited university or college.

21. *Forecasting Acceptable Conditions*. Smoke training may take place only if the Meteorologist forecasts no earlier than two hours prior to each smoke training exercise that the approved meteorological conditions described in Attachment A will exist throughout the anticipated smoke training exercise.

22. *Forecast Certification*. Prior to each smoke training exercise, the Meteorologist shall certify in writing the pre-exercise forecast required by Condition 21. Said forecast certification shall be maintained by the Permittee and made available to MDNR personnel on request.

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

23. *Pre-Exercise Computer Modeling*. Prior to each smoke training exercise, the Permittee shall use the Tactical Smoke computer model, TACSMK, or equivalent, to perform pre-exercise predictions of smoke behavior during anticipated smoke training exercises. Printouts of the TACSMK pre-exercise predictions shall be maintained by the Permittee and made available to MDNR personnel upon request.

24. *Prohibitions*. Generation of smoke shall cease if:

    a) Meteorological conditions are not within those approved for smoke training as described in Attachment A, or

    b) Smoke behavior differs significantly from the pre-exercise predictions of Condition 23 so as to indicate a reasonable likelihood that visible smoke will drift beyond the Fort Leonard Wood property boundary, or

    c) Conditions or smoke behavior are such so as to create a reasonable likelihood that visible smoke will cross the Fort Leonard Wood property boundary or that National Ambient Air Quality Standards at the Fort Leonard Wood property boundary will be exceeded, or

    d) There is an interruption for 2 minutes in the meteorological monitoring required by Condition 18, or

    e) Under other conditions as may be determined by the Director, MDNR.

    For the purposes of determining compliance with Condition 24a, meteorological conditions shall be deemed outside the approved conditions when three consecutive measurements recorded at one-minute intervals are outside approved conditions.

Soil and Vegetation Sampling

25. *Soil and Vegetation Sampling Plan (SVSP)*. Within 180 days of the issuance of this permit, the Permittee shall submit

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

two copies of a SVSP to the Staff Director, APCP, for review and approval.

The SVSP shall describe the method and manner of collecting and analyzing soil and vegetation samples and of monitoring the impact of smoke training activities on soils and vegetation. The SVSP shall include an inventory of vegetation found within the impact area that has any recreational or commercial value and shall identify any of the vegetation which may be sensitive to elevated ozone or particulate levels. The SVSP shall also include descriptions of operational or seasonal restrictions that could be used to minimize emissions and any accompanying deposition effects.

26. *Pre-Startup Sampling*. For no less than one year prior to the commencement of smoke training, the Permittee shall collect and analyze soil and vegetation samples no less frequently than quarterly at each location described in Attachment A and at other locations described in the SVSP.

27. *Reporting*. The Permittee shall report the results of the sampling and analysis required by Condition 26 to the APCP within 60 days of the date the samples are collected. All soil and vegetation sampling data collected pursuant to Condition 26 shall be submitted to APCP no later than 60 days prior to the commencement of smoke training.

28. *Post-Startup Sampling*. Upon commencement of smoke training, the Permittee shall collect and analyze soil and vegetation samples no less frequently than monthly at each location described in Attachment A and at other locations described in the SVSP. After two years of sampling, the Permittee may petition the Staff Director, APCP, for modification of the sampling schedule and frequency.

29. *Reporting*. The Permittee shall report to the APCP no less frequently than quarterly the soil and vegetation sampling data collected pursuant to Condition 28.

30. *Corrective Action*. MDNR may reevaluate the Best Available

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

Control Technology (BACT) analysis in support of this permit, establish any necessary operational restrictions, e.g., restricting smoke training to only the summer months, or require the Permittee to take any necessary corrective action, if the results of the soil, vegetation, or ambient air sampling indicate adverse deposition effects.

Other Special Conditions

31. *Record Retention*. All records required by this permit shall be maintained by the Permittee and made available for inspection by MDNR personnel for no less than ten years from the date the record is created.

32. *Public Information*. The Permittee shall cooperate with the APCP in presenting the air quality monitoring data of Condition 12 and soil and vegetation sampling data of Condition 26 to the public at an informational meeting to be convened by the APCP.

33. *Effects on Visibility*. Smoke training shall not be conducted so as to constitute or contribute to a safety hazard to air traffic or vehicular traffic on highways accessible to the public during smoke training exercises.

34. *Reporting of Violations*. Unless a different requirement is expressly provided for in this permit, the Permittee shall report to the Enforcement Section, APCP, MDNR, no later than ten days after any noncompliance with any condition or requirement of this permit.

35. *Corrective Action*. If in the opinion of the Director, MDNR, the presence of PM_{10} or ozone in the ambient air exists in quantities and durations that directly or proximately cause or contribute to injury to human, plant, or animal life or health, or to property, or that unreasonably interferes with the enjoyment of life or the use of property, the Director, MDNR, may require the Permittee to submit a corrective action plan adequate to timely and significantly mitigate the emission or the impact of PM_{10} or ozone. The Permittee

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

shall implement any such plan immediately upon its approval by the Director, MDNR. Failure to either submit or implement such a plan shall be a violation of the permit.

36. *Compliance With Other MDNR Permits*. The Permittee shall comply with the sampling and monitoring conditions of Missouri State Operating Permit No. MO-0117251 granted by the Missouri Department of Natural Resources, Missouri Clean Water Commission.

37. *Notification of Commencement of Smoke Training*. The Permittee shall not commence smoke training activities subject to this permit without first providing written notification of such commencement to the Director, MDNR, no later than 30 days prior thereto. Said notification shall include the certification by the Responsible Official that the Permittee has satisfied all conditions precedent to the commencement of smoke training as described in this permit.

Attachment A

WIND DIRECTIONS (θ) SUITABLE FOR SMOKE TRAINING

Site	Stability Class (Notes 1, 2, and 3)				
	A	B	C	D	E
Musgrave	$130 \leq \theta \leq 220$	$150 \leq \theta \leq 220$	$160 \leq \theta \leq 215$	$170 \leq \theta \leq 215$ (Note 4)	$150 \leq \theta \leq 225$
Ballard	$340 \leq \theta \leq 35$	$340 \leq \theta \leq 35$	$340 \leq \theta \leq 35$	$350 \leq \theta \leq 35$	$340 \leq \theta \leq 35$
Mush Paddle	$195 \leq \theta \leq 275$	$195 \leq \theta \leq 275$	$195 \leq \theta \leq 270$	$195 \leq \theta \leq 240$ (Note 5)	$195 \leq \theta \leq 270$
Bailey	$125 \leq \theta \leq 115$	$340 \leq \theta \leq 40$ $175 \leq \theta \leq 325$	$340 \leq \theta \leq 40$ $175 \leq \theta \leq 325$	None	$230 \leq \theta \leq 240$ (Note 6)

Notes:

1. Allowable wind directions are indicated by an angular interval. Wind directions are expressed as an angle measured clockwise from north indicating direction wind is coming from. E.g., 0 means wind is coming from due north (wind is coming from zero degrees clockwise from north), 225 means wind is coming from southwest (wind is coming from 225 degrees clockwise from north). Thus, "$130 \leq \theta \leq 220$" means allowable wind directions are generally from the south, i.e., from 130 degrees (approximately southeast) clockwise to 220 degrees (approximately southwest); "$340 \leq \theta \leq 35$" means allowable wind directions are generally from the north, i.e., from 340 degrees (approximately north-northwest) clockwise to 35 degrees (approximately northeast).
2. Stability classes A - D are limited to wind speeds of at least 1 meter/second, and stability class E is limited to wind speeds of at least 4 meters/second. No smoke may be generated during stability condition F.
3. Mixing height of 200 meters is necessary for stability classes A - C. Mixing height of 320 meters is necessary for stability classes D - E.
4. Forty-five (45) minute limit on smoke training for wind directions $190 \leq \theta \leq 210$ degrees.
5. Forty-five (45) minute limit on smoke training for wind directions $220 \leq \theta \leq 240$ degrees.
6. Commencement and continuation of smoke training is discouraged at Bailey Hollow during stability class E due to the narrow range of allowed wind directions.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (8) REVIEW
Project/Facility No: 3860-0004-015
Permit No: 0695-010

U. S. Army Engineering Center
Fort Leonard Wood
ATTN: ATZT-DPW-EE
Fort Leonard Wood, MO 65473

Complete: March 31, 1995
Reviewed: June 7, 1995

Parent Company:
U. S. Army Engineering Center
Fort Leonard Wood
ATTN: ATZT-DPW-EE
Fort Leonard Wood, MO 65473

Pulaski County, All or parts of T33, 34, 35N, R10, 11, 12W

REVIEW SUMMARY

- This review is conducted in accordance with Section (8) of Missouri State Rule 10 CSR 10-6.060, "Construction Permits Required."
- Prevention of Significant Deterioration (PSD) regulations apply to this facility.
- Emissions of particulate matter less than ten microns (PM_{10}) at the facility will be greater than 15 tons per year; therefore, this is a major modification at a major facility.
- No Hazardous Air Pollutants (HAP) above *de minimis* amounts are emitted in this process.
- No federal New Source Performance Standards (NSPS) or National Emission Standards for Hazardous Air Pollutants (NESHAP) apply to this operation.
- Special conditions are imposed by this permit.

PROJECT DESCRIPTION

Fort Leonard Wood (the "Applicant") is an existing major source and has applied for permission to operate an obscurant (smoke) training school. The smoke training school will use M3A3 smoke generators (or equivalent) to train soldiers in the operation of the smoke generators and in the tactical use of obscurants during simulated battlefield operations.

To generate the smoke, SGF-2 fog oil (a severely hydrotreated heavy naphthenic petroleum distillate mineral oil) is vaporized, recondensed, and dispersed into the air. The fog oil is emitted as liquid droplets with diameters of 0.5 to 1.0 micron. This diameter size is close to the wavelength of visible light, making this oil the choice for smoke training.

Fort Leonard Wood shall only use the fog oil designated SGF-2 (CAS# 64742-52-5) to generate smoke during smoke training. The fog oil shall contain no additives nor any rerefined oils.

In addition, the fog oil shall have the following properties and characteristics:

a. The fog oil shall be severely hydrotreated to remove polycyclic aromatic hydrocarbons (PAHs) and their nitrogen and oxygen analogues, and

b. The fog oil shall contain no carcinogenic or potentially carcinogenic constituents as defined under the Hazard Communication Standard (HCS) 29 CFR 1910.1200, and

c. The fog oil shall contain no more than 0.5% (one-half percent) by weight of any single hazardous air pollutant (HAP) as defined by 10 CSR 10-6.020(2)(C), "Table 3 – Hazardous Air Pollutants." The combination of all HAPs in the fog oil shall comprise no more than 1% (one percent) by weight of the fog oil.

Fort Leonard Wood shall maintain Material Safety Data Sheets (MSDS) and test data demonstrating compliance with the fog oil material specifications.

Fort Leonard Wood is prohibited from using to create smoke for smoke training any fog oil designated PY8035000 on the Registry of Toxic Effects of Chemical Substances (RTECS) of the National Institute for Occupational Safety and Health (NIOSH).

Fort Leonard Wood may not introduce any other substance into the fog oil used to generate smoke, e.g., kerosene to reduce viscosity in cold temperatures, graphite or brass to change or enhance obscurant effectiveness, etc.

The M3A3 smoke generators are driven by gasoline-powered pulse jet engines. Each generator consumes 4 gallons of unleaded gasoline per hour and processes 40 gallons of fog oil per hour.

There will typically be about 12 generators operating each time the training is conducted. However, there will be no limitations on the number of generators; rather, limits are imposed on the amount of fog oil which may be processed. The smoke training will occur at several sites at Fort Leonard Wood. Smoke training can not be used at some sites during certain meteorological conditions because such conditions could cause an exceedance of the PM_{10} ambient air quality standards (10 CSR 10-6.010, "Ambient Air Quality Standards") or the ambient air increment (10 CSR 10-6.060(11)(A), "Table 1 – Ambient Air Increment Table").

The air quality impact due to the smoke training is evaluated by considering the fog oil as a volatile organic compound (VOC) and as PM_{10}. There is no ambient air quality standard for VOCs. In lieu of preapplication air quality analysis, pre- and post-operation ambient air monitoring for ozone will be required.

The air ambient quality impact of the emission of PM_{10} is evaluated using the ambient air quality model ISC2 (Industrial Source Complex), draft version dated December 6, 1994. This version of ISC2 is recommended by the EPA for use in this study to estimate the effect on the ambient air quality of the operation of equipment which emits air contaminants. This permit has conditions that prohibit smoke training operations at those locations when meteorological conditions exist that could cause an exceedance of the PM_{10} National Ambient Air Quality Standards (NAAQS) or the PM_{10} increment. The constraints have been developed based on wind direction, atmospheric stability, and distance from the site to the property line. Attachment A describes the acceptable sites under various meteorological conditions. Fort Leonard Wood agrees to maintain a minimum of 3 kilometers visibility at property boundary as related to the smoke training school.

The total amount of fog oil processed by the smoke generators is limited to 65,000 gallons during any 12-month period. Since this construction triggers the federal PSD regulations, a Best Available Control Technology (BACT) analysis must be performed. Adding a PM_{10} control device to the smoke generators would defeat the purpose of the mission. Other smoke generation systems were evaluated, and the proposed method is the most feasible.

EMISSIONS/CONTROLS EVALUATION

Most of the fog oil will disperse as PM_{10}, but some will evaporate as VOC. According to information provided by the applicant, 30% of the fog oil will evaporate before reaching the property boundary.

Additional emissions are expected from the combustion of gasoline in the pulse-jet engines. Emission rates for the combustion of gasoline from the smoke generators are calculated using emission factors from the U.S. Environmental Protection Agency document AP-42, "Compilation of Air Pollutant Emission Factors: Volume II: Mobile Sources," and from Material Safety Data Sheets supplied by Fort Leonard Wood.

Table 1 below lists the annual emissions expected when Fort Leonard Wood vaporizes 65,000 gallons of fog oil, including the combustion of unleaded gasoline in the pulse-jet engine.

Table 1: Pollutants Emissions in Tons per Year

	VOC	PM_{10}	SO_2	NO_x	CO	HAPs (Note 1)
Fog Oil	250	175	0.0	0.0	0.0	≤ 2.5
Combustion	0.7	0.0	0.0	0.2	11.3	0.0
Totals	251	175	0.0	0.2	11.3	≤ 2.5

Note 1: Emissions from all HAPs combined is limited to 2.5 tpy. Emissions from any single HAPs is limited to 1.25 tpy.

PERMIT RULE APPLICABILITY

This PSD review is conducted under Section (8) of Missouri State Rule 10 CSR 10-6.060, "Construction Permits Required." Compliance with this section of the rule means that the proposed source will not interfere with the attainment or maintenance of ambient air quality standards, will not cause or contribute to ambient air concentrations in excess of any applicable maximum allowable increase as listed in 10 CSR 10-6.060 Subsection (11)(A) Table 1, will not violate any applicable emission control regulations or the Air Conservation Law, and will not cause an adverse impact on visibility in any Class 1 area.

APPLICABLE REQUIREMENTS

I. Installation Level: Fort Leonard Wood
   A. General
      1. Applicable Requirements: Submission of Emission Data, Emission Fees and Process Information
         a. Regulatory Authority: 10 CSR 10-6.110
         b. Emission Limitation: $25.70 per ton of pollutant
         c. Recordkeeping Requirement: Emissions Inventory Questionnaire (EIQ)
         d. Reporting Requirement: April 1 for previous year's emissions (EIQ)
      2. Applicable Requirements: Operating Permits
         a. Regulatory Authority: 10 CSR 10-6.065
         b. Emission Limitation: None
         c. Recordkeeping Requirement: None
         d. Monitoring Requirement: None
         e. Reporting Requirement: Submission of Future Operating Permit Application

II. Emission Point Level: Smoke Training Sites
   A. PM_{10} Emissions
      1. Applicable Requirements: Construction Permits Required
         a. Regulatory Authority: 10 CSR 10-6.060
         b. Emission Limitations: 65,000 gallons of SGF-2 fog oil per 12-month period; 3700 pounds of SGF-2 fog oil per day; 2600 pounds/hour of PM_{10}
         c. Recordkeeping Requirement: Annual and daily throughput; emissions rate
         d. Monitoring Requirements: Pre-startup and post-startup ambient air quality monitoring data; meteorological data; soil and vegetation sampling;
         e. Reporting Requirement: Violations of emission limitations; monitoring data
   B. VOC Emissions
      1. Applicable Requirements: Construction Permits Required
         a. Regulatory Authority: 10 CSR 10-6.060
         b. Emission Limitation: 65,000 gallons of SGF-2 fog oil per 12-month period.
         c. Recordkeeping Requirement: Annual and daily

throughput.

d. Monitoring Requirements: Pre-startup and post-startup ambient air quality monitoring data.

e. Reporting Requirement: Violations of emissions limitations.

C. Hazardous Air Pollutants (HAPs)

1. Applicable Requirements: Construction Permits Required

a. Regulatory Authority: 10 CSR 10-6.060

b. Emission Limitation: 2.5 tpy, Single HAPs. 1.25 tpy, Combination of HAPs. Below 25 tpy/10 tpy *de minimis* limit. Emissions are constrained by fog oil material specification, i.e., 1%/0.5% by weight HAPs.

c. Recordkeeping Requirement: None.

d. Monitoring Requirements: None.

e. Reporting Requirement: Violations of emissions limitations.

BACT ANALYSIS

A "top-down" BACT analysis is required to be submitted with this application. BACT is defined as an emission limitation based on the maximum degree of reduction for each pollutant which would be emitted from any proposed installation or major modification which the Director, on a case-by-case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable for such an installation or major modification. BACT may be achieved through application of production processes, or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of the pollutant.

Applying any control device defeats the purpose of the generating smoke for smoke training. Smoke training is conducted so as to simulate various battlefield conditions as realistically as possible. Large open areas are required for the movement of troops and equipment participating in smoke training exercises. There are no available control options with practical potential for application to the emissions unit and the regulated pollutants under evaluation.

The only BACT option is to examine the other methods available to produce smoke. According to the U. S. Army Medical Research and

Development Laboratory's publication, "Smokes and Obscurants: A Guidebook of Environmental Assessment, Volume 1. Method of Assessment and Appended Data," there are several methods to produce smoke.

Phosphorous Smokes and Hexachloroethane Smokes are both delivered in a pyrotechnic setting. In other words, they involve the use of cannons, mortars, smoke grenades, tank guns, rockets, and bombs. Diesel Fuels and Fog Oils are delivered by Smoke Pots, Vehicle Engine Exhaust Smoke Systems, M3A3 Generators, and Jet-Turbine Helicopters. Infrared Smokes are delivered by grenades. They contain powdered brass, which is an alloy of copper and zinc.

The purpose of smoke training is to train soldiers on the use of the M3A3 fog oil smoke generator and to allow them to observe the behavior of fog oil smoke under field conditions. The other methods of generating smoke produce significant Hazardous Air Pollutants (HAP) or are delivered in a more dangerous manner than the M3A3 generator.

There are no technically feasible control options, and the use of the M3A3 smoke generators and SGF-2 fog oil does not result in the emission of hazardous air pollutants above *de minimis* levels, nor employ the use of pyrotechnics. Therefore, the M3A3/SGF-2 option as described herein is chosen as BACT.

MDNR may reevaluate this BACT analysis, establish any necessary operational restrictions, e.g., restricting smoke training to only the summer months, or require the Permittee to take any necessary corrective action, if the results of the soil, vegetation, or ambient air sampling indicate adverse deposition effects.

MODELING AND MONITORING

Fort Leonard Wood, in compliance with Missouri State Rule 10 CSR 10-6.060(8)(C), has conducted ambient air quality modeling. The review of the modeling is included as a memo from the Technical Support Section of APCP (Appendix A). The modelling showed compliance with the NAAQS and PSD increments. The modeled maximum concentrations exceeded the *de minimis* level for PM_{10}. Fort Leonard Wood will be required to conduct post-construction monitoring For PM_{10}.

Existing PM_{10} monitoring data was determined to be representative of conditions at Fort Leonard Wood (Appendix B attached) and was used to demonstrate compliance with the NAAQS. However, to check this data, Fort Leonard Wood is required to conduct one year of preconstruction monitoring for PM_{10} and ozone prior to the beginning of smoke training. Fort Leonard Wood shall take appropriate corrective action should this later air monitoring data not substantially conform with the assumptions and conclusions of the air quality modelling or if the smoke training is show to cause or contribute to a violation of NAAQS.

Air monitoring of PM_{10} and ozone will continue for two years after smoke training begins. Because of concerns about the air quality in the area, Fort Leonard Wood will present the air monitoring data at a public informational meeting to be convened by the APCP prior to commencement of smoke training.

CLASS I AREA IMPACT ANALYSIS

The federal PSD regulations as adopted in 10 CSR 10-6.060 require an ambient air quality impact analysis to be done on all Class I areas within 100 kilometers in order to assure that no adverse ambient air quality impact will occur within the Class I area. There are no Class I areas within 100 kilometers of the proposed plant. Therefore, no Class I impact analysis is required.

ANALYSIS OF IMPACT ON VISIBILITY, LOCAL SOILS, ANIMALS AND VEGETATION

The Applicant analyzed the projected impairment to visibility, soils, animals and vegetation.

Fort Leonard Wood submitted soil and vegetation sampling conducted during test smoke training exercises in 1993. Results of sampling for total petroleum hydrocarbons (TPH) indicated significant deposition with high levels of TPH which decreased over several weeks. However, Fort Leonard Wood indicated that the sampling protocol was flawed (e.g., samples were collected in plastic bags) which resulted in contaminated samples and the overestimation of TPH levels.

The procedures listed in the EPA document, "A Screening Procedure for the Impacts of Air Pollution Sources on Plants, Soils, and

Animals," were examined. Since there is no simple procedure for estimating the impact of ozone from a single source, and since PM_{10} is not one of the regulated pollutants for which screening is done in the EPA screening guidance, no further analysis of the impact of smoke training on visibility, local soils, animals and vegetation is required.

However, to more accurately assess the impact of smoke training on soil and vegetation, Fort Leonard Wood is required to conduct soil and vegetation sampling at the training sites. Quarterly sampling will be performed at each training site for at least one year prior to commencement of smoke training. Monthly sampling will continue after smoke training begins. Fort Leonard Wood shall cooperate with APCP to present the results of pre-startup soil and vegetation sampling at a public informational meeting to be convened by the APCP prior to the commencement of smoke training.

In addition, prior to commencement of smoke training, Fort Leonard Wood shall inventory vegetation found within the smoke training impact area that has any recreational or commercial value and shall identify any of the vegetation which may be sensitive to elevated ozone or particulate levels. Fort Leonard Wood should consider the following documents in performing said inventory: *Air Quality Criteria Documents*, U.S. Environmental Protection Agency, *A Screening Procedure to Evaluate Air Pollution Effects on Class I Wilderness Areas*, U.S. Forest Service, and *Air Quality in the National Parks*, National Park Service. Fort Leonard Wood shall also describe operational or seasonal restrictions that could be used to minimize emissions and any accompanying deposition effects.

The EPA's "Workbook for Plume Visual Impact Screening and Analysis," was used to determine the visual quality of the area and assess the visual impact of the proposed facility. The model indicates that the visibility in the area would not be adversely affected. Appendix B contains the result of the visibility analysis.

Fort Leonard Wood shall also comply with water sampling required by MDNR, Water Pollution Control Program.

GROWTH IMPACTS

The Applicant analyzed the air quality impact projected for the area as a result of general commercial, residential, industrial growth, as well as growth associated with this installation. The installation is expected to increase by 7900 persons. This includes civilian/permanent party military increase of 1600 and a trainee increase of 6300. All of the permanent party and military trainees will be served by the facility on-post. Increased fuel use for space heating and air conditioning could result in some increased emissions. However, the expected increase in personnel would merely bring Fort Leonard Wood back to the same level of personnel as served in 1990. Therefore, no additional growth-related air pollution impacts are anticipated.

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (8), Missouri State Rule 10 CSR 10-6.060, "Construction Permits Required," the undersigned recommend this permit be granted with conditions.

Sharon Turpin
Environmental Engineer

6/7/95
Date

Glenn A. Carlson, P.E.
Environmental Engineer

6/7/95
Date

Review of Application for Authority to
Construct and Operate Smoke Training Facility
U.S. Army Engineering Center, Ft. Leonard Wood
June 7, 1995

APPENDIX A

Fort Leonard Wood Smoke Training PSD Modeling

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MEMORANDUM

DATE: June 7, 1995

TO: Glenn Carlson, Acting Unit Chief
Permit Section

FROM: Calvin Ku, Section Chief CK
Technical Support Section

Chris Smith, Meteorologist CS
Technical Support Section

SUBJECT: Fort Leonard Wood Smoke Training PSD Modeling (Revised)

I. Introduction

Fort Leonard Wood is proposing to conduct smoke training at several locations within their property. Due to the emission rates of the smoke generators to be used in the training, this project is subject to PSD (Prevention of Significant Deterioration) permit review including modeling requirements.

A modeling report entitled 'Predicted Air Quality Impacts for Fort Leonard Wood Smoke Training School' was submitted by Burns & McDonnell on April 9, 1995(attached). This report includes two separate analyses, the PSD increment analysis and the NAAQS (National Ambient Air Quality Standard) analysis. These analyses indicate that the smoke training can be conducted during specific meteorological conditions in order to meet the necessary standards. The following report summarizes the modeling review and the resulting recommendations for permit requirements.

II. Modeling Procedures

The modeling procedures used in this study follow PSD and air quality modeling guidelines. The selected model for this application is the draft version of the new ISC2 (Industrial Source Complex) model dated Dec. 6, 1994. This version of the ISC2 includes simple and complex terrain algorithms and

incorporates EPA's intermediate terrain policy. Additionally, the new version includes new area source and deposition algorithms. This model was recommended by EPA for use in this study.

The source information differs in the PSD increment modeling and the NAAQS modeling. For the PSD increment model, only the smoke generator sources are included. These generators will be placed on vehicles and may be moved during their operation. The vehicles will be spaced by at least 20 meters and will be oriented in a line or a 'v'. For modeling purposes, worst case is assumed to be a line of volume sources with an interval of 20 meters. The smoke generators are evaluated based on an emission rate of 2600 pounds per hour of PM_{10}. The smoke sources are modeled at all possible locations of operation within the fort. The NAAQS modeling includes all major sources within 50 kilometers of Fort Leonard Wood. A major source list was generated from the state's emission inventory databases and additional quality assurance was conducted prior to modeling to verify emission rates and source locations. These sources are modeled as continuous operations for worst case impacts.

The meteorological data sets are also different in the PSD increment and NAAQS runs. Because the smoke generators will be allowed to operate only during specific meteorological conditions, user-generated meteorological data sets are used for the PSD increment modeling. Varying meteorological conditions based on wind speed, stability, mixing height, and temperature are used in the model. Wind direction is considered by placing all receptors in a straight line at the proper downwind distance. Using this method, it is possible to model direct path wind directions to all fence line receptors in one model run. The NAAQS runs use five years of actual meteorological data from Springfield and Monett, Missouri.

III. PSD Increment Results

Because the baseline has not been established in this area, the entire PSD increments are available. These values are 30 ug/m^3 and 17 ug/m^3 for the 24-hour and annual average, respectively. The one-hour averages produced by the model are divided by 24 to obtain a representative 24-hour average. These results are then compared to the 24-hour increment of 30 ug/m^3 to identify receptors along the property boundary that will not exceed the increment. Corresponding wind directions are identified as acceptable conditions for operation. This procedure is duplicated for each possible training location. From these runs, a list of acceptable meteorological conditions is derived for each smoke training site (see Table II of the modeling report).

Because the smoke training will not be conducted more than 135 days per year, the annual increment does not require an evaluation. Even if a 30 ug/m^3 maximum 24-hour concentration occurs at the same receptor all 135 days, the annual concentration will only be 11 ug/m^3, well below the annual increment.

IV. NAAQS Results

PSD guidelines require that a NAAQS demonstration be conducted for the area that will be significantly impacted by the new source. For this study, a 50 kilometer radius is used. The model predicts several violations of the NAAQS due to sources beyond the Fort Leonard Wood property boundary. These locations are listed in Table III of the attached modeling report. Due to these potential exceedances of the NAAQS, the smoke training will not be allowed to occur under meteorological conditions which will result in a significant contribution. Several of the sites will not impact any of these potential exceedances already. However, under certain meteorological conditions stipulated in the PSD increment review as being acceptable, there is a significant contribution. Therefore, the fort is further restricted in their operation of the smoke generators. The resulting meteorological conditions which are acceptable for the PSD increment and the NAAQS are given in Table II of the modeling report.

V. Recommendations

Basis on the modeling analysis, we recommend the following conditions that should be required with the issuance of the smoke training permit:

1) The smoke generators shall be operated no more than 135 days per year.

2) The total emissions of PM10 from the smoke generators shall be limited at a rate of 2600 pounds per hour. This emission rate is based on the use of 3700 pounds per hour of fog oil and assumes a 70% conversion rate to particulate matter.

3) The smoke training emissions are found to be acceptable for the PSD increment and the NAAQS for the wind directions, stabilities, and durations listed in Table II of the smoke training modeling report provided by Fort Leonard Wood.

4) In addition to the wind direction and stability requirements, the model indicates that a wind speed of at least 1 m/s is necessary for stabilities A-D and at least 4 m/s for

stability E. Also, a mixing height of 200 meters is necessary for stabilities A-C and a mixing height of 320 meters is required for stabilities D-E.

5) Under no circumstance should the smoke training be conducted during F stability.

6) No smoke training should occur at any locations other than those specified in Table II of the modeling report.

7) The model predicts concentrations during very specific meteorological conditions. Special attention should be given to the measurement and monitoring of these parameters before, during, and after the smoke training occurs. This requires not only appropriate instrumentation, but qualified personnel as well. Fort Leonard Wood should be required to secure these instruments and trained personnel.

VI. Conclusion

Based on the modeling analysis, the proposed smoke training at Fort Leonard Wood, if operated under the requirements listed in Section V, will not cause or contribute to a violation of the PSD increment or NAAQS for PM10.

Review of Application for Authority to
Construct and Operate Smoke Training Facility
U.S. Army Engineering Center, Ft. Leonard Wood
June 7, 1995

APPENDIX B

Background Concentration for the Fort Leonard Wood Smoke Training

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MEMORANDUM

DATE: June 1, 1995

TO: Randy Raymond, Chief, Permitting Section
Air Pollution Control Program

FROM: Calvin Ku, Chief, Technical Support Section
Air Pollution Control Program

SUBJECT: Background Concentration for the Fort Leonard Wood Smoke Training

Background concentration determination is an important part of the ambient air quality impact analysis. In multi-source areas, two components of background should be considered. The first component is due to the nearby major sources which are expected to affect the area air quality. The impact of the nearby sources was modeled and areas of the maximum impact (hot spots) were identified in a report "Predicted Air Qality Impacts for Fort Leonard Wood Smoke Training School" prepared by the Army's Consultant, Burns and McDonnell.

The second component of the background is attributable to other sources such as natural sources and minor sources. Because no ambient monitors are located in the vicinity of Fort Leonard Wood, air quality data collected at the Mark Twain site was used to determine the natural and minor source background. The Mark Twain site was considered because it has a similar environmental setting as Fort Leonard Wood.

Attached is a report which shows three year PM_{10} data collected at the Mark Twain site between 1992 and 1994. The first and second maximum 24-hour concentrations collected in 1994 are 54 and 39 ug/m^3, respectively. The annual average is 15 ug/m^3. The maximum 24-hour concentration was recorded on June 19, 1994. This maximum concentration should not be used for background because the wind speed recorded was less than 1 m/s for all 24 hours in the day except two. The wind speed data for June 19, is also attached. As specified in the draft permit, the smoke training should not be conducted when the wind speed is 1 m/s or less.

It is recommended that a 24-hour background of 39 ug/m^3 and an annual background of 15 ug/m^3 be used in the air quality analysis for the smoke training. In addition, a 12-month pre-construction monitoring should start immediately after approval of the monitoring plan by the Missouri Department of Natural Resources to verify the background concentrations.

CK:sj

Attachment

PM-10 TOTAL 0-10UM (81102) MISSOURI UNITS: 001 UG/CU METER (25 C)

SITE ID	POC	MT	CITY	COUNTY	ADDRESS	YR	REP ORG	NUM OBS	SCHEDULED NUM OBS	% OBS	NUM REQ	MAXIMUM VALUES 1ST	2ND	3RD	4TH	VALS > 150 MEAS	EST	WTD. ARITH MEAN
29-007-0009	2	2	MEXICO	AUDRAIN CO	AUDRAIN COUNTY MEDICA	92	001	58	58	91	64	57	38	37	35	0	0.00	19
29-007-0009	2	2	MEXICO	AUDRAIN CO	AUDRAIN COUNTY MEDICA	93	001	60	59	94	63	37	35	31	31	0	0.00	17
29-007-0009	2	2	MEXICO	AUDRAIN CO	AUDRAIN COUNTY MEDICA	94	001	61	60	95	63	59	41	40	40	0	0.00	19
29-021-0005	1	3	ST JOSEPH	BUCHANAN C	SOUTH 759 HIGHWAY, PU	92	001	132	46	96	138	110	93	88	86	0	0.00	42
29-021-0005	2	2	ST JOSEPH	BUCHANAN C	SOUTH 759 HIGHWAY, PU	92	001	225	134	96	64	91	89	88	87	0	0.00	39
29-021-0005	2	2	ST JOSEPH	BUCHANAN C	SOUTH 759 HIGHWAY, PU	93	001	177	163	97	63	130	100	100	81	0	0.00	32
29-021-0005	2	2	ST JOSEPH	BUCHANAN C	SOUTH 759 HIGHWAY, PU	94	001	176	146	95	63	96	77	74	74	0	0.00	34
29-043-0004	1	3		CHRISTIAN	JOURNAGAN CLEVER QUAR	94	001	3	3	19	92	31	10	10		0	0.00	17
29-051-0003	1	3	JEFFERSON	COLE CO	MO STATE PENITENTIARY	94	001	15	15	94	16	24	19	17	17	0	0.00	11
29-077-0026	2	1	SPRINGFIEL	GREENE CO	5012 S. CHARLESTON S	92	005	61	61	95	64	49	44	38	35	0	0.00	19
29-077-0026	2	1	SPRINGFIEL	GREENE CO	5012 S. CHARLESTON S	93	005	61	61	97	63	40	37	34	31	0	0.00	17
29-077-0026	2	1	SPRINGFIEL	GREENE CO	5012 S. CHARLESTON S	94	005	61	61	97	63	51	36	31	29	0	0.00	17
29-077-0032	1	2	SPRINGFIEL	GREENE CO	S.W.MISSOURI STATE UN	92	005	58	58	91	64	50	42	41	38	0	0.00	19
29-077-0032	1	2	SPRINGFIEL	GREENE CO	S.W.MISSOURI STATE UN	93	005	59	59	94	63	38	34	33	31	0	0.00	18
29-077-0032	1	2	SPRINGFIEL	GREENE CO	S.W.MISSOURI STATE UN	94	005	61	61	97	63	58	39	32	30	0	0.00	18
29-077-0036	1	2	SPRINGFIEL	GREENE CO	HILLCREST HIGH SCHOOL	92	005	61	61	95	64	60	41	40	34	0	0.00	19
29-077-0036	1	2	SPRINGFIEL	GREENE CO	HILLCREST HIGH SCHOOL	93	005	61	61	97	63	42	39	37	33	0	0.00	18
29-077-0036	1	2	SPRINGFIEL	GREENE CO	HILLCREST HIGH SCHOOL	94	005	61	61	97	63	55	38	33	32	0	0.00	17
29-095-0009	1	2	INDEPENDEN	JACKSON CO	MOPAC RR RIGHT OF WAY	92	001	57	56	88	64	50	39	38	36	0	0.00	20
29-095-0009	1	2	INDEPENDEN	JACKSON CO	MOPAC RR RIGHT OF WAY	93	001	60	60	95	63	40	35	34	34	0	0.00	18
29-095-0009	1	2	INDEPENDEN	JACKSON CO	MOPAC RR RIGHT OF WAY	94	001	57	57	90	63	63	41	40	38	0	0.00	22
29-099-0005	2	2		JEFFERSON	DUNKLIN HIGH SCHOOL,	92	001	58	58	91	64	59	47	47	46	0	0.00	23
29-099-0005	2	2		JEFFERSON	DUNKLIN HIGH SCHOOL,	93	001	57	57	90	63	74	70	41	38	0	0.00	21
29-099-0005	2	2		JEFFERSON	DUNKLIN HIGH SCHOOL,	94	001	61	61	97	63	92	65	52	46	0	0.00	23
29-127-0004	2	2	HANNIBAL	MARION CO	ST ELIZABETH HOSPITAL	92	001	50	50	78	64	63	35	34	32	0	0.00	19
29-127-0004	2	2	HANNIBAL	MARION CO	ST ELIZABETH HOSPITAL	93	001	54	54	86	63	36	34	33	32	0	0.00	19
29-127-0004	2	2	HANNIBAL	MARION CO	ST ELIZABETH HOSPITAL	94	001	59	59	94	63	59	52	43	41	0	0.00	23
29-137-0001	1	3		MONROE CO	HWYS V & 107 MARK TWA	92	001	45	45	70	64	34	33	27	23	0	0.00	14
29-137-0001	1	3		MONROE CO	HWYS V & 107 MARK TWA	93	001	58	58	92	63	33	30	27	26	0	0.00	13
29-137-0001	1	3		MONROE CO	HWYS V & 107 MARK TWA	94	001	56	56	89	63	54	39	39	29	0	0.00	15
29-183-1002	1	2		ST CHARLES	GENERAL ELECTRIC STOR	92	001	47	47	73	64	63	43	36	31	0	0.00	19
29-183-1002	1	2		ST CHARLES	GENERAL ELECTRIC STOR	93	001	30	30	97	31	38	36	36	35	0	0.00	20
29-183-1002	1	2		ST CHARLES	GENERAL ELECTRIC STOR	94	001	41	41	85	48	56	54	51	44	0	0.00	25
29-215-0002	1	3		TEXAS CO	645 MAPLE	92	001	31	16	100	16	46	45	43	42	0	0.00	21

? INDICATES THAT THE MEAN DOES NOT SATISFY SUMMARY CRITERIA

06-01-1995
08:53:46

MET - AIR QUALITY DAILY DATA REPORT

Site: MTSP Date: 6/19/94

Hour	WINDS
0	1.00
1	0.00
2	0.00
3	0.00
4	0.00
5	0.00
6	0.00
7	0.00
8	1.00
9	1.00
10	1.00
11	2.00
12	3.00
13	1.00
14	3.00
15	1.00
16	0.00
17	0.00
18	0.00
19	1.00
20	0.00
21	0.00
22	0.00
23	0.00

BEFORE THE AIR CONSERVATION COMMISSION
STATE OF MISSOURI

IN THE MATTER OF:	)	
	)	
THE COALITION FOR THE ENVIRONMENT AND WENDY PELTON,	)	
	)	
Petitioners,	)	
	)	
v.	)	**No. 95-12-V**
	)	
MISSOURI DEPARTMENT OF NATURAL RESOURCES,	)	
	)	
Respondent,	)	
	)	
THE UNITED STATES ARMY ENGINEERING CENTER AND FORT LEONARD WOOD,	)	
	)	
Applicant for Variance.	)	

FINDINGS OF FACT AND CONCLUSIONS OF LAW

Introduction

The Commission conducted a hearing on this matter at its regularly scheduled meeting on Thursday, May 25, 1995, at the Allis Plaza Marriott, Kansas City, Missouri. Presiding over the hearing was Harriet Beard, Chairman. Other Commissioners participating were Michael Foresman, William Clark, Andrew Farmer and David Crane. The hearing continued on Friday, May 26, 1995, at the same location, and the following Commissioners were in attendance: Harriet Beard, Johnny Ray Conklin and Andrew Farmer. Lewis C. Green, of the law firm Green, Hennings & Henry, St. Louis, represented the petitioners. Deborah Neff, Assistant Attorney General, represented the Missouri Department of Natural Resources

("DNR"). Lt. Col. Uldric L. Fiore, Staff Judge Advocate, represented the applicant for the variance.

Following the hearing of live testimony, the parties submitted designated portions of deposition transcripts and exhibits and replies to such designations by June 1, 1995, and these items have been considered as part of the record. A transcript of the proceedings and the exhibits admitted into evidence have been reviewed by any member of the Commission who has participated in the rendering of a decision in this matter, but was not present for any part of the hearing. The Commission conducted a phone conference, which was closed pursuant to § 610.021(1), RSMo 1994, to discuss and vote upon these findings of fact, conclusions of law and order on June 6, 1995. Counsel was directed to immediately send copies of this decision to the parties of record.

Findings of Fact

1. The United States Army Engineering Center and Fort Leonard Wood ("Applicant"), at the request of the DNR, filed an application for a variance to operate a static and mobile fog oil smoke training facility for the purposes of training personnel in the operation and tactical use of obscurants during simulated battle conditions, beyond the limitations prescribed by Regulation 10 CSR 10-3.080, Restriction of Emission of Visible Air Contaminants for the Outstate Missouri Area. The process involves the use of oil, described in the application as SGF-2 motor oil, injecting it into generators, which heat the substance to 800-1200 degrees F, causing the substance to vaporize. As the heated oil is released into the atmosphere it condenses as particulate matter that remains suspended and refracts light, creating a smoke obscurant. The process can be operated to control opacity to 20%, as the rule would require,

but the Applicant seeks a variance to reach 100% opacity for the training to be effective. The throughput limitations set forth in a draft Prevention of Significant Deterioration (PSD) permit currently under review by the DNR is 65,000 gallons per year. The draft permit requires a limitation of fog oil emissions of 3700 pounds per hour. Applying a conversion factor of 70%, this rate corresponds to PM_{10} emissions of 2600 pound per hour.

2. The Missouri Department of Natural Resources ("DNR") was prepared to recommend that this Commission approve the request for the variance, at its regular meeting on April 27, 1995, in Jefferson City, Missouri, and the matter was included on the agenda for that meeting. The DNR was not aware of any opposition to the variance request. The Commission could not take up the matter at that time for lack of a quorum. The Commissioners in attendance, however, invited comments from representatives of the Applicant, DNR and the public to become acquainted with the request.

3. During the meeting on April 27, 1995, the Commissioners present were informed by Lewis Green, attorney, that a Petition and Request For A Hearing In Opposition To MDNR Request For Variance For Fog Training Exercises At Fort Leonard Wood had been filed on behalf of William A. Gibbs, Rebecca I. Gibbs and the Coalition for the Environment. The Commissioners heard comments from Mr. Green, Roger Pryor, chief executive for the Coalition, and Robert Schreiber, environmental consultant for the Coalition, concerning the petition. The Commissioners were informed that the Base Realignment and Closing Commission ("BRAC"), which was considering a proposal to relocate the static and mobile fog oil smoke training facility from Fort McClellan in Alabama to Fort Leonard Wood, has

required Fort Leonard Wood to obtain all required permits and authorizations, such as the variance at issue here, no later than June 22, 1995.

4. The Missouri Coalition for the Environment ("Coalition") is a corporation organized and existing under the not-for-profit corporation laws, qualified to do business in Missouri, with its principal office located in St. Louis County. The Coalition exists for the purpose of protecting and preserving environmental values in Missouri, and has for years been actively concerned with protecting air quality throughout the state. In this matter the Coalition asserts that it has thousands of members, many of whom seek recreation in floating the Big Piney River, which flows through Fort Leonard Wood, and the Gasconade River, which flows within approximately three miles of the fort, and also in hiking and camping in the Mark Twain National Forest, which surrounds the fort on three sides. The Coalition asserts that its interest in protecting and enhancing the quality of the ambient air throughout the state will be adversely affected if the variance requested by the Applicant is granted, and that Coalition members will be adversely affected as well. A member of the Coalition who resides near Fort Leonard Wood and frequently uses facilities on the premises testified in this matter.

5. On April 27, 1995, Wendy Pelton joined the request for a hearing on the variance filed by the petitioners. Ms. Pelton asserts that she resides and owns property a short distance from Fort Leonard Wood; that she from time to time drives through the fort; that she frequently floats the Big Piney River a few miles from the fort; and that she will be adversely affected by emissions from the training facility at issue in this variance request. Ms. Pelton also testified in this matter.

6. In view of the requirement of Sec. 643.110, RSMo 1994, that this matter be determined by the Commission after a hearing, and in view of the urgency of the deadline imposed by the BRAC, the Chairman decided that the hearing on the variance request should be scheduled for the next regular meeting of the Commission, May 25, 1995, before one or several Commissioners as she may appoint pursuant to the authority granted her by Sec. 643.100, RSMo 1994. By letter prepared on May 3, 1995, and sent by certified mail, return receipt requested, by Timothy P. Duggan, Assistant Attorney General and counsel to the Commission, the parties were so advised.

7. On May 3, 1995, the petitioners filed a Motion For Continuance, To Consolidate, To Appoint A Hearing Officer And Set Hearing, And To Shorten Time And Enter A Discovery Schedule. On May 8, 1995, five Commissioners participated in a phone conference with attorneys for the parties to consider these motions, which were denied by Chairman Beard, with concurrence of the other Commissioners.

8. On or about May 17, 1995, William A. Gibbs and Rebecca I. Gibbs voluntarily dismissed their petition for a hearing on the variance application, without prejudice.

9. The proposed smoke training is a lawful activity of the United States Army. Such training is necessary to protect the lives of soldiers on the battlefield in modern warfare, in that it prepares soldiers to create smoke to obscure friendly troop movements from an enemy.

10. The method for creating the smoke is similar to the method expressly allowed by 10 CSR 10-3.080(5)(E)6 for purposes of training air pollution control inspectors. The rule also expressly exempts fires used solely for the purpose of training firemen {subsection (5)(E)5}.

11. The opacity limitation for a new installation is 20%, pursuant to in 10 CSR 10-3.080(4). In general the opacity limitation is not considered by DNR to be a health-based standard, but relates to aesthetics, in that it protects a visible skyline or landscape. The Applicant proposes to generate smoke at 100% opacity for the specific purpose of training soldiers in concealing friendly troop movements from an enemy under battle conditions, which is an activity that cannot be conducted in compliance with this rule.

12. Otherwise the DNR considers an apparent violation of the opacity rule to be an indicator of a problem with air pollution control equipment. If an inspector observes smoke with an opacity greater than the prescribed limitation for a given facility, the inspector will issue a notice of excess emissions, which may be upgraded to notice of violation, unless the opacity limitation was exceeded because of equipment failure or other problem beyond the control of the operator. In order for the training proposed by the Applicant to be effective, the Applicant must achieve an opacity level of 100%, effectively eliminating opacity as a tool for DNR to determine problems with air pollution control equipment.

13. For some types of equipment and operations opacity can be an indicator of increased levels of emissions. In this matter, however, the witnesses for the DNR testified that emissions calculations will be determined from the throughput for the generators, not opacity, for purposes of the PSD permit application, which is not yet before this Commission. For purposes of this variance request, the Commission finds that opacity will not be relied upon as an indicator of the level of emissions and that control of the level of emissions will be based upon the allowed amount of throughput and other controls that may be established by a PSD permit. The Commission also finds that DNR will not rely upon opacity as an indicator

of the quality or health effects of substances emitted into the air for purposes of the smoke obscurant training.

14. Health concerns associated with the composition of the smoke will be addressed through a Prevention of Significant Deterioration (PSD) permit, if it is issued by the DNR. Accordingly, the granting of the variance from rule 10 CSR 10-3.080, standing alone, will not result in the continuance of a health hazard. If the permit is not issued for health related reasons, the smoke training cannot occur and the variance will be moot.

15. With appropriate conditions, the order of variance can assure that violation of the permit or any health-based laws and regulations, or any laws pertaining to nuisance will cause the variance to be null and void.

16. The applicant is willing to comply with environmental regulations, and recognizes the authority of the DNR to take enforcement actions to prevent the smoke training exercises in the interest of protecting the environment and the public health and welfare.

17. It is the policy of the Applicant to restrict public access to military training exercises, including the smoke obscurant training proposed in this matter, in the interest of public health and safety.

18. If a variance is not granted from the 20% opacity limitation required by 10 CSR 10-3.080, the smoke training exercises will be effectively eliminated without sufficient corresponding benefit or advantage to the people.

Conclusions of Law

I. Jurisdiction

The Commission has jurisdiction over this appeal pursuant to § 643.110, RSMo 1994. The Commission is required to cause a hearing to be set and a record of the evidence to be prepared pursuant to § 643.120, RSMo 1994. A decision of this Commission must be approved in writing by at least four members, each of whom must have either attended the hearing or reviewed all exhibits and read the entire transcript of the proceeding, pursuant to § 643.100, RSMo 1994. All final orders or determinations of this Commission shall be subject to judicial review pursuant to the provisions of §§ 643.130 and 536.100 to 536.140, RSMo 1994.

II. Standing of Petitioners

Objections to the standing of petitioners was waived by the DNR and Applicant during the hearing. In any event, Wendy Pelton and the Coalition assert that they will be aggrieved by the granting of the variance for the reasons set forth in paragraphs 4 and 5 of the Findings of Fact, above. These reasons, which the Commission finds are credible, are sufficient to give the petitioners standing, according to *Citizens for Rural Preservation v. Robinett,* 648 S.W.2d 117, 133-134 (Mo. App. 1978).

III. Burden of Proof and Legal Issues

Section 643.110.4 provides that in any hearing on a variance request the burden of proof shall be on the person applying for the variance. The Commission finds and concludes that the Applicant has sustained its burden of proof.

Section 643.110.1 provides that the Commission may grant individual variances beyond the limitations prescribed in chapter 643 whenever it is found, upon presentation of adequate proof, that compliance with any provision of this chapter or any rule, requirement or order of the commission or director of the Department of Natural Resources will result in a taking of property without just compensation or in the closing and elimination of any lawful business, occupation or activity, without sufficient corresponding benefit or advantage to the people; except that no variance shall be granted where the effect of the variance will permit the continuance of a health hazard; and except, also, that any variance so granted shall not be so construed as to relieve the person who receives the variance from any liability imposed by other law for the commission or maintenance of a nuisance.

In determining under what conditions and to what extent a variance may be granted, the Commission shall exercise a wide discretion in weighing the advantages and disadvantages to the applicant and to those affected by air contaminants emitted by the applicant. § 643.110.2. Variances shall be granted for such period of time and under such terms and conditions as shall be specified by the Commission in its order. The variance may be extended by affirmative action of the Commission. § 643.110.3.

Petitioners argue that § 643.110, in general, allows variances only for existing facilities that require more time to come into compliance with a standard established by law or regulation, and that the Commission lacks the authority to grant a variance to a proposed facility or operation. The Commission does not read the statute so narrowly, however.

§ 643.110.2 allows the Commission wide discretion to determine under what conditions and to what extent a variance may be granted, to weigh the equities involved and

the advantages and disadvantages to the Applicant and to those affected by air contaminants emitted by the Applicant. 10 CSR 10-3.080(4) specifically applies to new installations, and in this case a variance is necessary for the installation to exist at all. It would not make sense economically to require Applicant to create and operate the training program in order to be allowed to seek a variance. If the facility existed already, all other considerations would be the same.

Furthermore, § 643.110.1 expressly provides that the Commission may grant a variance beyond the limitations prescribed in chapter 643, where compliance will result in the elimination of any lawful business, occupation or activity without sufficient corresponding benefit or advantage to the people; except that no granting of the variance shall be granted if it will permit the continuance of a health hazard. The fog oil training is a lawful activity of the U.S. Army, but requiring the training to comply with the 20% opacity limitation of 10 CSR 80-3.010 will clearly defeat the purpose of the training, thereby eliminating it. There was no evidence presented that eliminating this activity will result in a corresponding benefit or advantage to the people. Nor was there evidence to indicate that granting the variance will result in the continuation of a health hazard.

The legal issue before the Commission is whether there is a health impact created by allowing the smoke used in the training to be at 100% opacity. This does not concern the constituents in the smoke itself, either in terms of the toxicity, size, or other hazardous characteristics, particularly in terms of respiratory effects of the smoke upon persons exposed to it; such issues are being studied by the DNR in the context of the PSD permit review for the obscurant training. The PSD permit, if issued, will be subject to an appeal to this

Commission for a contested case hearing and determination of the propriety of such permit. Because the training cannot occur until such a permit is issued, and because the variance would be rendered moot in the event that the permit is denied, the granting of the variance in this order will not result in the continuance of a health hazard. This decision should in no way be construed as a determination of any matter that may come before this Commission in the context of an appeal from a PSD permit issued by the DNR for the smoke obscurant training. Throughout these proceedings the Commission has made it clear that such issues are not ripe for consideration at this time.

The Commission finds and concludes, within its sound discretion after weighing the equities involved, that the variance from 10 CSR 10-3.080 standing alone, with the terms and conditions recommended by the DNR and incorporated herein, will not result in the continuance of a health hazard, nor relieve the Applicant from any liability imposed by other law for commission or maintenance of a nuisance.

Order

Under the authority of § 643.110, RSMo 1994, and subject to the terms and conditions set out below, this Commission grants a variance to the United States Army Engineer Center and Fort Leonard Wood to operate certain equipment and/or process, which will discharge into the ambient air such air contaminants of a shade or density, or of an opacity as to obscure an observer's view, beyond the limits prescribed in 10 CSR 10-3.080, Restriction of Emission of Visible Air Contaminants, to operate a static and mobile fog oil smoke training facility for the purposes of training personnel in the operation and tactical use of obscurants during simulated battle conditions at their Fort Leonard Wood facility.

Terms and Conditions

i. All dates, terms, design specifications and operating conditions specified in the application submitted by the United States Army Engineer Center and Fort Leonard Wood shall govern the mode of operation of the static and mobile fog oil training at the Fort Leonard Wood facility, except that where the dates specified herein are inconsistent with the dates specified in the application, the dates herein shall govern. No alteration of the proposed operation may be made without the approval of the Director, Department of Natural Resources.

ii. At all times during the operation of the static and mobile fog oil training, the United States Army Engineer Center and Fort Leonard Wood shall comply with the permit(s) (if any) that may be issued by the Department of Natural Resources pursuant to Chapter 643, RSMo, and the rules and regulations promulgated pursuant thereto, for the static and mobile fog oil training at the Fort Leonard Wood facility.

iii. At all times during the operation of the static and mobile fog oil training, the United States Army Engineer Center and Fort Leonard Wood shall comply with Missouri State Rule 10 CSR

10-6.170, Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin.

iv. The United States Army Engineer Center and Fort Leonard Wood shall furnish the Air Pollution Control Program with a schedule of training to be conducted at the beginning of each calendar quarter.

v. This variance shall be in effect for one year from the date of startup testing, at which time the United States Army Engineering Center and Fort Leonard Wood may apply for an extension of one year.

APPROVED and ENTERED on June 6, 1995. Separate forms have been signed and will be filed by the members of the Commission to indicate their individual decisions. The individual votes are recorded as follows:

Harriet Beard, concurs
Chairman

Michael Foresman, concurs
Commissioner

Johnny Ray Conklin, not participating
Commissioner

William Clark, concurs
Commissioner

David Crane, concurs
Commissioner

Andrew Farmer, concurs
Commissioner

MISSOURI PERMIT STATUS
June 13, 1995

THE ISSUE

The Department of Defense has recommended the closure of Ft. McClellan, Alabama and the transfer of the Chemical and Military Police Schools to Ft. Leonard Wood, Missouri. Ft. McClellan houses the only live chemical agent training facility in the "free world." This is the third time Ft. McClellan has been proposed to be closed. The 1993 Defense Base Closure and Realignment Commission (BRAC) made it clear that all permits must be in order before a recommendation to close Ft. McClellan would be approved. The 1995 Commission has made similar direct statements with regard for the need for all permits.

The Army has filed for and received only three of several permits that are needed to operate the Chemical School in Missouri, and all three of the permits they have received are tied up in appeals that could prevent the School from ever opening in Missouri.

Chemical Decontamination Training Facility (CDTF)

Fort Leonard Wood submitted an application for a permit to construct the CDTF to the Missouri Department of Natural Resources (MDNR) on March 1, 1995, based on data and drawings assembled during 1983-1985 on which Fort McClellan's original air permit was issued in Alabama in 1987.

MDNR issued a permit to construct the CDTF incinerator on April 10, 1995, conditioned on Fort Leonard Wood conducting and meeting stringent test burns and emission tests after construction of the facility. Special conditions in the Missouri air permit indicate that hazardous waste connot be burned in the CDTF incinerator, e.g., gas mask filters contining chromium, or materials contaminated with nerv agents.

EPA Region VII has indicated that it is concerned when a state regulatory agency says it can issue a permit within such short timetables, and without an opportunity for public review and comment, as was done in Missouri. **An appeal of this permit was filed before the Missouri Administrative Hearing Commission.**

Fog Oil Smoke Generation

Fort Leonard Wood submitted an air permit application to MDNR on March 1, 1995, to conduct fog oil smoke training in Missouri without first coordinating with officials at Fort McClellan on the permit requirements in violation of specific instructions from TRADOC to do so.

On April 11, 1995, MDNR issued a proposed air permit to Fort Leonard Wood which limits the Army to the use of no more than 65,000 gallons per year of fog oil. No use of any other type of fuel or obscurants is permitted under MDNR's proposed permit. Numerous Fort Leonard Wood personnel have repeatedly stated publicly that the air permit will limit them to doing smoke training a maximum of 135 days/year for a maximum of one hour per day. Fort McClellan trains with smoke at least 200 days per year, sometimes as much as 4 to 5 hours per day, depending on weather conditions.

On April 24, 1995, Fort Leonard Wood submitted to MDNR an application for a variance from Missouri's state air regulations which impose a maximum 20% opacity limit. The Chemical School's fog oil operations are by design intended to generate a smoke cloud which is 100% effective in obscuring vision.

On June 6, 1995, The Missouri Air Commission granted a variance to the Opacity Rule which allows the fog oil smoke generation to exceed Missouri's 20% opacity limit. Granting of this variance paved the way for the approval of the fog oil smoke generation permit the next day.

On June 7, 1995, an Air Permit for fog oil usage was approved by the Missouri Air Conservation Commission. This permit allows smoke training to be conducted using fog oil.

On June 9, 1995, the Missouri Coalition for the Environment and individuals from the area surrounding the base, filed an appeal of the issuance of the fog oil usage permit in Circuit Court in the city of St. Louis.

Hazardous Waste Permits

The Director of the Missouri Department of Natural Resources, David Shorr, has made contradictory public statements as to whether or not a hazardous waste permit will be needed for the CDTF. The following documents establish the record regarding Director Shorr's inconsistencies over the past few months.

In letters in 1993 and 1994, to 1993 BRAC Chairman Jim Courter and Secretary of Defense William J. Perry, respectively, MDNR Director David Shorr wrote that a hazardous waste permit will be needed for the CDTF. He also noted in this letter that a hazardous waste permit would normally take 1 ½ to 2 years to complete. In a 1995 letter, however, Director Shorr tells Major General Joe Ballard, Commandant at Ft. Leonard Wood, Missouri, that a hazardous waste permit for the CDTF will now not be required.

On April 12, 1995, before a 1995 BRAC Regional Hearing, Director Shorr testified under oath that a hazardous waste permit for the CDTF will not be required. Mr. Shorr's vehement response to the Chairman of the BRAC Commission was, "... [A] hazardous waste permit is not required for the thirty-four thousandth time."

This decision not to require a hazardous waste permit resulted in an appeal filed by the Missouri Coalition for the Environment before the Missouri Hazardous Waste Commission. In a motion to dismiss appeal, filed by Missouri Attorney General Jay Nixon, Nixon finds that a decision on the need for hazardous waste permit for CDTF is not final, arguing, among other things, that the Director of MDNR did not have the authority to make the decision that a permit was not needed.

Additional Required Permits

In addition, there are the many permits, licences and certifications which are required for the Chemical School to operate in Missouri -- but for which no applications have yet been filed. These include a hazardous waste permit for the incinerator at the CDTF, several stormwater and air quality permits, two Nuclear Regulatory Commission licenses, a radioactive waste storage permit, a NESHAPS hazardous air pollutants permit relating to the radiation laboratory, a wastewater permit and a public water supply permit.

- **Section 7 consultation with U.S. Fish and Wildlife.** Under Section 7 of the Endangered Species Act, the Army is required to seek consultation with the U.S. Fish and Wildlife Service regarding the three listed endangered species on the base (Indiana Bat, Gray Bat and American Bald Eagle). To date, the Army has refused to seek this consultation.

- **Environmental Impact Statement.** The Army has not developed a required environmental impact statement.

- **Nuclear Regulatory Commission permits.** Because the Chemical School utilizes special nuclear materials and produces low-level radioactive waste, Ft. Leonard Wood will have to obtain a Part 30 and a Part 70 license. To date, Ft. Leonard Wood has not applied for these two NRC permits. Once received, it can take from 30 days to a year to process.

A trail of permitting errors that began when the Army failed to even apply for its Missouri permits until March 1, leaving very little time for Missouri to respond. Fort Leonard Wood hurriedly prepared permit applications, leaving out required data and using obsolete and inaccurate information. Missouri rushed the three permits through, awarding two of them in 43 days and a third in just over 60 days -- even though these permits normally take 250 to 500 days. **The rush resulted in permits so flawed that all have been challenged, and are on appeal or in court.** If challengers win, these three permits will be negated; if challengers lose, the three permits could be tied up in court for years, delaying the full operation of the Chemical School until long after the same operations at Fort McClellan have been shut down.

U.S. ARMY PERMIT REQUIREMENTS FOR CHEMICAL TRAINING SCHOOL TRANSFER

REQUIRED PERMITS	IS IT REQUIRED?	REQD. FROM WHOM	APPLICATION STATUS	PERMIT STATUS
Air Permit - Fog Oil Usage This permit allows smoke training to be conducted using fog oil.	Yes (10 CSR 20-6.200)	Missouri DNR	Granted June 7, 1995 Pending Opacity Appeal	Variance Appealed
Air Permit - Opacity Rule Variance This variance would allow the fog oil permit to be granted by allowing fog oil smoke to exceed Missouri's 20 percent opacity limit.	Yes (10 CSR 10-6.060)	Missouri DNR	Approved June 6, 1995	Appealed
Air Permit - CDTF Construction This permit allows the post to build the CDTF, which includes an incinerator.	Yes (10 CSR 10-6.060)	Missouri DNR	Granted April 11, 1995	Appealed
Stormwater Permit - Fog Oil Usage This permit allows storm water to be discharged from the base.	Yes (10 CSR 20-6.200)	Missouri DNR	1st Granted February 17, 1995 Revised March 2, 1995 Granted April 4, 1995	Appealed
Stormwater Permit - CDTF Construction This permit allows the post to build the CDTF which includes clearing more than 5 acres of land.	Yes (10 CSR 20-6.200)	Missouri DNR	Not filed	
Stormwater Permit - Flame Training Since flame training is a significant potential stormwater pollution source, this permit is required for any designated flame training area.	Yes (10 CSR 20-6.200)	Missouri DNR	Not filed	

U.S. ARMY PERMIT REQUIREMENTS FOR CHEMICAL TRAINING SCHOOL TRANSFER

REQUIRED PERMITS	IS IT REQUIRED?	REQD. BY WHOM	APPLICATION STATUS	PERMIT STATUS
Stormwater Permit - Other Construction	Yes (10 CSR 20-6.200)	Missouri DNR Missouri Clean Water Law	Not filed	
This permit is necessary for any construction which would result in a stormwater point source. It is required for all construction areas exceeding 5 acres.				
Air Permit - Other Obscurants	Yes (10 CSR 10-6.060)	Missouri DNR	Not filed	
This permit allows the use of other types of obscurant training (other than fog oil) which is necessary for the comprehensive training in battle conditions.				
Air Permit - Flame Training	Yes (10 CSR 10-6.060)	Missouri DNR	Not filed	
This permit is required for flame training - an integral part of Chemical School training - to be conducted.				
RCRA Hazardous Waste - CDTF Operation	Yes (40 CFR 261.24)	Missouri DNR	Not filed	
This permit allows for the hazardous waste disposal of waste pads containing silver which are used to detect nerve agents. EPA Waste Code D011.				

U.S. ARMY PERMIT REQUIREMENTS FOR CHEMICAL TRAINING SCHOOL TRANSFER

REQUIRED PERMITS	IS IT REQUIRED?	REQD. BY WHOM	APPLICATION STATUS	PERMIT STATUS
NRC Permit **Radioactive Isotope Training Labs** **Part 30** This permit is required for the radioactive laboratories to be constructed at the base. A Part 30 license is for byproduct materials and specific source materials.	Yes (10 CFR 30)	Nuclear Regulatory Comm.	Not filed	
NRC Permit **Radioactive Isotope Training Labs** **Part 70** This permit is required for the radioactive labs to be constructed. A Part 70 license is for Special Nuclear Material.	Yes (10 CFR 70)	Nuclear Regulatory Comm.	Not filed	
Radioactive Training-Laboratory Wastes This permit is required for Fort Leonard Wood to store all radioactive waste materials on-site until a disposal site is available (estimated 10-15 years.)	Yes (10 CSR 25-7.264 and 40 CFR 264)	Missouri DNR	Not filed	
Air Permit - NESHAPs (Rad. Lab) The National Emissions Standards for Hazardous Air Pollutants permit is required for any new facility with an NRC-regulated license.	Yes (10- CSR 10-6.060)	US EPA Missouri DNR	Not filed	

U.S. ARMY PERMIT REQUIREMENTS FOR CHEMICAL TRAINING SCHOOL TRANSFER

REQUIRED PERMITS	IS IT REQUIRED?	REQD. BY WHOM	APPLICATION STATUS	PERMIT STATUS
Air Permit - Process Weight Rule The Process Weight Rule restricts the amount of allowable particulate emissions from the generation of fog oil.	Yes (10- CSR 10-3.050)	Missouri DNR	Not filed	
Air Permit - Modeling for PSD EPA guidelines require that total emissions (major and minor) from all of the Chemical School operations be evaluated to prevent significant deterioration of air quality.	Yes (10- CSR 10-6.060)	Missouri DNR	Not filed	
Wastewater Permit - CDTF Air Scrubber Water This is a water polution control construction permit which will allow wastewater from the incinerator scrubber to be discharged into Fort Leonard Wood's waste-water treatment plant.	Yes (10 CSR 20-6.010)	Missouri DNR	Not filed	
Public Water Supply Permit This permit allows the base to dispense water from its nontransient noncommunity water system to staff exceeding 25 persons.	Yes (10 CSR 60-3.010 and 10 CSR 60-2.015)	Missouri DNR Missouri Drinking Water Regulations	Not filed	

STATE OF MISSOURI
Mel Carnahan, Governor • David A. Shorr, Director
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF THE DIRECTOR
P.O. Box 176 Jefferson City, MO 65102-0176 (314)751-4422
FAX (314)751-7627

June 22, 1995

Please refer to this number when responding 950623-2

Mr. J. J. Gertler
Senior Analyst, Army Team
The Defense Base Closure and
Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, VA 22209

TRANSMITTED BY FAX: (703) 696-0550

Dear Mr. Gertler:

Enclosed please find a revised matrix pertaining to the U.S. Army Environmental Action Reviews for the Chemical Training School at Fort Leonard Wood, Missouri.

The Missouri Department of Natural Resources found serious misrepresentations in the matrix provided by Alabama representatives.

Enclosed for your use, as appropriate, is a revised matrix that we believe more accurately represents the facts.

If you need additional information, please let me know.

Very truly yours,

DEPARTMENT OF NATURAL RESOURCES

David A. Shorr

David A. Shorr
Director

DAS:sbs

Enclosure

c: Madelyn Creedon, General Counsel, The Defense Base Closure and Realignment Commission

RECYCLED PAPER

U.S. ARMY ENVIRONMENTAL ACTION REVIEWS FOR CHEMICAL TRAINING SCHOOL AT FORT LEONARD WOOD, MISSOURI

June 22, 1995

REQUIRED ACTIONS	IS PERMIT REQUIRED?	JURISDIC-TION	APPLICATION STATUS	PERMIT STATUS	MO DNR COMMENTS
Air - Fog Oil Usage This permit allows smoke training to be conducted.	Yes	MO DNR	Submitted March 1, 1995.	Issued June 7, 1995.	Property right vests at time of issuance. Appeal pending.
Air - CDTF Construction This permit allows the post to build the CDTF, which includes an incinerator.	Yes	MO DNR	Submitted March 1, 1995.	Issued April 10, 1995.	Property right vests at time of issuance. Appeal pending.
Stormwater - Fog Oil Usage This permit allows stormwater to be discharged from the base including smoke training area.	Yes	MO DNR	Original submitted January 24, 1994; revised submitted March 2, 1995.	Original issued February 17, 1995; Revised March 2, 1995; Final granted April 4, 1995.	Property right vests at time of issuance. Appeal pending.
Stormwater - CDTF Construction Permit required only if more than 5 acres of land are cleared.	No	MO DNR	Not required.	Not necessary.	Not needed unless more than 5 acre disturbance. Regulatory authority may be avoided by keeping any clearing to less than 5 acres.
Stormwater - Flame Training	No	MO DNR	Not required.	Not necessary.	Not part of application; not a stormwater issue in Missouri.

U.S. ARMY ENVIRONMENTAL ACTION REVIEWS FOR CHEMICAL TRAINING SCHOOL AT FORT LEONARD WOOD, MISSOURI

June 22, 1995

REQUIRED ACTIONS	IS PERMIT REQUIRED?	JURISDIC-TION	APPLICATION STATUS	PERMIT STATUS	MO DNR COMMENTS
Stormwater - Other Construction Permit required only if more than 5 acres of land are cleared.	No	MO DNR	Not necessary.	Not required.	Not needed unless more than 5 acre distrubance. Regulatory authority may be avoided by keeping any clearing to less than 5 acres.
Air - Opacity Rule Variance	Variance required prior to 6/15/95; not required after rule published 6/15/95.	MO DNR	Submitted April 24, 1995.	Variance granted June 6, 1995.	Property right vests at time of issuance. Initial legal challenge denied. Rule change created exemption published 6/15/95.
Air - Other Obscurant This permit would allow the use of other types of obscurant training (other than fog oil) which may be necessary for the comprehensive training in battle conditions. (Alabama language)	No	MO DNR	Not necessary.	Not required.	Other obscurants now in use are grandfathered and hence don't need to be permitted.
Air - Flame Training	No	MO DNR	Not necessary.	Not required.	Exempt as combustion device with capacity less than 1 million BTU's per hour heat input. 10 CSR 10-6.060.

U.S. ARMY ENVIRONMENTAL ACTION REVIEWS FOR CHEMICAL TRAINING SCHOOL AT FORT LEONARD WOOD, MISSOURI

June 22, 1995

REQUIRED ACTIONS	IS PERMIT REQUIRED?	JURISDIC-TION	APPLICATION STATUS	PERMIT STATUS	MO DNR COMMENTS
RCRA Hazardous Waste - CDTF Operation This permit would allow hazardous waste disposal in CDTF unit, pursuant to MO Hazardous Waste Management Law.	No	MO DNR	Submitted April 6, 1995.	Determined not to be necessary.	Materials do not meet MO Hazardous Waste Management Law definitions and are therefore not hazardous waste.
NRC - Radioactive Isotope Training Labs Part 30 This permit is required for the radioactive laboratories to be constructed at the base. A Part 30 license is for byproduct materials and specific source materials. (Alabama language)	Not a state requirement.	U. S. Nuclear Regulatory Commission	Unknown.	Unknown.	Not required by Missouri - federal level determination.
NRC - Radioactive Isotope Training Labs Part 70. This permit is required for the radioactive laboratories to be constructed at the base. A Part 70 license is for Special Nuclear Material. (Alabama language)	Not a state requirement.	U. S. Nuclear Regulatory Commission	Unknown.	Unknown.	Not required by Missouri - federal level determination.
Radioactive Training-Laboratory Waste This permit is required for Fort Leonard Wood to store all radioactive waste materials on-site until a disposal site is available (estimated 10-15 years). (Alabama language)	Not a state requirement.	U. S. Nuclear Regulatory Commission	Unknown.	Unknown.	Not required by Missouri - federal level determination. Missouri is a member of the Midwest Interstate Low-Level Radioactive Waste Compact. Ohio currently siting facility.

U.S. ARMY ENVIRONMENTAL ACTION REVIEWS FOR CHEMICAL TRAINING SCHOOL AT FORT LEONARD WOOD, MISSOURI

June 22, 1995

REQUIRED ACTIONS	IS PERMIT REQUIRED?	JURISDIC-TION	APPLICATION STATUS	PERMIT STATUS	MO DNR COMMENTS
Air - NESHAP's (Rad. Lab)	No	U.S. EPA, Region VII MO DNR	Not necessary.	Not required.	Not needed unless emissions exceed de minimis levels.
Air - Process Weight Rule	No	MO DNR	Not necessary.	Not required.	Not an industrial process.
Air - Modeling for PSD for CDTF	No	MO DNR	Not necessary.	Not required.	Not PSD because below de minimis level, therefore modeling not required.
Wastewater - CDTF Air Scrubber Water Water generated to be burned in incinerator pursuant to air permit application.	No	MO DNR	Not necessary.	Not required.	Application indicates destruction in incinerator. No discharge solution.
Public Water Supply This permit allows the base to dispense water from its nontransient noncommunity water system to staff exceeding 25 persons. (Alabama language)	Yes	MO DNR	Submitted in 1981.	Issued in 1982.	No additional requirements.

U.S. ARMY PERMIT REQUIREMENTS FOR CHEMICAL TRAINING SCHOOL TRANSFER

REQUIRED PERMITS	IS IT REQUIRED?	REQD. BY WHOM	APPLICATION STATUS	PERMIT STATUS
Stormwater Permit - Other Construction	Yes (10 CSR 20-6.200)	Missouri DNR Missouri Clean Water Law	Not filed	
This permit is necessary for any construction which would result in a stormwater point source. It is required for all construction areas exceeding 5 acres.				
Air Permit - Opacity Rule Variance	Yes (10 CSR 10-6.060)	Missouri DNR	Approved June 6, 1995	Appealed
Air Permit - Other Obscurants	Yes (10 CSR 10-6.060)	Missouri DNR	Not filed	
This permit allows the use of other types of obscurant training (other than fog oil) which is necessary for the comprehensive training in battle conditions.				
Air Permit - Flame Training	Yes (10 CSR 10-6.060)	Missouri DNR	Not filed	
This permit is required for flame training to be conducted as part of the Chemical School. It is an integral part of the training.				
RCRA Hazardous Waste - CDTF Operation	Yes (40 CFR 261.24)	Missouri DNR	Not filed	
This permit allows for the hazardous waste disposal of waste pads containing silver which are used to detect nerve agents. EPA Waste Code D011.				

U.S. ARMY PERMIT REQUIREMENTS FOR CHEMICAL TRAINING SCHOOL TRANSFER

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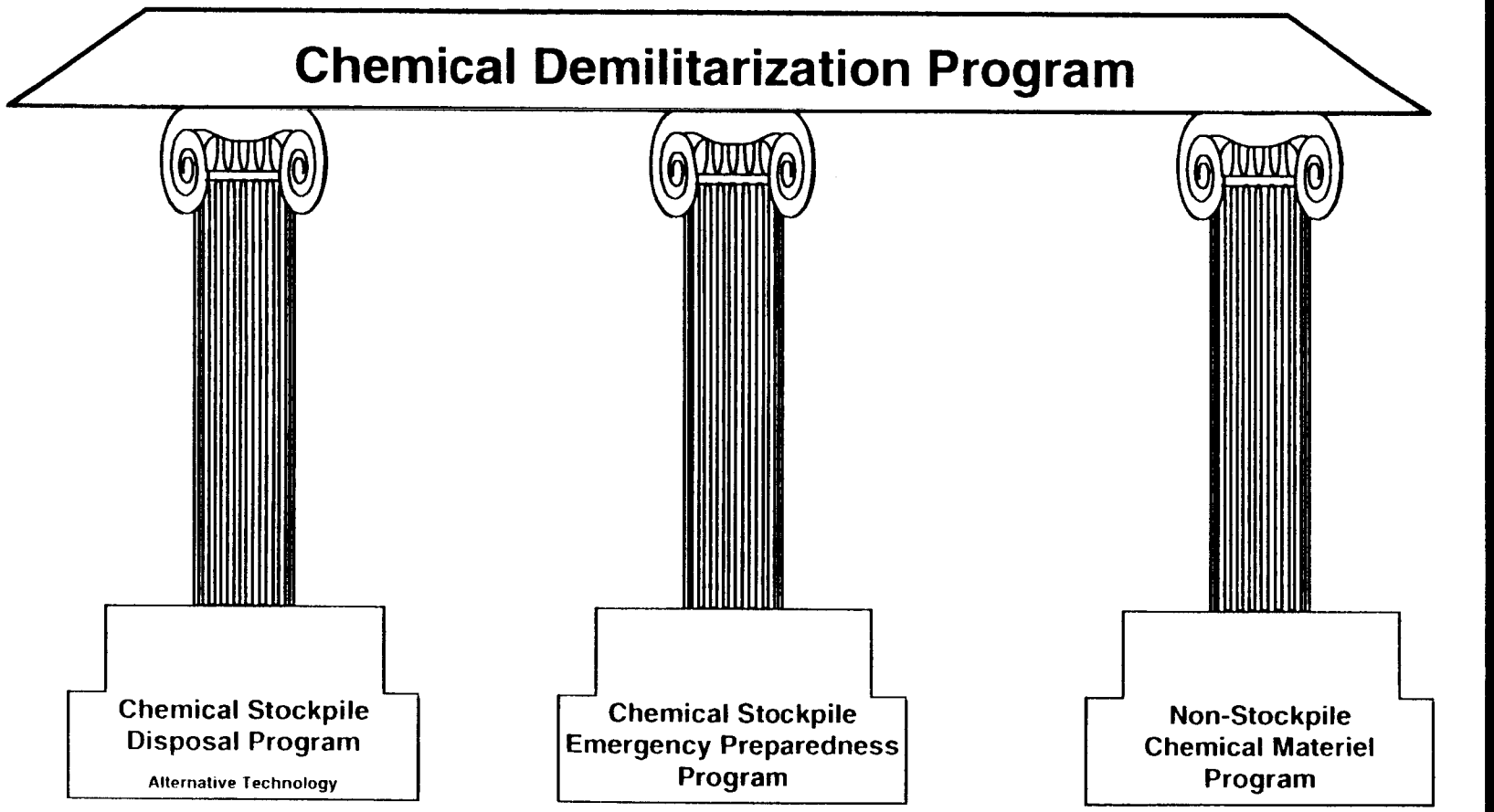
NRC Permit **Radioactive Isotope Training Labs** **Part 30** This permit is required for the radioactive laboratories to be constructed at the base. A Part 30 license is for byproduct materials and specific source materials.	Yes (10 CFR 30)	Nuclear Regulatory Comm.	Not filed	
NRC Permit **Radioactive Isotope Training Labs** **Part 70** This permit is required for the radioactive laboratories to be constructed at the base. A Part 70 license is for Special Nuclear Material.	Yes (10 CFR 70)	Nuclear Regulatory Comm.	Not filed	
Radioactive Training-Laboratory Wastes This permit is required for Fort Leonard Wood to store all radioact ive waste materials on-site until a disposal site is available (estimated 10-15 years.)	Yes (10 CSR 25-7.264 and 40 CFR 264)	Missouri DNR	Not filed	

.S. ARMY PERMIT REQUIREMENTS
OR CHEMICAL TRAINING SCHOOL TRANSFER

REQUIRED PERMITS	IS IT REQUIRED?	REQD. BY WHOM	APPLICATION STATUS	PERMIT STATUS
Air Permit - NESHAPs (Rad. Lab)	Yes (10- CSR 10-6.060)	US EPA Missouri DNR	Not filed	
Air Permit - Process Weight Rule	Yes (10- CSR 10-3.050)	Missouri DNR	Not filed	
Air Permit - Modeling for PSD for CDTF	Yes (10- CSR 10-6.060)	Missouri DNR	Not filed	
Wastewater Permit - CDTF Air Scrubber Water This is a water polution control construction permit which will allow wastewater from the incinerator scrubber to be discharged into Fort Leonard Wood's waste-water treatment plant.	Yes (10 CSR 20-6.010)	Missouri DNR	Not filed	
Public Water Supply Permit This permit allows the base to dispense water from its nontransient noncommunity water system to staff exceeding 25 persons.	Yes (10 CSR 60-3.010 and 10 CSR 60-2.015)	Missouri DNR Missouri Drinking Water Regulations	Not filed	

THE CHEMICAL DEMILITARIZATION PILLARS



MISSIONS

Chemical Demilitarization (Chem Demil) Program: Implement the Destruction of all U. S. Chemical Warfare Related Materiel, Including the Chemical Weapons Stockpile, while Ensuring **Maximum Protection** to the Environment, General Public and Personnel Involved in the Destruction Effort.

Chemical Stockpile Disposal Program (CSDP): Destroy the U.S. Stockpile of Unitary Chemical Weapons while Ensuring **Maximum Protection** to the Environment, General Public, and Personnel Involved in the Destruction Effort.

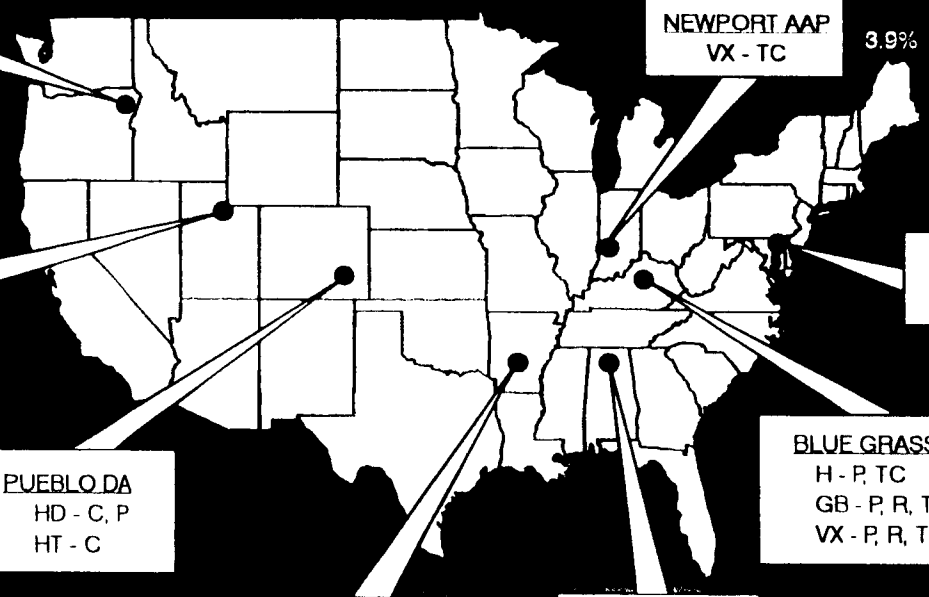
Non-Stockpile Chemical Materiel Program (NSCMP): Destroy the Inventory of Non-Stockpile Chemical Warfare Materiel while Ensuring Protection to the Environment, General Public, and Personnel Involved in the Destruction Effort.

Chemical Stockpile Emergency Preparedness Program (CSEPP): Provide **Maximum Protection** of the Civilian Population During Storage, Handling and Destruction of the U.S. Chemical Weapons Stockpile by Improving State and Local Governments' Preparedness for an Accidental Release of Agent.

WHY CHEM DEMIL IS UNIQUE

- Mandated by Congress
- May Become Treaty Driven
- White House Interest
- Must Submit an Annual Report to Congress
- Life Cycle Costs Are Truly Cradle to Grave - "Grass and Daisies"
- Incineration Plants Are Politically Sensitive to Communities
- Obtaining Environmental Permits Controls Schedule
- O&M Costs > 50% of Total Program Costs
- The Developer is the User

CHEMICAL STOCKPILE DISTRIBUTION BY STORAGE LOCATION



UMATILLA DA — 11.6%
HD - TC
GB - P, R, B, TC
VX - P, R, M, ST, TC

TOOELE AD — 42.3%
H - P, TC
HD - C, P, TC
HT - C, P
GB - C, P, R, B, TC
VX - C, P, R, M, ST, TC
GA - TC
L - TC

PUEBLO DA — 9.8%
HD - C, P
HT - C

PINE BLUFF — 12.0%
HD - C, TC
HT - TC
GB - R, TC
VX - R, M

ANNISTON AD — 7.1%
HD - C, P, TC
HT - C, TC
GB - C, P, R, TC
VX - P, R, M, TC

NEWPORT AAP — 3.9%
VX - TC

ABERDEEN — 5.0%
HD - TC

BLUE GRASS AD — 1.6%
H - P, TC
GB - P, R, TC
VX - P, R, TC

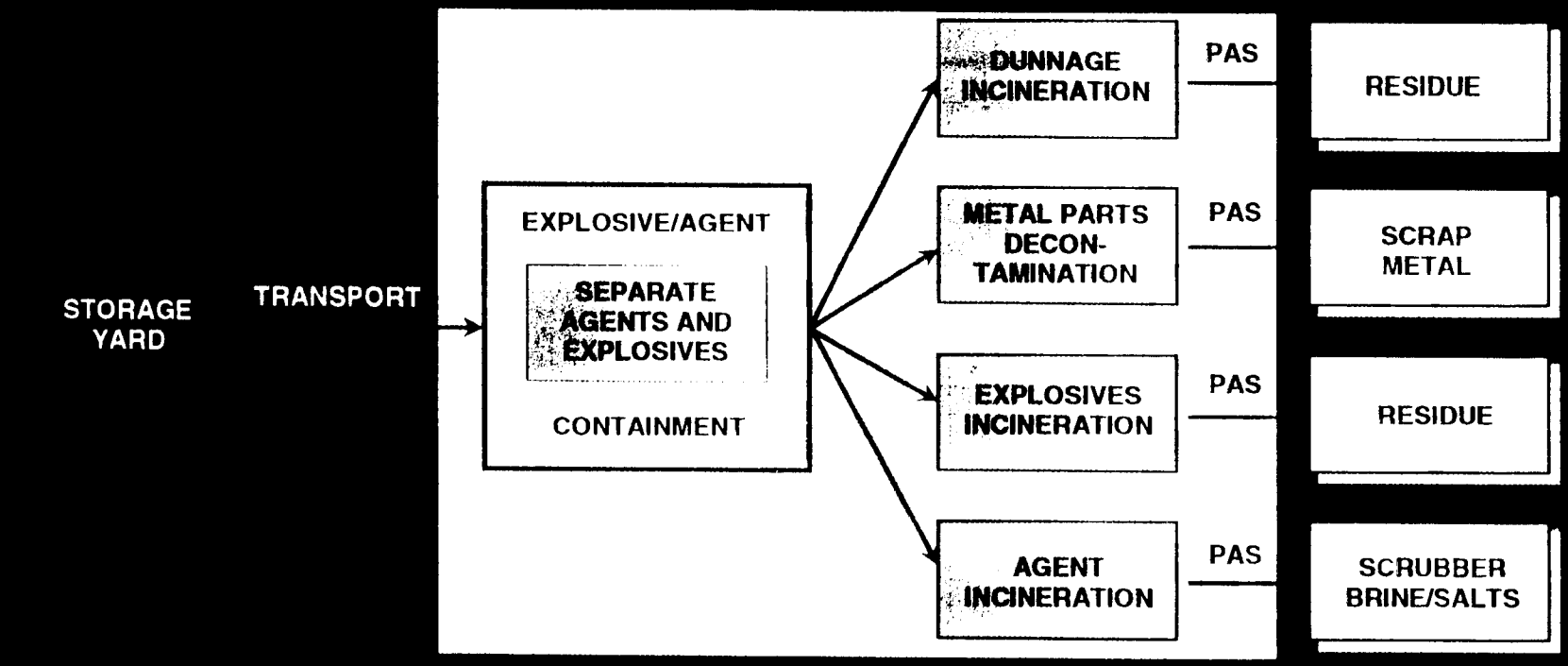
JOHNSTON ISLAND (JACADS) — 6.6%
H - C, P, TC
GB - P, R, B, TC
VX - P, R, M, TC

HAWAII

GB, VX, H, HD, HT, GA, L = CHEMICAL AGENTS

TC = Ton Container
R = Rockets
M = Mines
ST = Spray Tanks
B = Bombs
C = Cartridges
P = Projectiles

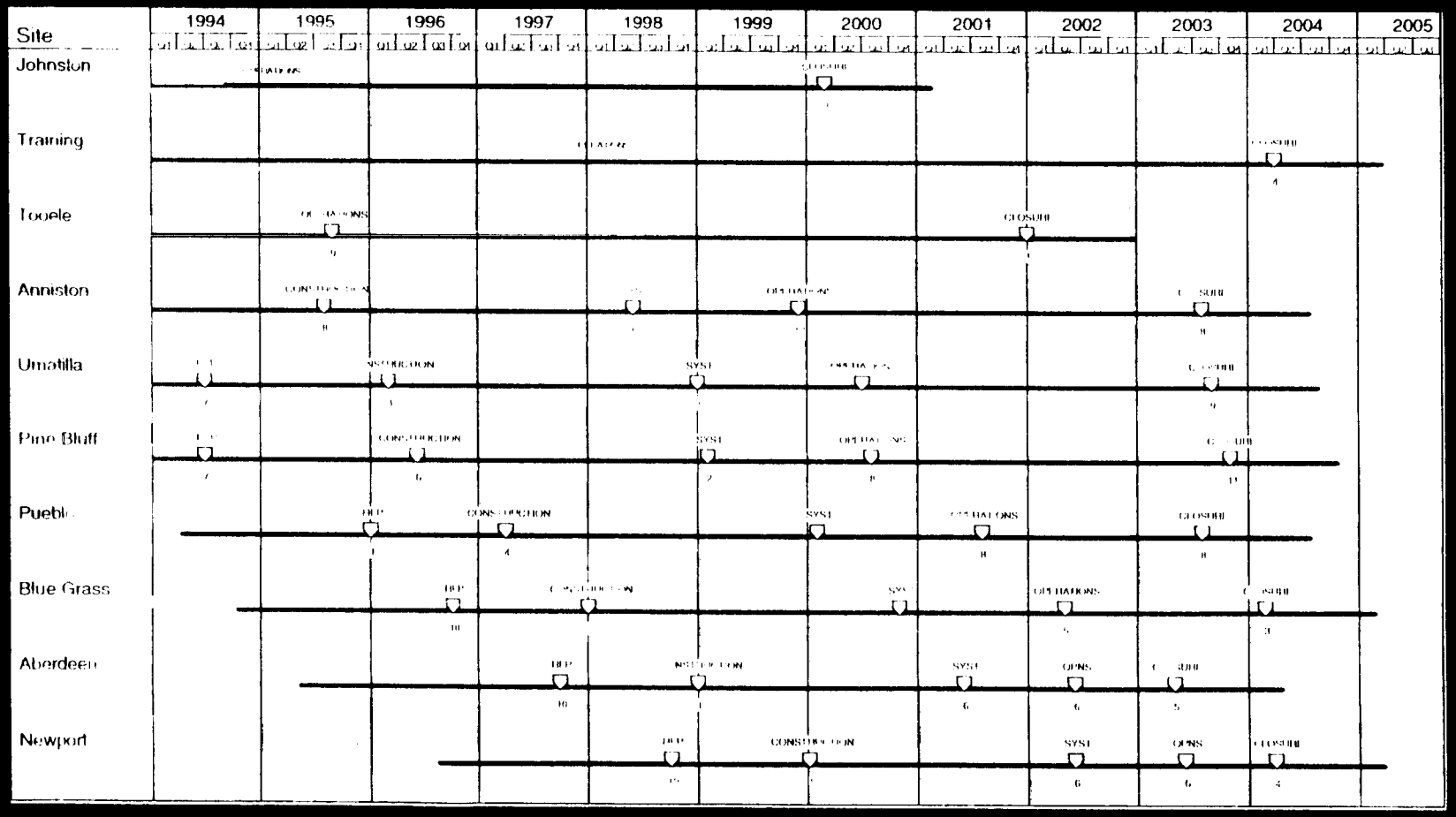
CHEMICAL MUNITIONS DISPOSAL PROGRAM



PAS - POLLUTION ABATEMENT SYSTEM

STOCKPILE DISPOSAL SCHEDULE

As of: 28 FEB 95



Construction Means Selection Of System Contractor and Contract Award

NSCMP DEFINITION

- Disposal of All Chemical Warfare Materiel (CWM) Not Included in the Unitary Stockpile:
  - Binary Chemical Weapons
  - Miscellaneous CWM: (As Defined by the Chemical Weapons Convention)
  - Recovered Chemical Weapons
  - Former Chemical Weapons Production Facilities
  - Buried CWM

CHEMICAL STOCKPILE EMERGENCY PREPAREDNESS PROGRAM

- Required By Sec 1412, Public Law 99-145
- Ongoing Program to Develop Functioning Alert and Notification Systems, Emergency Operations Centers, Communications Systems, and Automated Data Processing Systems
- Ongoing Effort to Develop and Host Training Courses on CSEPP, Chemical Awareness, Emergency Medical Technician Response, Decontamination, Use of Auto-Injector Antidotes for Nerve Agent Exposure and Overview of Personal Protective Equipment
- Program is Directed at the Stockpile and Assures Public Safety at all CONUS Storage Sites Until Destruction is Completed
- Partnership with FEMA, States, Counties and Installations
- Benchmarking/Baselining Cost By Site Complete By Oct 95

DAB APPROVED PROGRAM IMPERATIVES

(29 MAR 95)

Program Manager for Chemical Demilitarization

Environmental

RCRA and CAA Requirements Including:
- HRA Protocol and Standard
- Realistic Trial Burns for all Sites

DoD

Charcoal Filters

"Maximum Protection"

Alternative Technology

Congressional

Phase II Closure

Risk Assessments

The Chemical Weapons Convention (CWC)

J.E. (Ned) Covington, Ph.D.
OATSD(AE)(CBM)
June 2, 1995

CWC Overview

- Background
- Prohibitions
- Requirements
- Provisions
- Status
- Related Bilateral Agreements
- Questions/Discussion

CWC Background

- Negotiated in Geneva (1968-92)
- Signed in Paris (1993)
- PrepCom in The Hague (1993-present)
- Entry into Force, Worldwide (1995?)

CWC Prohibitions

- Development
- Production
- Acquisition
- Stockpiling
- Retention
- Transfer
- Use, or Preparation for Use
- Assistance in Prohibited Activity

CWC Requirements

- Destruction of Chemical Weapons (CW)
  - Existing Stockpiles
  - Abandoned CW in another State
- Destruction of CW Production Facilities
- Declarations of Related Activity
- Non use of Riot Control Agents (RCAs) as a "method of warfare"

CWC Provisions

- International Organization (OPCW)
  - Conference of States Parties
  - Executive Council
  - Technical Secretariat
- Intrusive Verification
  - Routine Inspections (Facility Agreements)
  - Challenge Inspections ("Managed Access")
  - Conversion of Certain Facilities
- Assistance & Protection against CW

CWC Status

- Signed by 159 Nations
- Ratified by 27 Nations
  - 65 Ratifications Needed
  - 180-day "Window" before Entry Into Force
  - 10 Nations Ratified, but Holding...
- US and Russian Participation Needed
  - US Senate & Ru Duma Now Considering
- Projection: December 1995?

Related Bilateral CW Agreements

- Wyoming MOU
  - Sep 89; Completed - Dec 94
- Bilateral Destruction Agreement
  - Jun 90; Status Uncertain
- Destruction Assistance Agreement
  - Jul 92; Ongoing - $55 Million

Questions

- Impact of Bilateral CW Agreements
- Prospects of a CWC without US
- Prospects of a CWC without Russia
- CW Destruction Timelines
- Protection of National Security
- Protection of Confidential Business Info
- Effectiveness of the CWC

GLEN BROWDER
3rd District, Alabama

COMMITTEE ON NATIONAL SECURITY
COMMITTEE ON THE BUDGET

Congress of the United States
House of Representatives
Washington, DC 20515–0103

WASHINGTON OFFICE:
2344 Rayburn Building
Washington, DC 20515–0103
(202) 225–3261

DISTRICT OFFICES:
104 Federal Building
Post Office Box 2042
Anniston, AL 36202
Phone: (205) 238–5655

107 Federal Building
Opelika, AL 36801
Phone: (334) 745–6221

115 East Northside
Tuskegee, AL 36083
Phone: (334) 727–6490

April 27, 1995

The Honorable Molly H. Beattie
Director, U.S. Fish and Wildlife Service
3256 Interior Building
1849 C Street, NW
Washington, DC 20240

Dear Director Beattie:

The purpose of this letter is to request your assistance in providing information to me regarding compliancy with the Endangered Species Act at Fort Leonard Wood, Missouri.

As you may know, the Army proposes to close Fort McClellan, Alabama, and relocate its current activities and missions to Fort Leonard Wood. This recommendation is currently under review by the independent Defense Base Closure and Realignment Commission.

It is my understanding that the Endangered Species Act requires federal agencies to consult with the Fish and Wildlife Service on any proposed action that may affect a listed endangered/threatened species. It has been determined that breeding populations of two listed species, Indiana and Gray Bats, are found at Fort Leonard Wood.

Among the many activities being proposed for transfer to Fort Leonard Wood is smoke/obscurant training for U.S. Army Chemical Corps soldiers. A key aspect of this training is dissemination into the atmosphere of large quantities (77,000 gallons per year) of a smoke-producing material known as fog oil. Fog oil is a petroleum derivative that is disseminated by means of mechanical smoke generators and in typical training exercises, areas as large as 20-25 square kilometers may be covered with a dense cloud of the material. Smoke training also involves the dissemination of colored smoke containing dyes, brass flakes and carbon fibers. It would seem to me that dissemination of these materials on a large scale would have an adverse impact on the bat population.

It is also my understanding that Army installations (Fort Leonard Wood, in this case) must formally consult with the Fish and Wildlife Service on an action that may affect a listed species or critical habitat unless the listing service agrees in writing that the action is not likely to adversely affect any listed species or critical habitat.

My question to you is this: Has there been any consultation (formal or informal) between the Army and your Service regarding the proposed move of activities from Fort McClellan to Fort Leonard Wood? If so, please provide me with copies of all related correspondence, decision or other communications and documentation. If not, do you anticipate any consultation on this issue in the future?

Thank you for your assistance with this matter, and because of base-closure deadlines, I would appreciate receiving your reply by May 10, 1995.

Sincerely,

Glen Browder

Glen Browder
Member of Congress

GB/vfp

DEPARTMENT OF THE ARMY
U.S. ARMY CHEMICAL AND MILITARY POLICE CENTERS & FORT McCLELLAN
FORT McCLELLAN, ALABAMA 36205-5000

REPLY TO
ATTENTION OF

27 APR 1995

Office of the Staff Judge Advocate

Ms. Madelyn R. Creedon
General Counsel
Defense Base Closure and Realignment
Commission
1700 N. Moore Street, Suite 1425
Arlington, Virginia 22209

Dear Ms. Creedon:

During your visit last month you requested information pertaining to the acquisition of Fort McClellan. At the time I thought it would be a relatively easy tasking. In discussions with the Corps of Engineers, and after one of my staff attorneys spent several hours at the Calhoun County Court House I have determined there are 17 deeds relating to the acquisition of Fort McClellan, and at least two condemnation decisions are on file.

While all the deeds are recorded, their indexing is not well done. The Mobile District Corps of Engineers does have copies of all the deeds, but they are warehoused on microfiche. I thought it best to summarize the information for you.

The deeds all convey a fee simple interest to the United States of America. No reversionary clauses have been found in any of the deeds. Several did not convey mineral rights to the United States, and Mobile has an historical file on this issue. A contract for the sale of the land between the Anniston Chamber of Commerce and the United States is dated March 16, 1917. The majority of the approximate 19,000 acres (on Fort McClellan proper, not including Pelham Range and leased property), was transferred between September 1918 and July 1919.

I hope this information is helpful. If I can assist you further, please do not hesitate to contact me at (205) 848-5435.

Sincerely,

Bryan H. Felmet
Lieutenant Colonel, U.S. Army
Staff Judge Advocate

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15 MAY 95

M,

You may want to read the tabbed parts + pp. 1+2 before you go out to St. Louis. I'm checking on the status of the permit hearings + lawsuits) — I'll update you ASAP.

Ralph

May 3, 1995

MEMORANDUM FOR COMMISSIONER REBECCA COX

SUBJECT: ENVIRONMENTAL PERMITTING AT FORT LEONARD WOOD

Notwithstanding David Shorr's letter of April 18, 1995 to Ms. Creedan, there are matters now pending in Missouri which question the validity of the permits granted and the likelihood that additional required permit requests will be approved by 22 June 1995, if at all.

Two petitions have been filed with the Missouri Air Conservation Commission which challenge the application by the Army for a variance for visible emissions resulting from operating the Smoke Training School (Tab 1 and 2). In addition, a motion to expedite the hearing on the CDTF permit to construct, or in the alternative to stay the permit to construct, has been filed with the Missouri Air Conservation Commission (Tab 3). Finally, a motion of appeal of the Missouri Department of Natural Resource's approval to construct the CDTF has been filed with the Missouri Air Conservation Commission (Tab 4).

In addition to the foregoing, there will be a hearing before the Missouri House of Representatives Energy Committee on 3 May 1995. This hearing will consider the nuclear permitting requirements associated with the proposed location of the Chemical School at Fort Leonard Wood. To our knowledge, no application for a permit for this activity has been sought by the Army, nor does it appear that Missouri officials were aware of the mission before the release of the Secretary of Defense Base Closure recommendations on 28 February 1995. Enclosed is a White Paper concerning Live Agent Nuclear Defense Training at Fort McClellan and the related permits (Tab 5).

It is anticipated that there will be public meetings of Missouri State Environmental Panels on 9, 12, and 25 May 1995. The 12 May hearing is a public hearing in Waynesville, Missouri concerning the fog oil permit; the 25 May hearing is a full Commission hearing to address the CDTF permit to construct and the fog oil permit.

At least one letter, (Tab 6) has been received by Chairman Dixon from Missouri environmental groups, a letter dated April 11, 1995 from the Missouri Coalition for the Environment which raises questions with respect to the accuracy and adequacy of the information provided by the Army in its permit applications, and the adherence of Missouri officials to their own written guidelines and policies.

At Tab 7 are various Missouri media articles and press releases reflecting concern and opposition by Missouri citizens.

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BEFORE THE MISSOURI
AIR CONSERVATION COMMISSION

IN THE MATTER OF:

WILLIAM A. GIBBS, REBECCA I. GIBBS,
AND THE COALITION
FOR THE ENVIRONMENT

Petitioners,

vs.

MISSOURI DEPARTMENT OF
NATURAL RESOURCES,

Respondent.

PETITION AND REQUEST FOR A HEARING IN OPPOSITION TO MDNR REQUEST FOR VARIANCE FOR FOG TRAINING EXERCISES AT FORT LEONARD WOOD

Come Now Petitioners, by and through their attorneys, and pursuant to § 643.110(4) RSMo., appeal the decision of the Missouri Department of Natural Resources ("MDNR") to issue a variance to the U.S. Army Engineering Center and Fort Leonard Wood for visible emissions resulting from the operation of an obscurant (smoke) training school at the facility and request the Commission to conduct an evidentiary hearing on the proposed variance. In support thereof, Petitioners state as follows:

1. Petitioners William A. Gibbs and Rebecca I. Gibbs (hereinafter "the Gibbs") are residents of Newberg, Missouri and own real property near Fort Leonard Wood. The Gibbs and their minor children use for recreational purposes the streams and national forest areas adjacent to Fort Leonard Wood and live and recreate within the potential impact area of the proposed smoke training exercises. The Gibbs from time to time visit Fort Leonard Wood and are present on the premises. They will be

adversely affected by the emissions resulting from the smoke training exercises.

2. The Missouri Coalition for the Environment ("Coalition") is a corporation organized and existing under the not-for-profit corporation laws, qualified to do business in Missouri, with its principal office located in St. Louis County, Missouri. The Coalition exists for the purpose of protecting and preserving environmental values in Missouri, and has for years been actively concerned with protecting air quality throughout the state. The Coalition has thousands of members, many of whom seek recreation in floating the Big Piney River, which flows through Fort Leonard Wood, and the Gasconade River, which flows within approximately three miles of the fort, and also in hiking and camping in the Mark Twain National Forest, which surrounds the fort on three sides. The Coalition's interest in protecting and enhancing the quality of the ambient air throughout the state will be adversely affected if the variance is granted. The Coalition members will be adversely affected by the emissions from the fogging operations which are the subject of this variance request, if the variance is granted. The Coalition files this petition on its own behalf and on behalf of its members.

3. The Gibbs and the Coalition are "aggrieved persons" within the meaning of § 643.110(4) in that each Petitioner has a specific and legally cognizable interest in the subject matter of this administrative action, and the decision of the Commission will have a direct and substantial impact on that interest.

4. As part of the base closure and realignment process, the Army has proposed to relocate from its present location in Fort McClellan, Alabama to Fort Leonard Wood, Missouri the United States Army's nuclear, biological and radiological training programs including the Chemical Decontamination Facility and Thermal Treatment Unit ("CDTF") and smoke obscurant training. Approval of such a move by the BRAC Commission is contingent upon the Army obtaining all necessary environmental permits from MDNR.

5. As part of the chemical, biological and radiological training program, the Army intends to conduct fog oil obscurant training exercises. Accordingly, on or about March 1, 1995, the Army submitted to MDNR for approval an Application For Authority to Construct a Static Or Mobil Fog Oil Generators (hereinafter the "Fog Oil Permit") at Fort Leonard Wood.

6. A public hearing on the Fog Oil Permit is scheduled for May 12, 1995 in Waynesville, Missouri.

7. Missouri regulations require that new sources, such as those proposed in the Fog Oil Permit, limit opacity to 20%. The opacity requirements provide regulators with the ability to make instantaneous determinations as to regulatory compliance. See 10 CSR 10-3.080

8. MDNR estimates that opacity from the smoke training will routinely be 100% and has recommended that the Army be granted a variance from Missouri's opacity requirements.

9. Pursuant to 643.110(1) RSMo., the Commission may grant a variance of a rule or requirement only where, upon presentation of adequate proof, the requirement would result in either the

taking of property or the closing and elimination of any business, occupation or activity. Neither of these conditions exist here.

10. Moreover, MDNR's variance request is tantamount to a modification of the State Implementation Plan ("SIP"). Revisions to Missouri's SIP, in addition to EPA approval, require proper notice and the opportunity for a public hearing. MDNR has failed to provide adequate notice and the opportunity for meaningful public comment.

11. Pursuant to 643.110(1) RSMo., no variance may be granted where the effect of that variance would permit the continuance of a health hazard.

12. In its evaluation of the variance request, it appears that MDNR failed to adequately assess the potential threat to health posed by the fog training to nearby residents, Army personnel, or visitors to Fort Leonard Wood and recreational users of the national forest, rivers and streams surrounding Ford Leonard Wood.

13. MDNR apparently failed to address the impact of the proposed blanket variance respecting emissions which extend beyond the immediate training area.

14. Lastly, MDNR failed to assess the impact of such a variance and the fog training exercises on endangered species such as the Indiana bat, the gray bat and the American Bald Eagle, which live and feed in the Fort Leonard Wood area.

WHEREFORE, for all the foregoing reasons, Petitioners respectfully request that the Commission conduct an evidentiary

hearing pursuant to § 643.100 RSMo. concerning the Army's request for a variance from Missouri's opacity requirements and for such other and further relief as the Commission deems just and proper.

GREEN, HENNINGS & HENRY

By: _____

LEWIS C. GREEN
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St. Louis Missouri 63102-2097
(314) 231-4181

Attorneys for Petitioners

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BEFORE THE MISSOURI
AIR CONSERVATION COMMISSION

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AIR POLLUTION
CONTROL PGM

IN THE MATTER OF:

WILLIAM A. GIBBS, REBECCA I. GIBBS,
AND THE COALITION FOR THE
FOR THE ENVIRONMENT

Petitioners,

vs.

MISSOURI DEPARTMENT OF
NATURAL RESOURCES,

Respondent.

PETITION AND REQUEST FOR A HEARING IN
OPPOSITION TO MDNR REQUEST FOR VARIANCE
FOR FOG TRAINING EXERCISES AT FORT LEONARD WOOD

Comes now Wendy Pelton, by her attorney, pursuant to § 643.110.4, RSMo., and joins in the petition and request for hearing of William A. Gibbs, et al., on the application of the U.S. Army and Fort Leonard Wood for variance for visible emissions resulting from operation of a smoke training school. Petitioner Pelton resides and owns property a short distance from Fort Leonard Wood. From time to time she drives through the fort. She frequently floats the Big Piney River a few miles from the fort. She will be adversely affected by the emissions resulting from the smoke training exercises. She incorporates by reference the petition of William A. Gibbs, et al.

Wendy Pelton to
be added to
CDTF Appeal.

GREEN, JENNINGS & HENRY
by
Lewis C. Green
314 N. Broadway, Suite 1830
St. Louis, Mo. 63102
{314} 231-4181

Document Separator

BEFORE THE MISSOURI
AIR CONSERVATION COMMISSION

IN THE MATTER OF:	)
	)
WILLIAM A. GIBBS, REBECCA I. GIBBS,	)
AND THE COALITION	)
FOR THE ENVIRONMENT	)
	)
Petitioners,	)
vs.	)
	)
MISSOURI DEPARTMENT OF	)
NATURAL RESOURCES,	)
	)
	)
Respondent.	)

MOTION TO EXPEDITE OR, IN THE ALTERNATIVE, FOR AN INTERLOCUTORY ORDER STAYING PERMIT TO CONSTRUCT CHEMICAL DECONTAMINATION FACILITY AND THERMAL TREATMENT UNIT

Come Now Petitioners, by and through their attorneys, and respectfully request this Commission to direct the Missouri Department of Natural Resource's ("MDNR") staff and the hearing officer assigned to this appeal to expedite a hearing on the merits of Petitioners' Appeal so as to allow this Commission to determine the matter finally before June 22, 1995. As grounds therefor, Petitioners state as follows:

1. As part of the base closure and realignment process, Fort Leonard Wood seeks to relocate the United States Army's Chemical Decontamination Facility and Thermal Treatment Unit ("CDTF") from its present location in Fort McClellan, Alabama to Fort Leonard Wood, Missouri. Approval of such a move by the BRAC Commission is contingent upon the Army obtaining all necessary environmental permits from MDNR prior to June 22, 1995.

2. Accordingly, on or about March 1, 1995, the Army submitted to MDNR for approval an Application For Authority to

Construct a Thermal Treatment Unit to treat waste generated from a Chemical Decontamination Training Facility. The Army intends to conduct nerve agent training at the proposed facility, as more fully described in Petitioners' Notice of Appeal.

3. On April 11, 1995, MDNR approved the Army's application and issued the permit to construct and subsequently operate the CDTF facility (Permit No. 0495-013).

4. A public hearing was not held prior to MDNR issuing its approval.

5. As set forth more fully in their Notice of Appeal, Petitioners object to MDNR's issuance of the Permit To Construct in that the issuance of the Permit was based upon erroneous and incomplete data submitted by Fort Leonard Wood and was not in compliance with specific requirements of Missouri regulations controlling the permitting of such facilities.

6. On June 21, 1995, the BRAC Commission begins its final evaluation and deliberations and must submit its final recommendation of base closures and realignments to the President by July 1, 1995.

7. So that the BRAC Commission may base its final evaluation and deliberations upon a complete and accurate record as to the status of Fort Leonard Wood's Application and Permit to Construct, Petitioners respectfully request an expedited hearing. Since MDNR has already approved the Permit Application, neither MDNR nor the Army are prejudiced by such a request.

8. Alternatively, Petitioners request that the Commission issue its interlocutory Order staying the effectiveness of Permit

No. 0495-013 until such time as the Commission enters its final Order on this Appeal. Since neither the BRAC Commission nor the President have approved the Army's request to relocate the CDTF, MDNR and the Army would not be prejudiced by such an interlocutory Order.

9. Petitioners and the public at large on the other hand would be severely prejudiced if it is found, as Petitioners contend, that the permit was improperly issued without public hearing and was based on incomplete and inaccurate data. In such an event the BRAC Commission's determination may be final and could result in an imminent and substantial endangerment to human health of the Petitioners and the environment of the citizens of the State of Missouri.

WHEREFORE, for all the foregoing reasons, Petitioners respectfully request that the Commission: (a) direct MDNR to appoint a hearing officer forthwith to determine their appeal; (b) direct the hearing officer to allow expedited discovery, an expedited hearing, and to report his recommendations to the Commission prior to June 20, 1995, or on such other date to allow this Commission to issue its Order on or before June 20, 1995; and (c) issue such other orders or directions as may be required to expedite this Appeal. In the alternative, Petitioners request the Commission to enter its interlocutory Order staying Permit No. 0495-013 until such time as Petitioners' Appeal may be heard.

Respectfully submitted,

GREEN, HENNINGS & HENRY

By: _____

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Attorney for Petitioners

Document Separator

BEFORE THE MISSOURI
AIR CONSERVATION COMMISSION

Omitted from FAX
Permit Application (Exhibit A)
and
Permit (Exhibit B)

IN THE MATTER OF:	)
WILLIAM A. GIBBS, REBECCA I. GIBBS, AND THE COALITION FOR THE ENVIRONMENT	)
Petitioners,	)
vs.	)
MISSOURI DEPARTMENT OF NATURAL RESOURCES,	)
Respondent.	)

NOTICE OF APPEAL OF THE MISSOURI DEPARTMENT OF NATURAL RESOURCES' APPROVAL OF APPLICATION TO CONSTRUCT CHEMICAL DECONTAMINATION FACILITY THERMAL TREATMENT UNIT

Come Now Petitioners, by and through their attorneys, and pursuant to § 643.075(6) RSMo., appeal the decision of the Missouri Department of Natural Resources ("MDNR") to issue Permit Number 0495-013 to the U.S. Army Engineering Center and Fort Leonard Wood for the construction and subsequent operation of a Chemical Decontamination Facility and Thermal Treatment Unit (hereafter the "CDTF"). In support thereof, Petitioners state as follows:

1. Petitioners William A. Gibbs and Rebecca I. Gibbs (hereinafter "the Gibbs") are residents of Newberg, Missouri and own real property near Fort Leonard Wood. The Gibbs and their minor children use for recreational purposes the streams and national forest areas adjacent to Fort Leonard Wood and live and recreate within the potential impact area of the proposed CDTF incinerator site. The Gibbs from time to time visit Fort Leonard Wood and are present on the premises. They will be adversely

affected by the emissions resulting from the proposed incinerator.

2. The Missouri Coalition for the Environment ("Coalition") is a corporation organized and existing under the not-for-profit corporation laws, qualified to do business in Missouri, with its principal office located in St. Louis County, Missouri. The Coalition exists for the purpose of protecting and preserving environmental values in Missouri, and has for years been actively concerned with protecting air quality throughout the state. The Coalition has thousands of members, many of whom seek recreation in floating the Big Piney River, which flows through Fort Leonard Wood, and the Gasconade River, which flows within approximately three miles of the fort, and also in hiking and camping in the Mark Twain National Forest, which surrounds the fort on three sides. The Coalition's interest in protecting and enhancing the quality of the ambient air throughout the state will be adversely affected if the permit is upheld. The Coalition members will be adversely affected by the emissions from the incinerator which is the subject of this appeal, if the permit is upheld. The Coalition files this appeal on its own behalf and on behalf of its members.

3. The Gibbs and the Coalition are "aggrieved persons" within the meaning of § 643.075(6) in that each Petitioner has a specific and legally cognizable interest in the subject matter of this administrative action, and the decision of the Commission will have a direct and substantial impact on that interest.

4. On or about March 1, 1995, the Army submitted to MDNR

for approval an Application For Authority to Construct a Thermal Treatment Unit to treat waste generated from a Chemical Decontamination Training Facility ("CDTF") at Fort Leonard Wood in Pulaski County, Missouri. The Army intends to conduct nerve agent training at the proposed facility. Army personnel will identify and decontaminate vehicles and equipment tainted with nerve agents. A copy of Fort Leonard Wood's original application is appended hereto as Exhibit "A".

5. The Army intends to manufacture and use at the CDTF the following nerve agents: GB, VX, and HD. All of these agents are highly toxic and, if mishandled, pose a threat to human health and the environment. Agent GB (Sarin) is a colorless liquid which, when vaporized, is readily absorbed through the skin. It is the same substance implicated in the recent tragedy of the Tokyo subway system, resulting in the death and injuries to hundreds of people. While Agent VX does not volatize as rapidly as agent GB, it is estimated to be 100 times more toxic. Exposure to agents VX and GB can result in death within 15 minutes after exposure to a lethal dose. Agent HD (mustard gas) is a known carcinogen and, when heated, releases toxic fumes. Exposure to lethal doses of HD can result in death within 4 to 6 hours.

6. The operations conducted at CDTF will include identification and decontamination of live nerve agents. The decontamination wastes and potentially contaminated materials include clothing, gas mask filters, laboratory wastes, medical and infectious wastes, air filters and washdown water. Debris

from the training, laboratory and CDTF will be burned in the incinerator.

7. According to the Permit Application, emissions from the incineration process will produce VOCs, carbon monoxide (CO), NOx, sulfur dioxide, particulate matter and toxic substances including Sarin. Through the proposed combustion of the on-site wastes, dioxins and furans will also be emitted. The incinerator will operate 8 hours per day, 250 days per year.

8. The Permit Application is based on 1983 design and on data collected in 1983 and 1985 from operations at Fort McClellan, Alabama, where the Army's CDTF is sited currently. Upon information and belief, the current operations at Fort McClellan differ in many material respects from those described in the Permit Application for Fort Leonard Wood, yet the Army does not intend to change its CDTF operation to revert back to practice that may have been in effect more than a decade ago. The Permit Application is defective in many material respects as it does not accurately and truthfully describe the conditions under which the CDTF will operate at Fort Leonard Wood and, therefore, it needs to be revised and resubmitted. The Permit Application contains incomplete and missing data, lacks sufficient detail and supportive documentation, contains incorrect calculations and omits critical information necessary for the proper construction and operation of an incinerator. The Permit Application is defective and deviates from actual practice at Fort McClellan in at least the following material respects:

(a) inaccurately depicts maximum sulfur emissions from the

Thermal Treatment Unit, the generators and the boilers;

(b) fails to identify infectious waste, blood products drawn at the conclusion of the training period, as being incinerated in the Thermal Treatment Unit;

(c) omits from its supporting diagram a 20 x 10 x 10 foot secondary chamber and two (2) autoclave which treat personal protection equipment ("PPE") contaminated during the nerve gas training;

(d) proposes to use an incinerator designed in 1983 which does not represent the technology currently in use at the CDTF in Fort McClellan, which is what is proposed by the Army for use at Fort Leonard Wood; and

(e) fails to identify hazardous wastes which will be incinerated in the Thermal Treatment Unit.

Numerous other defects are contained in the Application, as will be developed during the hearing of this case.

9. Upon information and belief, the CDTF has the potential of emitting more than 100 tons of pollutants a year.

10. MDNR incorrectly classified the Permit Application as being a "de minimis permit" for which no public hearing requirements are required. In addition, "de minimis permits" are exempt from most regulatory requirements.

11. On March 28, 1995, MDNR staff reviewed the Army's permit application and recommended approval.

12. On April 10, 1995, MDNR approved the Army's application and issued the permit to construct and subsequently operate the CDTF facility. A copy of the Permit to Construct is appended

hereto as Exhibit "B".

13. Had the Fort Leonard Wood Permit Application been accurate, complete and truthful, as required by law, MDNR would have been required to hold a public hearing and would and should have taken different action with respect to the Permit, at the very least requiring a RCRA Part B permit for the incinerator and imposing other special conditions not in the Permit as issued. Because the underlying Permit Application is inaccurate and incomplete, the Permit is invalid.

14. In approving the permit application, MDNR imposed certain Special Conditions including, inter alia, that no hazardous waste be burned in the Thermal Treatment Unit and that emissions from the facility not exceed limits set forth in the approved Permit. Specifically, no detectable limits of GB (Sarin) or VX may be emitted or released from the facility and the Army is prohibited from incinerating gas mask filters containing chromium, a listed hazardous waste under 40 CFR Part 261. Missouri has adopted and incorporated by reference the federal RCRA regulations. See 10 CSR 25-3.260.

15. Some of the materials the Army proposes to incinerate, and which the permit allows the Army to incinerate, are hazardous wastes. Specifically, agent VX is a sulfide bearing material and is a D003 reactive hazardous waste within the meaning of 40 CFR § 261.23(a)(5). Agent VX is absorbed into carbon filters which are then incinerated in the Thermal Treatment Unit. The incineration of these filters account for nearly half of the CDTF's total weight of solid wastes.

16. Upon information and belief, during the course of training Army personnel use nerve agent detectors which utilize pads containing silver nitrate which are then incinerated along which other wastes. Silver is a characteristic listed hazardous waste under 40 CFR Part 261. Upon information and belief, laboratory analysis of pads used at Fort McClellan indicate that the material in question exhibits the characteristic of toxicity using the Toxicity Characteristic Leaching Procedure ("TCLP").

17. In addition, upon information and belief, the Army uses in the CDTF laboratories non-halogenated solvents which are listed hazardous wastes under 40 CFR §261.33. These solvents are then incinerated in the Thermal Treatment Unit.

18. MDNR failed to impose Special Conditions on the use of the nerve agent HD.

19. By manufacturing live nerve agents at the CDTF, the installation is a "chemical process plant" within the meaning of 10 CSR 10-6.020(3)(B)(20), Table 2.

20. Pursuant to 10 CSR 10-6.020(8) (hereinafter "Section 8"), Table 2 installations which have the <u>potential</u> to emit one hundred tons or more of <u>any</u> pollutant are considered major sources of emissions and as such must comply with the requirements of Section 8 and the procedures for public participation set forth in 10 CSR 10-6.060(12) ("Section 12, Appendix B").

21. Section 8 requires, inter alia, pre-application modeling and monitoring, analysis of visibility and air quality impacts projected for the area as a result of general commercial,

residential, and industrial growth, as well as growth associated with the installation and conduct a fisheries and wildlife review.

22. In addition, Section 8 permits must comply with the procedures for public participation which include holding a public hearing prior to issuance of the permit. At such a hearing, any interested party may submit information or materials in opposition to the application.

23. Prior to approving the Permit Application, MDNR failed to hold a public hearing as required by law.

24. Each of the petitioners oppose MDNR's issuance of the Permit To Construct on grounds that they have private rights and/or property interests that will be damaged by the operations at the proposed incinerator site. The injuries that Petitioners presently suffer or may in the future incur as a result of the approval of the Permit and the subsequent construction and operation of the facility including diminished property value, diminished quality of life, detrimental effects upon health, detrimental effect upon quality of the environment and reduced marketability of property.

25. In issuing the Permit, MDNR has failed to (1) properly categorize the installation as requiring an Attainment and Classification Area Permit pursuant to 10 CSR 10-6.060(8); (2) require in the Permit Application monitoring, modeling, visibility analysis, and air quality impact analysis; (3) hold a public hearing as required by Section 12; and (4) determine that the Permit Application submitted by Fort Leonard Wood was

defective, incomplete, inaccurate and deviated from current CDTF operations.

WHEREFORE, for all the foregoing reasons, Petitioners respectfully request the Commission to:

(a) Grant a full evidentiary hearing as required by law, at which time Petitioners may present evidence regarding their appeal.

(b) Enter its Order that the Permit to Construct be denied;

(c) Enter its Order expediting the appeal process to allow this Commission to enter an order prior to June 20, 1995, or alternatively, immediately staying the effectiveness of the Permit and all conditions thereof pending final resolution of this appeal; and

(d) For such other and further relief as the Commission deems just and proper.

GREEN, HENNINGS & HENRY

By: _____

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Attorney for Petitioners

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WHITE PAPER ON THE LIVE AGENT NUCLEAR DEFENSE TRAINING CONDUCTED BY THE U.S. ARMY CHEMICAL SCHOOL AT FORT McCLELLAN, ALABAMA, WHICH HAS BEEN RECOMMENDED FOR RELOCATION TO FORT LEONARD WOOD, MISSOURI

APRIL 18, 1995

WHITE PAPER ON THE
LIVE AGENT NUCLEAR DEFENSE TRAINING
CONDUCTED BY THE U.S. ARMY CHEMICAL SCHOOL
AT FORT McCLELLAN, ALABAMA,
WHICH HAS BEEN RECOMMENDED FOR RELOCATION
TO FORT LEONARD WOOD, MISSOURI

CHEMICAL SCHOOL'S NUCLEAR DEFENSE OPERATIONS

The United States Army Chemical School at Fort McClellan, Alabama, conducts training and research in nuclear, biological and chemical warfare defense. The nuclear defense portion of the Chemical School training is conducted by the Edwin R. Bradley Radiological Laboratories, consisting of ten laboratories performing separate functions. Eight of the laboratories provide initial entry and professional development live agent nuclear training for:

(a) Chemical Corps soldiers;

(b) Joint services training for Navy, Marines, Air Force, Defense Logistics Agency, On-Site Inspection Agency, and Defense Nuclear Agency personnel; and

(c) Radiation Protection and Safety Training for Department of Defense military and civilian personnel.

The Army nuclear defense facility's two other laboratories provide support for the radiological labs, such as preparing radioisotopes, and safety support for the Chemical Defense Training Facility ("CDTF"), which provides live agent nerve gas chemical training at Fort McClellan.

The Radiological Laboratories contain specially-designed safety features including: a high efficiency particulate air filter system, an interlock system for high nuclear radiation areas, special shielding barriers and double shielded walls, a liquid

waste containment system, a special monitoring and alarm system, a state-of-the-art health physics laboratory, and special use laboratories. The radiological facility covers approximately 11,500 square feet and was completed in 1988 at a cost of approximately $1 million. Decommissioning costs for this facility alone would be approximately $1 million, and replacement cost would be approximately $3 million.

NUCLEAR DEFENSE TRAINING

Fort McClellan is the only Army school capable of providing broad-scope, hands-on training and experience with live radioactive materials for radiation protection and nuclear defense. It is also the only Army facility licensed to conduct live agent radiological identification and decontamination training.

The largest training mission for the radiological labs involves nuclear and radiological training for the Army's Chemical Corps soldiers. During 1994, approximately 4,000 Chemical Corps soldiers, mainly privates and second lieutenants, received training on nuclear agent detection and area and personnel monitoring. Live nuclear agents, including Cobalt 60 and Calcium 45, are used during this training.

The facility also conducts Radiation Protection Officer/ Radiation Safety Officer training. This training includes Department of the Army and Department of Defense civilians, Defense Logistics Agency personnel, and military personnel from the Army, Navy, Air Force and Marine Corps. Each military installation, activity and division is required by federal law to have two

Radiation Protection Officers ("RPO's"). Because of the widespread use of radioactive elements in various military equipment, this requires over 300 military installations and units around the world to have trained RPO's. During 1994, approximately 400 RPO's were trained at Fort McClellan.

RPO's learn identification of particular radioactive isotopes in common use, protective measures, decontamination techniques, transportation requirements for nuclear materials, monitoring and surveying techniques, and various laws and regulations including Title 10 of the Code of Federal Regulations (Atomic Energy Act) and Army and Department of Defense regulations. As part of their training, a number of different types of live radiological agents are used in identification, decontamination, and monitoring exercises.

Fort McClellan's radiological laboratories also conduct radiological training for U. S. State Department personnel assigned to the U.S. On-Site Inspection Agency. This training focuses on protective measures needed to protect American and foreign personnel from radiation exposure during their activities related to nuclear arms treaty compliance and verification inspections.

SUPPORT FOR THE NERVE GAS TRAINING FACILITY

The Chemical School radiological labs also support the nerve gas training conducted at the Chemical Defense Training Facility ("CDTF") at Fort McClellan. The CDTF uses three types of nerve gas detection equipment which contain radioactive source materials: (1) The M8A1 Tactical Chemical Agent Alarm; (2) the Chemical Agent

Monitor ("CAM"); and (3) the Improved Chemical Agent Monitor ("ICAM"). Because these hand-held nerve gas detection devices contain radioactive sources, they are required to be tested every twelve months for radioactive leakage. Consequently, a procedure called a "wipe test" is performed on this equipment. This involves wiping the nerve gas detection equipment with a piece of absorbent cloth and then analyzing the cloth for the presence of radioactive material. Because this detection equipment is used in the CDTF where live nerve gas is present, the detection equipment is potentially contaminated with nerve agent. Since the absorbent cloths used in the wipe test might also be potentially contaminated with nerve agent, the wipe test analysis is conducted on-site at Fort McClellan by the radiological labs. This arrangement avoids having to ship potentially extremely hazardous substances off-site to another installation.

While the M8A1 and the CAM nerve gas detection equipment is licensed under a general Nuclear Regulatory Commission license held by the Army Material Command, as is all other common Army equipment containing radioactive source material, the ICAM is an experimental piece of equipment not yet adopted by the Army. It is used solely at Fort McClellan under the nuclear license held by the radiological laboratory. Consequently, until a new facility receives a nuclear license at Fort Leonard Wood, soldiers would not be able to use the ICAM in their Chemical School training in Missouri.

NUCLEAR REGULATORY COMMISSION LICENSES AT FORT McCLELLAN

The United States Army Chemical School at Fort McClellan currently possesses two Nuclear Regulatory Commission ("NRC") licenses issued by NRC's Region II office in Atlanta, Georgia: (1) a Part 70 special nuclear material license; and (2) a Part 30 nuclear byproduct material license. Both NRC licenses are specific to Fort McClellan. Copies of McClellan's two latest licenses (they are renewed every five years) and an April 5, 1995, letter from LTC Edward Newing, Special Assistant to the Commandant, are attached.

A. Part 70 License No. SNM-1877 (Special Nuclear Material)

The Chemical School has a Part 70 special nuclear material license, because the school has small amounts of Plutonium 239 and Uranium 233 on hand which is used to calibrate the lab's radiation equipment and to train nuclear weapons response teams in the proper calibration of their own equipment. Small amounts of these two nuclear isotopes are needed for this purpose.

B. Part 30 License No. 01-02861-05 (Nuclear Byproduct Material)

The Chemical School also has a Part 30 nuclear byproduct material license for the other radioactive isotopes and the materials exposed to radiation which are used in live agent nuclear training, operation of the laboratory, and research and development. This Part 30 NRC license is a broad-scope license which allows Fort McClellan to possess and use many different radioactive isotopes. There are currently 25-30 different nuclear isotopes in use at the Chemical School's radiological laboratories including: Americium 241, Nickel 63, Cobalt 60, Calcium 45, Cesium 137, Radium 226, Gold 198, Polonium 210, Promethium 147, Strontium 90, Thorium 232, and Hydrogen 3

(tritium). These isotopes, which emit varying amounts of alpha, beta and gamma radiation, are used in training (detection, identification, monitoring and decontamination), support functions, laboratory research and development.

NRC LICENSING REQUIREMENTS AT FORT LEONARD WOOD

The only NRC license currently held by Fort Leonard Wood is a Part 35 license for the Post hospital. Consequently, to move the Army Chemical School's nuclear defense training to Missouri would require additional NRC licenses at Fort Leonard Wood. These licenses could be obtained by two methods: (1) Fort Leonard Wood would have to apply for and receive two new licenses from NRC's Region III office in Lisle, Illinois. (2) Alternatively, the Army Chemical School could apply to the NRC's Region II office in Atlanta to amend its current licenses to add Fort Leonard Wood as a second location on its existing licenses. Under either scenario, however, the plans and design for the new nuclear facilities at Fort Leonard Wood must be included with either NRC application. The process of designing and preparing the plans for a new nuclear facility in Missouri is estimated to take twelve months. To date, no such application has been submitted. Once an application is received by the NRC, estimates of the processing time vary from thirty days to one year. Even then, however, a final Full Operations License would not be issued by the NRC until after the facility at Fort Leonard Wood is constructed and inspected. Engineers from Fort Leonard Wood have optimistically estimated it would take three years at the earliest to design, construct, and

move the Chemical School from Alabama to Missouri. This estimate only takes into account the engineering and construction aspects of the relocation. It does not include any possible and highly probable permitting, bureaucratic, or legal delays.

STORAGE OF LOW-LEVEL RADIOACTIVE WASTE

The Bradley Radiological Labs at Fort McClellan currently produce approximately three 55-gallon drums of Low-Level Radioactive Waste ("LLRW") each year. This LLRW consists mainly of surgical gloves, lab trash, and contaminated clothing and equipment used in training that is no longer serviceable. Normal types of equipment carried by a soldier into a combat situation, including uniforms, gas mask covers, rucksacks, entrenching tools, canteen cups, etc. are contaminated with live agent radioisotopes. These items are then used in training Chemical Corps soldiers in the detection, monitoring, and isolation of nuclear contamination. As the items become unserviceable from repeated use, they must be disposed of as LLRW because they have been contaminated. Other items, such as the air filters removed from the lab's ventilating systems, also become part of the LLRW. This LLRW is segregated by like items into 55-gallon drums. When the drums are full, they are shipped (every two to three years) to the regional LLRW disposal facility at Barnwell, South Carolina.

Only LLRW generators whose states are members of the Southeast Interstate Low-Level Radioactive Waste Management Compact, of which Alabama is a member, may ship their LLRW to Barnwell. While Barnwell is tentatively scheduled to close at the end of 1995, work

on establishing a new Southeast regional LLRW disposal facility in North Carolina is well underway. That new facility is projected to be open by late 1998. If Barnwell closes as scheduled, the LLRW generated at Fort McClellan would have to be stored on-site. In that event, the amount of LLRW currently generated at Fort McClellan could be reduced by half using work reduction and compaction techniques, and that reduced volume of LLRW could be stored for five to seven years using the current storage capacity at Fort McClellan under their Part 30 byproduct material license. Moreover, the Part 30 NRC license at Fort McClellan could not be terminated until the LLRW stored there is removed. While it is possible that the LLRW could eventually be shipped to Fort Leonard Wood if a LLRW storage facility is built and licensed there, that LLRW transfer would require approval of the Southeast Compact Commission.

Fort Leonard Wood, Missouri, is in the Midwest Intrastate Low-Level Radioactive Waste Management Compact, which does not have an LLRW disposal site. In fact, the designated Midwest Compact host state of Ohio does not yet even have legislation in place to designate and construct a site. It is estimated it will be ten to twelve years before a Midwest Compact LLRW disposal facility is open once a site is designated. Consequently, Fort Leonard Wood will have to construct a much larger and much more expensive on-site LLRW storage facility capable of holding at least twelve to fifteen years of LLRW before the Chemical School could be moved to Missouri.

OBSTACLES TO RELOCATION OF NUCLEAR TRAINING FACILITIES

The process of moving the Radiological Laboratories which are an integral part of the United States Army Chemical School from Fort McClellan, Alabama, to Fort Leonard Wood, Missouri, would be lengthy, complicated and expensive. Two key actions that must occur are: (1) both a new radiological laboratory and an on-site LLRW storage facility must be designed and constructed at Fort Leonard Wood; and (2) NRC licenses must be obtained for the new facilities at Fort Leonard Wood. The design and construction process alone, not including any highly likely permitting, bureaucratic or legal delays, is optimistically estimated to take at least three years.

The process of obtaining the required NRC licenses is inextricably linked to the construction of the new facilities at Fort Leonard Wood. Preparation of a complete 100+ page application alone could take from several months to more than a year. Moreover, final approval from the NRC for Fort Leonard Wood to begin full-scale operations will not come until <u>after</u> construction of the new facility is completed and it has been inspected and approved by the NRC. As a direct example of how long this process can take, the radiological facility at Fort McClellan received its initial Limited Operations License in 1980, but it was not allowed to begin full-scale operations until its facilities were finally completed and inspected by the NRC in 1988.

While it is conceivable that a Limited License could be obtained in less than a year, this would merely allow the <u>storage</u> but <u>not</u> the <u>use</u> of radioactive materials at Fort Leonard Wood;

hence, both the nuclear and chemical training at the Chemical School would be severely degraded. Moreover, the radiological facility at Fort McClellan would have to remain open at least until the facility at Fort Leonard Wood is built and licensed by the NRC merely to accept and store the radioactive materials from Fort McClellan. Only after the radioactive materials have been removed from Fort McClellan and the facility has been decommissioned may that facility close and its licenses be terminated. During the interim years before a radiological facility is fully operational at Fort Leonard Wood, nuclear training operations using radioactive materials would either have to be continued at Fort McClellan or they could not be done at all.

It must also be recognized that the federal law establishing the base closure process mandates that a base selected for closure must be closed within six years of the submission of the list by the President to the Congress. It would be highly speculative at best to presume that a similar nuclear defense training facility could be built, licensed, and in operation at Fort Leonard Wood within six years. To risk closing the Army's only nuclear defense training facility at Fort McClellan without first having the guaranteed ability to conduct similar training and operations at Fort Leonard Wood would pose a severe threat to both the military capability and the national security of the United States.

DEPARTMENT OF THE ARMY
U.S. ARMY CHEMICAL SCHOOL
FORT MCCLELLAN, ALABAMA 36205-5020

REPLY TO
ATTENTION OF

[redacted]

ATZN-CM-SAC (5-10c)

MEMORANDUM FOR TRADOC BRAC OFFICE, ATTN: ATCS-OR

[redacted]

1. This memorandum forwards information requested in TRADOC (ATCS-OR) memo dated 30 Mar 95, subject: Congressional Request - Permits.

[redacted] Next under, is a full list including permit numbers, dates, issuing agencies, and general conditions. The last set of documents are copies of the two Nuclear Regulatory Commission (NRC) licenses for radiological material used at the Chemical School. [redacted]

3. Point of Contact is LTC Newing, DSN 865-6228, Fax DSN 865-6786.

FOR THE COMMANDANT:

EDWARD W. NEWING
LTC, CM
Special Assistant to the Commandant

Encls

CF: Strategic Plans Office, ATZN-SP

(10-89)

U.S. NUCLEAR REGULATORY COMMISSION

Corrected Copy

MATERIALS LICENSE

Amendment No. 9

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Ti Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 39, 40 and 70, and in reliance on statements and representations here made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and s nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such m to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the cond specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the N Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	
1. Department of the Army U.S. Army Chemical School	In accordance with letter received January 22,1991 3. License number SNM-1877 is amended in its entirety to read as follows:
2. Fort McClellan, Alabama 36205-5020	4. Expiration date May 31, 1996
	5. Docket or Reference No. 070-02934

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that license may possess at any one time under this license
A. Plutonium 239	A. Plated alpha sources (Eberline Model S94-1 or AN/UDM-6)	A. 12.5 microcuries (200 microg
B. Uranium 233	B. Plated alpha sources (Oak Ridge National Laboratory custom stainless steel plates)	B. 24 microcuries (25 milligra

9. Authorized use

A. and B. To be used for instrument calibrations and in the training of students.

CONDITIONS

10. Licensed material shall be used only at the U.S. Army Chemical School, Fort McClellan, Alabama.

11. A. The Radiation Safety Officer for the activities authorized by this license is John W. May.

    B. Alternate Radiation Safety Officers are Dr. Charles Sondhaus, Juan A. Torres, and James V. Landingha

12. Licensed material shall be used by, or under the supervision of, individuals trained as specified in the letter wi attachments received January 22, 1991. The licensee shall maintain records of individuals designated as users.

13. A. Sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination intervals not to exceed 3 months.

    B. In the absence of a certificate from a transferor indicating that a leak test has been make within s months prior to the transfer, a sealed source received from another person shall not be put into use un tested.

(continued) CONDITIONS

13. C. Sealed sources need not be leak tested if:

(1) they contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcurie or less of alpha emitting material; or

(2) They are not designed to emit alpha particles, are in storage, and are not being used. However when they are removed from storage for use or transferred to another person, and have not bee tested within the required leak test interval, they shall be tested before use or transfer. N sealed source stored for a period of more than 10 years without being tested for leakage and/o contamination.

D. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the te sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, th source shall be removed from service and decontaminated, repaired, or disposed of in accordance wit Commission regulations. A report shall be filed within 5 days of the date the leak test result is know with the U. S. Nuclear Regulatory Commission, Region II, Division of Radiation Safety and Safeguard Nuclear Material Inspection Section, 101 Marietta Street, Suite 2900, Atlanta, Georgia 30323. The repo shall specify the source involved, the test results, and corrective action taken. Records of leak test resul shall be kept in units of microcuries and shall be maintained for inspection by the Commission. Recor may be disposed of following Commission inspection.

E. Tests for leakage and/or contamination shall be performed by the licensee or by other perso specifically licensed by the Commission or an Agreement State to perform such services.

14. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices receiv and possessed under the license. Records of inventories shall be maintained for 2 years from the date of ea inventory.

15. The licensee shall maintain records of information important to safe and effective decommissioning at its locati specified in Condition 10 in accordance with the provisions of 10 CFR 70.25(g) until this license is terminated the Commission.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

Corrected Copy

License number SNM-1877
Docket or Reference number 070-02934

Amendment No. 9

(continued) CONDITIONS

16. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance wit the statements, representations, and procedures contained in the documents including any enclosures, listed belov The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations an procedures in the licensee's application and correspondence are more restrictive than the regulations.

A. Letter received January 22, 1991
B. Letter May 29, 1991

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

SANDRA W. BUTLER

Date JAN 03 1994

By Sandra W. Butler
Region II, Nuclear Materials Licensing Section
101 Marietta Street, Suite 2900
Atlanta, GA 30323

NRC FORM 374
(10-89)

U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE

Amendment No. 13

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 39, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	
1. Department of the Army U.S. Army Chemical School	In accordance with application dated November 29, 1990 3. License number 01-02861-05 is amended in its entirety to read as follows:
2. ATZN-CM-AHP Fort McClellan, Alabama 36205	4. Expiration date February 28, 1997
	5. Docket or Reference No. 030-17584

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Any byproduct materials with atomic number 3-83, inclusive	A. Any	A. Not to exceed 100 millicuries pe radionuclide and 3 curies tota additionally see Condition 16
B. Cesium 137	B. Sealed sources (3M Model 4F6S)	B. Not to exceed 500 millicuries pe source and 2 curies total
C. Cesium 137	C. Sealed sources (UDM-1A)	C. 120 curies
D. Hydrogen 3	D. Any	D. 1 curie
E. Americium 241	E. Plated sources	E. Not to exceed 1 microcurie p source and 10 microcuries total
F. Polonium 210	F. Plated sources	F. 1 microcurie

9. Authorized Use:

A. through F. For research and development as defined in 10 CFR 30.4, and for instruction of personnel in the safe use and measurement of ionizing radiation.

CONDITIONS

10. Licensed material shall be used only at The U.S. Army Chemical School, Building 1081, Fort McClellan, Alabama except one Cesium 137 sealed source of 500 millicuries may be used in the licensee's Alpha Field for instructional purposes.

11. The Radiation Protection Officer for the activities authorized by this license is John W. May, and in his absence Juan A. Torres, or James V. Landingham.

12. Licensed material shall be used by, or under the supervision of individuals designated by the licensee's Radiation Safety Committee and trained in accordance with the application dated November 29, 1990 and the letter with attachments dated February 6, 1992. The licensee shall maintain records of the training and experience of individuals designated as authorized users.

13. A.(1) The source(s) specified in Item 7, shall be tested for leakage and/or contamination at intervals not to exceed 6 months. Any source received from another person which is not accompanied by a certificate indicating that a test was performed within 6 months before the transfer shall not be put into use until tested.

(2) Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.

B. Any source in storage and not being used need not be tested. When the source is removed from storage for use or transfer to another person, it shall be tested before use or transfer.

C. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the source shall be removed from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. A report shall be filed within 5 days of the date the leak test result is known with the U. S. Nuclear Regulatory Commission, Region II, Division of Radiation Safety and Safeguards, Nuclear Material Safety Section, 101 Marietta Street, Suite 2900, Atlanta, Georgia 30323. The report shall specify the source involved, the test results, and corrective action taken. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. Records may be disposed of following Commission inspection.

D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically licensed by the Commission or an Agreement State to perform such services.

14. Sealed sources containing licensed material shall not be opened by the licensee.

15. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under this license. Records of inventories shall be maintained for 2 years from the date of each inventory.

License number 01-02861-05

Docket or Reference number 030-17584

Amendment No. 13

MATERIALS LICENSE
SUPPLEMENTARY SHEET

continued

CONDITIONS

16. The licensee is authorized to hold radioactive material with a physical half-life of less than 65 days for decay-in-storage before disposal in ordinary trash provided:

A. Radioactive waste to be disposed of in this manner shall be held for decay a minimum of 10 half-lives.

B. Before disposal as normal waste, radioactive waste shall be surveyed to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.

17. The licensee shall maintain records of information important to safe and effective decommissioning at the location specified in Condition 10 pursuant to the provisions of 10 CFR 30.35(g) until this license is terminated by the Commission.

18. In addition to the possession limits in item 8, the licensee shall further restrict the possession of licensed material as follows:

A. For unsealed sources, to quantities less than 10^5 times the applicable limits in Appendix C, 10 CFR 20 as specified in 10 CFR 30.35(d) and

B. For sealed sources, to quantities less than 10^{10} times the applicable limits in Appendix C, 10 CFR 20 as specified in 10 CFR 30.35(d).

19. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations and procedures in the licensee's application and correspondence are more restrictive than the regulations.

A. Application dated November 29, 1990

B. Letter dated August 29, 1991

C. Letter with attachments dated February 6, 1992

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

EARL G. WRIGHT

Date FEB 12 1992

By Earl G. Wright

Region II, Nuclear Materials Safety Section
101 Marietta Street, Suite 2900
Atlanta, GA 30323

Document Separator

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Missouri Coalition for the Environment

6267 Delmar Boulevard, Saint Louis, Missouri 63130 (314) 727-0600, FAX: (314) 727-1665

April 11, 1995

The Honorable Alan Dixon
Chairman
The Defense Base Closure and Realignment Commission
c/o Rosemont Convention Center
9301 West Brynn Mawr
Rosemont, Illinois 60018

RE: **Relocation of U. S. Chemical School from Alabama to Missouri**

Dear Chairman Dixon:

The intent of this letter is to call to the attention of the BRAC the fact that our review of the permit applications submitted to the Missouri Department of Natural Resources (MDNR) for construction of new sources of air contaminants associated with the relocation of the U. S. Army Chemical School has found the applications seriously flawed. These applications demand careful, deliberate scrutiny by MDNR officials in accordance with both the letter and spirit of all applicable laws and regulations which protect the environment of our state and nation. After its initial review is complete, MDNR should also provide ample opportunity for public review and comment. We seek the assurances of the members of the BRAC that all actions by public agencies regarding relocation of the U. S. Army Chemical School will follow all established regulations and guidelines.

Both of the permit applications filed with MDNR on March 1, 1995 are seriously flawed by incomplete and missing data, lack of detail and supporting documentation, incorrect calculations, and omissions of critical information. These apparent oversights could seriously call into question any conclusions MDNR might reach regarding the type or amount of air contaminant emissions from the proposed sources, or the impact of the emissions on the environment surrounding Ft. Leonard Wood. The applications are for construction permits for air emissions sources from the relocation of the U. S. Army Chemical School from Fort McClellan, Alabama to Fort Leonard Wood, Missouri. One permit application is to construct an incinerator for disposal of chemical decontamination wastes, while the other is to construct oil fog smoke generator units to be used in smoke training exercises.

We want to call to your attention some specific areas where we believe there are potential conflicts between the permit applications and the requirements of Title 10 of the Missouri Code of State Regulations. A discussion of the three air permitting issues that stand out as potential problems follows. It is essential that these potential conflicts be carefully considered and resolved, and not be overlooked in a rush to expeditiously approve the permit applications.

First, the oil fog smoke generators used for military training emit smoke with an opacity far exceeding

20%, which exceeds the opacity limits established by the regulations. The Missouri regulation entitled "Restriction of Emissions of Visible Air Contaminants " (10 CSR 10-3.080) limits emissions from new sources of air contaminants to no more than 20% opacity (Number 1 on the Ringlemann Chart). Military training is not exempted from compliance with this rule.

Second, the permit application does not contain the ambient air quality modeling data required for this emissions source. The permit application for the oil fog smoke generators incorrectly indicates that the only air contaminants emitted by these devices will be Volatile Organic Compounds. This is contradicted by supplementary information contained in the application which indicates that the fog oil used in these units contains zero percent volatiles. In fact, the air contaminant emissions from these units will be predominantly particulate matter (commonly referred to as aerosols). The permit application shows projected emissions of 233 tons per year from the smoke generating units. According to 10 CSR 10-6.060 (Construction Permits Required), permit applications for new air contaminant sources with potential emissions of particulate matter over 50 tons per year are required to contain ambient air quality modeling data in order to determine air quality impacts. No such ambient air quality modeling data was contained in the construction permit application package submitted to MDNR on March 1, 1995.

Third, the estimated emissions outlined in the permit application appear to be represented far below the actual projected emissions, and may require a Prevention of Significant Deterioration of Ambient Air Quality (PSD) permit. The Army's estimate of 233 tons per year of emissions from the fog oil smoke generators was based on a projected annual consumption of 63,000 gallons of fog oil per year. However, the average consumption of fog oil for this purpose at Ft. McClellan over the past five years has been 77,476 gallons per year. Using the methodology of the submitted permit application, an annual usage of 77,476 gallons of fog oil results in 287 tons per year of smoke emissions. In addition, a March 23, 1995 letter to MDNR, the Special Assistant to the Commandant of the U. S. Army Chemical School indicated that potential emissions from the fog oil smoke generators would be roughly double the average of 287 tons per year over the past five years at Ft. McClellan.

We fear that the curiously low emissions estimate of 233 tons per year stated in the permit application might be deliberately underestimated in an attempt to avoid the more rigorous permit application and review process mandated by the federal Prevention of Significant Deterioration of Ambient Air Quality (PSD) provisions (40 CFR Part 52). In this case, PSD permitting requirements would be triggered by 250 tons per year in potential emissions from the smoke generator units. It is worthy of note that if MDNR issues a construction permit limiting fog oil use to 63,00 gallons per year at Ft. Leonard Wood, the Army would be required to prepare and submit an in-depth PSD construction permit application and an Environmental Impact Statement should it ever desire to expand smoke training to the point where emissions exceed 250 tons per year. In order to deter such scenarios, the USEPA (in a June 28, 1989 preamble to a final rulemaking on Approval and Promulgation of Implementation Plans) addressed this issue. **The preamble indicated that if a source obtained a construction permit allowing it to escape PSD preconstruction review as a major new source, primarily with an intent to subsequently construct and begin operation of a major new source without first obtaining a PSD permit, the source would be viewed as intentionally avoiding preconstruction review. In such cases, USEPA indicated it would consider seeking injunctive relief, civil penalties, and criminal sanctions, from the beginning of actual construction.**

Over the past 25 years, with our active participation, our elected representatives in Jefferson City and

Washington, D. C. have enacted a set of laws aimed at stabilizing the delicate balance between economic development and protection of our air, land, and water resources. These laws, and the regulations promulgated under their authority, have been carefully crafted to ensure that each potential source of air and water contamination is deliberately studied to determine its long-range consequences to our environment before permits are granted allowing its construction. We seek the assurances of the BRAC that the State of Missouri's Department of Natural Resources (MDNR) will closely follow its written guidelines and policies when considering the applications for permits to construct two new sources of air contaminant emissions which are associated with the relocation of the Army Chemical School to Ft. Leonard Wood.

Yours sincerely,

R. Roger Pryor

R. Roger Pryor
Executive Director
Missouri Coalition for the Environment

cc The Honorable Mel Carnahan, Governor of Missouri
Mr. David Shorr, Director, Missouri Department of Natural Resources
Mr. Dennis Gramms, Regional Administrator, Region VII, USEPA
Defense Base Closure & Realignment Commission, 1700 North Moore Street, Suite 1425, Arlington, VA 22209

PEER
People for Enforcing Environmental Regulations

Contact: Odie Dickens
(314) 635-8694
or
Dana Spitzer
(314) 821-6979

For Immediate Release
April 27, 1995

Missouri Environmental Experts Express Concern About Permits and Procedures for Fort Leonard Wood

(Jefferson City, MO) -- Three Missouri environmental experts, including two former officials of the state's environmental agencies, today expressed concerns about the Missouri Department of Natural Resources' (MDNR) handling of environmental permits relating to proposed facilities at Fort Leonard Wood in the central Missouri Ozarks. The permits relate to the Army's proposed move of its chemical warfare training school to Fort Leonard Wood from Fort McClellan, Alabama.

MDNR actions for which concern was expressed include: the haste with which two permits have already been approved; the issuance of two permits based upon inaccurate and incomplete information in the Army's permit applications; the approval of the permits without full information having been presented to Missouri citizens; and the Army's application for a variance (waiver) to the state's environmental standards relating to an additional permit that would allow the Army to spew thousands of gallons of petroleum-based chemical fog oil into the Ozark air.

The Missouri Coalition for the Environment and individuals residing near Fort Leonard Wood filed requests with the Missouri Air Conservation Commission today for hearings in connection with the Army's permit applications. These requests included:

- an Appeal of MDNR's approval of the air construction permit which would allow the Army to construct a facility to manufacture, store and use live nerve gas, as well as incinerating nerve gas-contaminated waste; and
- a Petition asking for a hearing on the Army's request for a variance (waiver) of Missouri's air pollution standards for fog oil training exercises at Fort Leonard Wood.

Appearing before the Air Commission were: Bob Schreiber, an environmental engineer and former state Director of Environmental Quality; Lewis Green, an environmental attorney and former chairman of the Air Conservation Commission; and Roger Pryor, executive director of the Missouri Coalition for the Environment, one of Missouri's leading environmental organizations.

-more-

These experts asked the Commission to schedule public hearings on the environmental permit applications and to provide a more thorough review of environmental issues associated with the chemical warfare training facility, which includes nuclear and biological warfare training, and the use of live nerve gas.

"The State owes the public a more detailed accounting of information involving these permits," Green told the Commission. "We could be rushing into something here that we may eventually regret. The procedures exist for a reason and must be carefully followed, otherwise we will have no idea whether the facility is safe for people and the environment, or not."

Schreiber said it was highly unusual - and maybe unprecedented - for environmental permits involving such sensitive materials to be issued as quickly as the MDNR acted on the Army's permit applications. "It normally takes nine to 18 months for Missouri businesses to receive environmental permits," Schreiber said.

Pryor stressed the importance of following established procedures. "It is important that all procedures be fully followed in evaluating the Army's permit applications," Pryor said. "All the facts must be brought out so the people of Missouri will know exactly what is being planned and have an opportunity to be heard before the Commission makes a final decision."

The MDNR issued two permits April 11 and released a third for public comment on the proposed Fort Leonard Wood training project. The Army applied for the permits March 1.

One permit allowed construction of a chemical decontamination training facility. The facility includes an incinerator which will be used to destroy wastes associated with this facility, including clothing, waste water and other materials. The facility will involve the use of live nerve gas.

A second permit covers water discharges. The department also gave preliminary approval for a fog oil permit. But later it asked the Air Commission for a variance for the fog oil permit because the fog used during training would exceed standards allowed by state law. The variance request was on Thursday's Commission schedule, even though no public notice had been issued that the Army was seeking a variance.

Green, who filed an appeal of the department's permit for an incinerator, said the permit application was based on data from 1983 and 1985 from operations at Fort McClellan. But the current operations at Fort McClellan differ in many respects from those described in the application. Furthermore, the training at Fort Leonard Wood would differ in many respects from that described in the application, he said.

For example, Green pointed out that the application proposed to use an incinerator designed in 1983, rather than a modern state-of-the-art facility. It also does not identify many of the hazardous wastes to be burned at the incinerator.

The incinerator is likely to emit more than 100 tons of pollutants a year, but its permit application was classified "deminimis" in order to avoid a public hearing, Green said.

"This facility requires a public hearing. We just don't know enough yet about what will be going on there," Green said, noting that nuclear and biological training wastes will also be produced at the training center.

Green, Schreiber and Pryor also asked the Commission not to allow a variance to the Army's air permit without a required public hearing.

People for Enforcing Environmental Regulations (PEER) is part of the Missouri Environmental Trust, dedicated to ensuring that the Army's applications for permits to construct and operate a nerve gas facility and a fog oil training center at Fort Leonard Wood are given a full, careful review. In addition, the organization seeks to provide the public with complete and accurate information and an opportunity to be heard before final decisions are made. The Chemical School which the Army proposes to locate at Fort Leonard Wood includes what is called NBC Training -- nuclear, biological and chemical training.

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Jefferson City Post-Tribune

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OL. 130, NO. 56 JEFFERSON CITY, MISSOURI FRIDAY AFTERNOON, APRIL 28, 1995

MAY-03-1995 12:07 FROM BALCH & BINGHAM TO 7120282488 P.02

Environmentalists fight plan to move chemical training to Fort Wood

The Associated Press

Rebecca Gibbs worries that a thick, white oil-based fog might some day float through the air and into her back yard from nearby Fort Leonard Wood.

"What I hear is that it coats things when it settles to the earth — the grass, the trees, the streams, the bugs, my kids," Ms. Gibbs said. "I have no idea what the potential effects could be."

So Ms. Gibbs contacted an environmental attorney to try to delay a plan to move the Army's only chemical defense training base from Fort McClellan, Ala., to Fort Leonard Wood in southern Missouri.

On Thursday, Gibbs and an environmental group filed petitions with the Department of Natural Resources alleging that the Army failed to assess the "potential threat to health" posed by the fog used in its training.

Army officials said those concerns have no validity.

As for the oil-fog sprayed from jeep-bound canisters: "I've observed it, I've walked through it, and it has no effect at all," said Fort Leonard Wood environmental chief Scott Murrell.

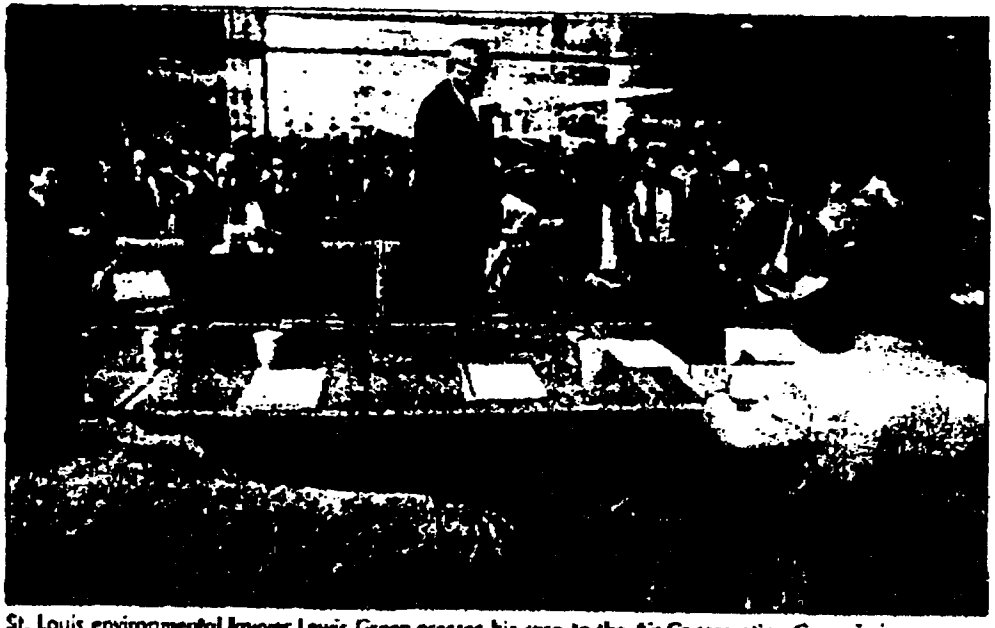
The Coalition for the Environment also is appealing a state permit issued April 17, giving the Army the go-ahead to build and operate an incinerator that would burn chemically decontaminated materials. Environmentalists want the permit overturned until a public hearing is held.

Approval of both permits is vital to proceed with moving the Army's chemical school to Missouri. The federal Base Closure and Realignment Commission plans to make its final recommendations to President Clinton by July 1.

If the commission doesn't have the state permits approved by June 22, "they cannot consider the recommended move," said Fort Leonard Wood spokesman Brad Rose.

During a meeting Thursday with state environmental officials, Army officials stressed the need for quick action on their requests.

"This is essential for the defense of the country and it does need to be done," Murrell said.



St. Louis environmental lawyer Lewis Green presses his case to the Air Conservation Commission. AP

The base relocation would bring an additional 4,200 soldiers yearly to Fort Leonard Wood, plus 1,800 permanent jobs and 400 civilian jobs, Rose said. It also could pump up to $150 million in salaries and construction contracts into the state economy, he said.

But environmentalists and nearby residents fear the new mission could spew tons of contaminants.

Among the chemicals used in Army training is Sarin, the colorless vapor that recently killed 10 people and injured hundreds more on a Tokyo train.

Army officials said concerns about a similar disaster in Missouri are unwarranted.

Murrell said Sarin and other nerve gases only are produced in small quantities and are kept inside at all times. Furthermore, polluted materials are decontaminated before being incinerated, he said.

The petitions filed Thursday allege that the Army underestimated the incinerator's potential sulfur emissions, failed to identify some waste products to be burned and overlooked the oil-fog's potential effect on endangered species, such as the bald eagle and Indiana bat.

See FT. WOOD, page 8

TOTAL P.02

☆Ft. Wood

From page one

"This is serious business. We're talking about nerve gases, biological agents and chemicals," environmental attorney Lewis Green said in a session with three members of the Missouri Air Conservation Commission. A formal hearing before the commission was canceled Thursday because four of its seven members were absent.

"We're not trying to stop the darn thing. We're trying to get information out to the public," Green said.

Commission chairman Harriet Beard said the panel will "take the concerns under advisement" and try to reach some decision by June.

Officials at the Department of Natural Resources, which grants the permits, said they already had done a thorough job of evaluating the permit applications.

"Some of the stuff they brought up we've already talked about with our staff. It's not an issue," said Roger Randolph, director of DNR's air pollution control program.

Commissioners and DNR employees plan to hear public comments about the oil-fog training on May 12 in Waynesville, near Fort Leonard Wood. A hearing about the state waiver is set for May 25 in Kansas City.

In response to the petitions, an appeal hearing also must be held on the incinerator permit. No hearing date has been set.

Effective Citizen Action Since 1969

Missouri Coalition for the Environment

6267 Delmar Boulevard, Saint Louis, Missouri 63130 (314) 727-0600, FAX: (314) 727-1665

April 11, 1995

The Honorable Alan Dixon
Chairman
The Defense Base Closure and Realignment Commission
c/o Rosemont Convention Center
9301 West Brynn Mawr
Rosemont, Illinois 60018

RE: **Relocation of U. S. Chemical School from Alabama to Missouri**

Dear Chairman Dixon:

The intent of this letter is to call to the attention of the BRAC the fact that our review of the permit applications submitted to the Missouri Department of Natural Resources (MDNR) for construction of new sources of air contaminants associated with the relocation of the U. S. Army Chemical School has found the applications seriously flawed. These applications demand careful, deliberate scrutiny by MDNR officials in accordance with both the letter and spirit of all applicable laws and regulations which protect the environment of our state and nation. After its initial review is complete, MDNR should also provide ample opportunity for public review and comment. We seek the assurances of the members of the BRAC that all actions by public agencies regarding relocation of the U. S. Army Chemical School will follow all established regulations and guidelines.

Both of the permit applications filed with MDNR on March 1, 1995 are seriously flawed by incomplete and missing data, lack of detail and supporting documentation, incorrect calculations, and omissions of critical information. These apparent oversights could seriously call into question any conclusions MDNR might reach regarding the type or amount of air contaminant emissions from the proposed sources, or the impact of the emissions on the environment surrounding Ft. Leonard Wood. The applications are for construction permits for air emissions sources from the relocation of the U. S. Army Chemical School from Fort McClellan, Alabama to Fort Leonard Wood, Missouri. One permit application is to construct an incinerator for disposal of chemical decontamination wastes, while the other is to construct oil fog smoke generator units to be used in smoke training exercises.

We want to call to your attention some specific areas where we believe there are potential conflicts between the permit applications and the requirements of Title 10 of the Missouri Code of State Regulations. A discussion of the three air permitting issues that stand out as potential problems follows. It is essential that these potential conflicts be carefully considered and resolved, and not be overlooked in a rush to expeditiously approve the permit applications.

First, the oil fog smoke generators used for military training emit smoke with an opacity far exceeding

20%, which exceeds the opacity limits established by the regulations. The Missouri regulation entitled "Restriction of Emissions of Visible Air Contaminants " (10 CSR 10-3.080) limits emissions from new sources of air contaminants to no more than 20% opacity (Number 1 on the Ringlemann Chart). Military training is not exempted from compliance with this rule.

Second, the permit application does not contain the ambient air quality modeling data required for this emissions source. The permit application for the oil fog smoke generators incorrectly indicates that the only air contaminants emitted by these devices will be Volatile Organic Compounds. This is contradicted by supplementary information contained in the application which indicates that the fog oil used in these units contains zero percent volatiles. In fact, the air contaminant emissions from these units will be predominantly particulate matter (commonly referred to as aerosols). The permit application shows projected emissions of 233 tons per year from the smoke generating units. According to 10 CSR 10-6.060 (Construction Permits Required), permit applications for new air contaminant sources with potential emissions of particulate matter over 50 tons per year are required to contain ambient air quality modeling data in order to determine air quality impacts. No such ambient air quality modeling data was contained in the construction permit application package submitted to MDNR on March 1, 1995.

Third, the estimated emissions outlined in the permit application appear to be represented far below the actual projected emissions, and may require a Prevention of Significant Deterioration of Ambient Air Quality (PSD) permit. The Army's estimate of 233 tons per year of emissions from the fog oil smoke generators was based on a projected annual consumption of 63,000 gallons of fog oil per year. However, the average consumption of fog oil for this purpose at Ft. McClellan over the past five years has been 77,476 gallons per year. Using the methodology of the submitted permit application, an annual usage of 77,476 gallons of fog oil results in 287 tons per year of smoke emissions. In addition, a March 23, 1995 letter to MDNR, the Special Assistant to the Commandant of the U. S. Army Chemical School indicated that potential emissions from the fog oil smoke generators would be roughly double the average of 287 tons per year over the past five years at Ft. McClellan.

We fear that the curiously low emissions estimate of 233 tons per year stated in the permit application might be deliberately underestimated in an attempt to avoid the more rigorous permit application and review process mandated by the federal Prevention of Significant Deterioration of Ambient Air Quality (PSD) provisions (40 CFR Part 52). In this case, PSD permitting requirements would be triggered by 250 tons per year in potential emissions from the smoke generator units. It is worthy of note that if MDNR issues a construction permit limiting fog oil use to 63,00 gallons per year at Ft. Leonard Wood, the Army would be required to prepare and submit an in-depth PSD construction permit application and an Environmental Impact Statement should it ever desire to expand smoke training to the point where emissions exceed 250 tons per year. In order to deter such scenarios, the USEPA (in a June 28, 1989 preamble to a final rulemaking on Approval and Promulgation of Implementation Plans) addressed this issue. **The preamble indicated that if a source obtained a construction permit allowing it to escape PSD preconstruction review as a major new source, primarily with an intent to subsequently construct and begin operation of a major new source without first obtaining a PSD permit, the source would be viewed as intentionally avoiding preconstruction review. In such cases, USEPA indicated it would consider seeking injunctive relief, civil penalties, and criminal sanctions, from the beginning of actual construction.**

Over the past 25 years, with our active participation, our elected representatives in Jefferson City and

Washington, D. C. have enacted a set of laws aimed at stabilizing the delicate balance between economic development and protection of our air, land, and water resources. These laws, and the regulations promulgated under their authority, have been carefully crafted to ensure that each potential source of air and water contamination is deliberately studied to determine its long-range consequences to our environment before permits are granted allowing its construction. We seek the assurances of the BRAC that the State of Missouri's Department of Natural Resources (MDNR) will closely follow its written guidelines and policies when considering the applications for permits to construct two new sources of air contaminant emissions which are associated with the relocation of the Army Chemical School to Ft. Leonard Wood.

Yours sincerely,

R. Roger Pryor

R. Roger Pryor
Executive Director
Missouri Coalition for the Environment

cc The Honorable Mel Carnahan, Governor of Missouri
Mr. David Shorr, Director, Missouri Department of Natural Resources
Mr. Dennis Grammis, Regional Administrator, Region VII, USEPA
Defense Base Closure & Realignment Commission, 1700 North Moore Street, Suite 1425, Arlington, VA 22209

Document Separator

May 5, 1995

To: Madeline Creedon
JJ Gertler

From: Deirdre Nurre

Cc: Bob Cook

Re: Record of Communication: David Shorr, Director,
Missouri Department of Natural Resources

This memorandum presents highlights from a phone conversation I had this morning with David Shorr. We discussed a few of the questions brought to the Commission by the Alabama Military Affairs Task Force (community group) on May 3, responses to which I share below.

Possible dates to meet with David Shorr: If we'd like to plan a meeting with him, we can travel to Missouri during week of May 29 - June 2 or week of June 5 - 9. Week of June 5 might not give JJ enough time to fully incorporate the information into his final materials, so we should pursue week of 29th. The other option would be to see him here in Washington as part of a meeting he has with EPA Headquarters; he'll be here on May 16th and 17th. However, since his time is largely planned out for that visit, we may have less of an opportunity to see him, and we wouldn't have access to his staff or to Missouri departmental records. Please get back to me with the specific dates you'd be available, and whether you're still interested in a meeting. Do we want to combine the MO DNR meeting with a visit to Leonard Wood? Should any of the commissioners be invited?

CDTF washwater/rinsate waste characterization: I had wondered about the Army's rationale for not treating the CDTF as a hazardous waste. Shorr will fax me a waste characterization completed by his staff. Shorr indicated that serin is not a listed waste because it is a material available to and used by the military and isn't commercially available. The rinsate from decontamination of uniforms, equipment, etc., once it is neutralized, becomes a discharge of the type which can legally be discharged to a wastewater treatment facility. A useful analogy is that of a plating shop, which uses toxic materials such as cyanide in its production process but can successfully break down the wastes such that the wastewater is sent to and treated in a wastewater treatment plant and discharged. Shorr maintains that the Army in this case is going one step beyond in planning to incinerate the decontaminated wastewater which would be acceptable for treatment in a wastewater treatment plant. After I receive the waste characterization, I'll let you know if I have any remaining concerns about this question.

Smoke training: A public hearing will be held on May 12 to discuss the permit for the smoke school. A public hearing is not mandatory for this permit, but Missouri is holding the hearing to be responsive to public requests for information.

Public notice for NPDES permit: Questions were raised about the public notice process. The permit was already being public-noticed prior to the release of the BRAC list because it was up for regular 5-year renewal. Once BRAC recommendations were released, the Missouri DNR added the monitoring stipulations needed for the smoke school activities and re-initiated the public notice period to allow the full 30 days. Shorr stated that the public notice seems to have been effective because DNR is receiving public comments from various groups (such as MO Sierra Club, etc.).

Permit to construct and permit to operate should be treated as two separate actions: The Alabama community group expressed the view that MO is not considering these two actions as separate activities and thus is not permitting them adequately. Shorr answers that under current MO law, which does not yet include Title V of the Clean Air Act, permit to construct is the only permit legally required. Often permittees contact MO DNR for a post-construction inspection, to satisfy themselves that the completed construction won't violate emission standards, but a separate permit to operate is not required.

Under future MO law as Title V is expected to be implemented, MO DNR will be required to issue a permit to operate to any individual with a state-approved permit to construct. According to Shorr, the MO DNR won't have the option of denying an operating permit to anyone who has obtained a permit to construct. Therefore, even after implementation of Title V occurs about a year and a half from now, the permit to construct will still be the essential permit to obtain, while Shorr implies that a permit to operate would be a pro forma decision process.

In conclusion: I didn't want to get too far into a discussion with Shorr without the rest of the DBCRC team present, as it's likely that the two of you will be wanting the same explanations straight from Shorr that I'd want. We can plan a focused series of questions for our meeting with Shorr, if you are still interested in a meeting with him.

DEPARTMENT OF THE ARMY
U.S. ARMY CHEMICAL SCHOOL
FORT MCCLELLAN, ALABAMA 36205-4020

REPLY TO ATTENTION OF

ATZN-CM-SAC

16 May 95

MEMORANDUM FOR MAJ TELLER, HQDA, OSJA, ENVIRONMENTAL OFFICE

SUBJECT: Review of Draft Air Permit, Fort Leonard Wood Smoke Training

1. The purpose of this memorandum is to provide comments on the subject document per your request. More detailed comments are found at the enclosure.

2. The State of Missouri smoke permit restrictions, if implemented, will create **overwhelming degradation to Chemical Mission readiness.** The restrictions will cut back the minimum amount of annual fog oil use by 30%. The daily allowance for smoke training time will be cut by 75%. After suffering these unacceptable losses, it further limits our Joint forces to smoke operations during weather conditions which may exist only 60% of the year. The smoke permit virtually eliminates more than one smoke event per day. The impact would be violations (subject to fines) for 92 days when two events are trained, another 56 days when three events are trained, and another 21 days when four separate events are underway at one time. If allowed to stand, the Missouri smoke permit allows us to conduct roughly 25% of training to standards, **these restrictions would kill both the US Army and US Air Force smoke training.**

3. During the Chemical Functional Area Analysis on 31 Oct 94, the Vice Chief of Staff challenged the Army to "take the lead on proactive involvement with agencies drafting environmental regulatory requirements that impact on chemical training on Army ranges. Focus on leading towards the least restrictive measures that provide the maximum training opportunities. (Action ODCSOPS)"

4. Under Base Realignment and Closure actions, Fort Leonard Wood, unfortunately without coordination with the Chemical School, applied for a smoke permit and variance. The Missouri smoke permit restrictions will inadvertently squash the VCSA's goal and tragically cripple the capability to conduct smoke training. One of the most stunning restrictions of this permit is the loss of capability to train with smoke hand grenades, vehicular smoke grenades, smoke pots, infrared defeating grenades, riot control agents, and large area infrared obscurants. The Reserve Component smoke training at the Chemical School would also be a casualty.

5. If you have questions regarding this quick assessment of the smoke and obscurants issue, please call me, DSN 865-6228 or commercial 205-848-6228 or Fax 865-6786.

Encl

EDWARD W. NEWING
LTC, CM
Special Assistant to the Commandant

From: NEWINGE --MCC1
To: ABERNAR --MCC1
cc: MASHBURN--MCC1
LEVYR --MCC1

Date and time 05/15/95 13:38:46

COUGHLIR--MCC1

From: LTC Edward W. Newing, SAC, USACMLS, 6228
Subject: Request for CB Counterterrorism Assistance
Received call from the Defense Protective Service in the Pentagon this morning. "Sgt" Weston requested a course catalog of the types of courses taught at the Military Police and Chemical Schools. I asked why and he cited the CB terrorism events in the world recently. I could fax him a proposed course we developed for the NY/NJ Transit Authority which keys on survival, detection, identification, and CDTF. Any guidance? By the way, he called our Contingency Support Mobile Training Team as well this morning.

(MAJ CRAIG TAYLOR)

Called by an environmental lawyer with HQDA, quite concerned by FLW's application for smoke permit. He said FLW told state we only will use 1,000 gallon of fog oil per year. Told him we used 93,800 last year and 116,350 in 93. He asked if FLW coordinated any reduction in our operations, I said no and that we have not received the permit or request for variance for coordination. Mentioned he spoke to Ron Levy as well regarding particulate emissions. He told me there could be major problems with this permit. He said he is on his way to FLW to assist them in a hearing in KC over the "Army's" request for a variance. I offered my help in the future.

TOLD HIM REDUCTION TO ONLY 135 DAYS/YR WITH ≤ ONE HOUR/DAY WOULD CREATE A TREMENDOUS READINESS PROBLEM. TOLD HIM OUR ABILITY TO TRAIN WOULD BE CRITICALLY IMPAIRED. HE NOTED NO IR OBSCURANTS, HC SMOKE POTS, COLORED SMOKE GRENADES ETC WERE NOT APPLIED FOR. TOLD HIM THIS WOULD CRIPPLE US & STATE NEEDS TO KNOW WHAT WE REALLY WANT TO DO.

ATZN-CM-SAC 13 Mar 95

MEMORANDUM FOR STRATEGIC PLANS OFFICE, FORT McCLELLAN, AL

SUBJECT: Fort McClellan Permits

1. Reference TRADOC letter, dated 10 Mar 95, SAB, the proposed reply is provided:

a. Fort McClellan has no knowledge of permit applications submitted in regards to the proposed closure and realignment. The Chemical School, Chemical Defense Training Facility, and Environmental Management Officer have not been asked nor supplied any information to the Department of the Army, Fort Leonard Wood, or the State of Missouri pertaining to environmental permit requirements.

b. Fort McClellan personnel do not know anything regarding publicity of the applications. Furthermore, no one knows what applications, if any, were filed. Permits submitted to State agencies would be considered part of a public record, attainable through the Freedom of Information Act, or upon public request.

c. Environmental Assessments for construction of the CDTF at Fort McClellan began in Feb 81 and were completed in Jun 85. Additional environmental documentation, RCRA Part B, was completed under contract by Rust International and was reviewed by EPA Region IV and the State of Alabama Department of Environmental Management. NEPA documentation (environmental assessment/environmental impact statement) is mandatory, however the requirements in regards to a full EIS or RCRA Part B submissions are not well understood. In today's climate, most incinerators require an EIS. The CDTF incinerator and air filtration system required both Federal and State certification.

2. Point of Contact for these issues is LTC Newing, USACMLS, DSN 865-6228.

DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
FORT MONROE, VIRGINIA 23651-5000

REPLY TO ATTENTION OF

S: 13 Mar 95

ATCS-OR

MAR 10 1995

MEMORANDUM FOR

Commander, U.S. Army Engineer Center and Fort Leonard Wood, ATTN: ATZT-CS, Fort Leonard Wood, MO 65473-5000
Commander, U.S. Army Chemical and Military Police Centers and Fort McClellan, ATTN: ATZN-CS, Fort McClellan, AL 36205-5000

SUBJECT: Fort McClellan Permits

1. Request Fort Leonard Wood and Fort McClellan provide information in response to following questions from The Army Basing Study:

a. What permits have been applied for and when, in regards to the closure of Fort McClellan and realignment of Military Police and Chemical Schools?

b. Are the applications public; if so, how can the public obtain them?

c. Was an EIS done at Fort McClellan when the CDTF was built; if so, how long did it take?

2. Response requested by 1500 hours on 13 Mar 95. Fort McClellan should provide data to Ms. Francine Cole, who will be on site for BRAC 95 installation visit. Fort Leonard Wood should prof data to Ms. Francine Cole, PROFS ID: MON1(COLEF) with copy furnished to Mr. David Taylor, PROFS ID: MON1(TAYLORBD);

FOR THE COMMANDER:

JOSEPH A. ROSZKOWSKI
Colonel, GS
Director, Operations

DEPARTMENT OF THE ARMY

[illegible]

[illegible]

[illegible]: 1 Jun 95

ATCS-OR (5-10c) 10 MAR 1995

MEMORANDUM FOR MAJOR GENERAL JOE N. BALLARD, COMMANDER, U.S. ARMY ENGINEER CENTER AND FORT LEONARD WOOD, FORT LEONARD WOOD, MO 65473-5000

SUBJECT: Permits for Relocation of Chemical and Military Police Schools to Fort Leonard Wood

1. Secretary of Defense recommended relocation of the Chemical and Military Police Schools to Fort Leonard Wood as part of his recommendation for the closure of Fort McClellan to the 1995 Base Closure and Realignment Commission. This relocation was conditioned "upon receipt of the required permits."

2. During testimony by the Army leadership before the 1995 Base Closure and Realignment Commission on 7 March, Commission Chairman Dixon indicated that the permits are required before 22 June 95.

3. Request the necessary permits be obtained from the State of Missouri for relocation of the Military Police and Chemical Schools to Fort Leonard Wood. Two copies of the permits are to be furnished to the TRADOC Base Realignment and Closure Office (ATCS-OR) as quickly as possible, but no later than 1 June 1995.

4. Coordinate directly with Commander of Fort McClellan to ensure all necessary permits are identified. The most critical permits are for the construction and operation of the Chemical Defense Training Facility.

FOR THE COMMANDER:

John P. Herrling

JOHN P. HERRLING
Major General, GS
Chief of Staff

DEPARTMENT OF THE ARMY
US ARMY CHEMICAL AND MILITARY POLICE CENTERS & FORT MCCLELLAN
FORT MCCLELLAN, ALABAMA 36205-5000

REPLY TO ATTENTION OF

ATZN-CMN (351) 24 APR 1995

MEMORANDUM THRU Commander, U.S. Army Training and Doctrine Command, ATTN: Base Realignment and Closure Office, Fort Monroe, VA 23651-5000

FOR Headquarters, Department of the Army, ATTN: DACS-DM, Washington, DC 20310-0200

SUBJECT: Chemical Defense Training Facility (CDTF) Construction Costs

1. During the recent visit of the Honorable James B. Davis, Defense Base Closure and Realignment Commission, to Fort McClellan, the issue of the cost to construct a new CDTF was raised. The estimate of $70 million we provided him was considerably higher than the Total Army Basing Study (TABS) estimate of $30 million. Differences in the age of the data available to TABS and the impact of changing environmental federal, state and local regulations account for the increased costs.

2. Please note that the information presented to Commissioner Davis had been presented to the TRADOC BRAC team that visited the installation the week prior to the Commissioner's visit. The only major change in the estimates provided ($62 million versus $70 million) was an $8 million increase in the cost of the incinerator needed at a new site. This increase was based on the estimate provided in the Department of the Army permit request submitted to the state of Missouri.

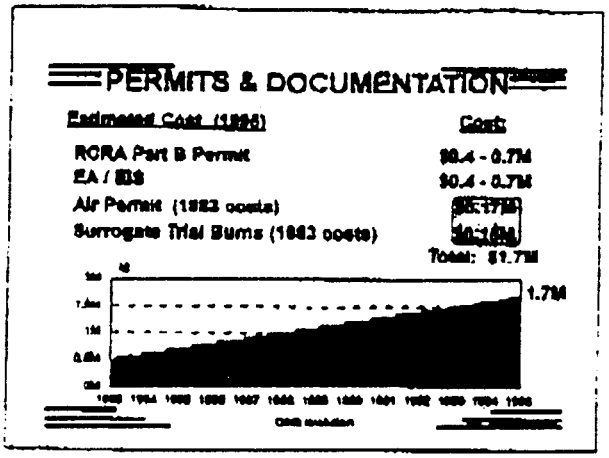
3. Enclosed is a description of the component costs of a new CDTF. These data represent our most reasonable estimates but I caution that true costs can only be obtained through the contracting process.

4. Should you desire any further information, please have your staff contact LTC Bob Abernathy at (205) 848-5050 or DSN: 865-5050.

FOR THE COMMANDER:

Encl

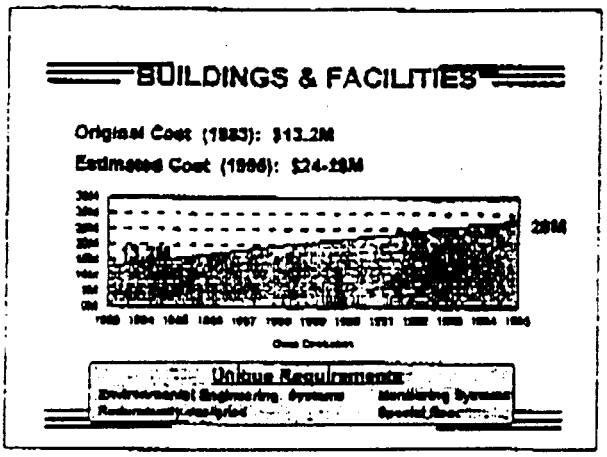
PETER D. HOFFMAN
Colonel, General Staff
Chief of Staff



The estimated costs for conducting the process to obtain a Resource Conservation Reclamation Act (RCRA) Part B permit and to conduct the Environmental Assessment/Environmental Impact Statement was determined to be $0.4-0.7M for each process. These estimates were obtained from Mr. Tom Fultz, Corps of Engineers, Region IV and supported by the Environmental Engineering Section, Anniston Army Depot.

It should be understood that these cost estimates are average figures based upon prior experience by these organizations being involved in the EA/EIS and RCRA Part B processes. An overlying factor which cannot be accounted for is the potential cost escalation due to unforeseen problems which may arise during each respective process. These potential problems can include: endangered species, toxic substances into a new region, local permitting, and RCRA Part B changing criteria.

The final two figures presented on this slide represent the 1983 true costs for obtaining the Alabama Department of Environmental Management air permit and the cost of conducting surrogate trial burns to validate the incineration and pollution abatement equipment. These figures have not been adjusted for inflation and are the true 1983 costs encountered by the contractor.

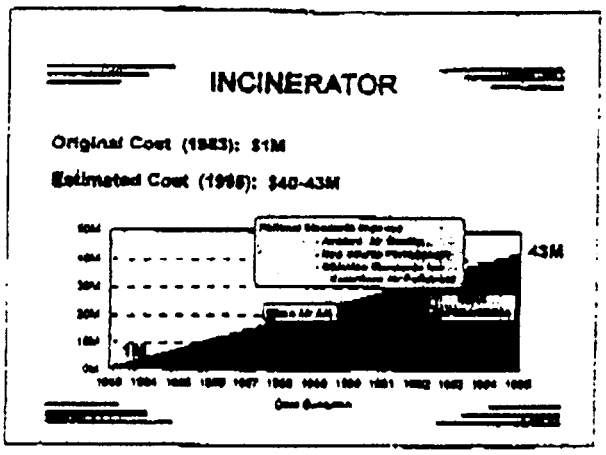


The original cost of the CDTF was $14.2M. Due to the volatile cost nature of incinerators, the cost of the site was determined to be $13.2M for all buildings and support structures with an additional $1M for the incinerator. The 1985 cost estimate was determined by two methods:

a. The first method involved the use of the Historical Air Force Construction Cost Handbook. Information for use of this method was obtained from the Cost Engineering Branch, Corps of Engineers, Region IV and resulted in an estimate of $24M. The basic methology involved is:

Cost = Past Cost (Prsent Index/Original Index)

b. The second cost estimation method involved contacting Morrison Knudson Engineering and requesting a cost estimate. The estimate obtained was $28M which is based on a 6-8 percent inflation rate per year. The base year used for the estimate was 1983. It should be noted that Morrison Knudson Engineering is the prime contractor for the demilitarization facility at Tooele.



The 1983 cost of the solid/liquid waste incinertor was $1M. The $40-43M estimated cost of a new incinerator was obtained from two independent sources. The $40M estimate was a figure confirmed by Dr. Zimmerman, Argonne National Labs. Dr. Zimmerman has been to the CDTF on several occasions and was the technical consultant for the original incinerator. Dr. Zimmerman also indicated that the $40M estimate is probably low. The $43M estimate was obtained from the air permit submitted to the state of Missouri for the construction of a CDTF. As outlined in the permit, the $43M is for a thermal incinerator and ancillary pollution abatement equipment.

The volatile cost nature of incinerators can be traced to several key federal legislative acts which resulted in more stringent operating criteria. The Clean Air Act Amendments (CAAA) of 1990 resulted in several major changes to the operation of incinerators. Title III of the 1990 CAAA deals specifically with the 189 listed air toxics and the regulation schedule of these sources. Another major impact of the 1990 CAAA is Title V which has established a more stringent federal air permitting process to be administered by the states.

In addition to the CAAA of 1990, the criteria for emission of criteria pollutants (Lead, Part. Matter, CO, NO2, SO2, and Ozone) has continued to become more stringent as outlined in the National Ambient Air Quality Standards (NAAQSs). The construction of a solid waste incinerator will be further governed by National New Source Performance Standards (NSPSs) which require more stringent control of particulate emissions from this category of incinerator.

The final legislation which can impact upon a solid waste incinertor and further increase costs is if the system is to be designed as a hazardous waste incinerator. This would require complience with 40 CFR and specifically the National Emission Standards for Hazardous Air Pollutants (NESHAPs).

As can be seen in the brief outline of federal legislation affecting air permits for incinerators, the environmental criteria encountered in 1983 as opposed to 1995 has greatly changed. This growing concern has resulted in the much tighter regulation standards for incinerators.

96

ARMY

13 APR 1995
16 MAR 1995

ort Jackson
outh Carolina

DOD POLYGRAPH INSTITUTE

171 20 45839 4,350

UTHARY FACILITY				3,916
POLYGRAPH INSTITUTE	LS	--	--	(3,301)
IDS Install	LS	--	--	(4)
DODM Costs	LS	--	--	(100)
15% Supporting Facs	LS	--	--	(511)

IPPORTING FACILITIES

STIMATED CONTRACT COST		3,916
ONTINGENCY PERCENT (5.00%)	---	196
UBTOTAL		4,112
UPERVISION, INSPECTION & OVERHEAD (6.00%)		247
OTAL REQUEST		4,359
OTAL REQUEST (ROUNDED)		4,350
NSTALLED EQUIPMENT-OTHER APPROPRIATIONS		(0)

Construct an administration, operations, training, and esearch facility for the Department of Defense Polygraph nstitute. Project includes all required interior structural, lectrical, mechanical, fire alarm system, information, tility monitoring and control system (UMCS), and intrusion etection system (IDS). The physically handicapped will be rovided for in the new facility. Heating and 88 tons of air-onditioning will be provided by a self-contained unit at the roject site. Provide comprehensive interior and furnishings elated design services. Supporting facilities include all xterior utilities, electrical service, lightning protection, ire protection and alarm system, information systems, paving, alks, curbs and gutters, parking, fencing, storm drainage, andscaping, and site improvements required. Parking for 24 rganizational vehicles and 41 non-organizational vehicles ill be required.

2 DOD
2

REGIONAL HEARING LOCATIONS
1995

SAN FRANCISCO, CA: THURSDAY, MAY 25: 9:00AM - 5:34PM

The Basilone Theater
Bldg 401
Naval Station, Treasure Island
San Francisco, CA.
(415) 395-5112
Seating Capacity: 998

CHICAGO, IL: WEDNESDAY, MAY 31: 9:00AM - 1:21PM

NOT CONFIRMED: TENTATIVE

The O'Hare Hilton
Chicago, IL.

BOSTON, MA: SATURDAY, JUNE 3: 8:30AM - 1:09PM

The John F. Kennedy Library
Columbia Point
Boston, MA.
(617) 929-4552
Seating Capacity: 500

ATLANTA, GA: FRIDAY, JUNE 9: 9:00AM - 2:46PM

NOT CONFIRMED: TENTATIVE

The Fox Theater
660 Peach Tree Street, N.E.
Atlanta, GA.
(404) 881-2100
Seating Capacity: 600

DALLAS, TX: SATURDAY, JUNE 10: 9:00AM - 3:25PM

Fort Worth/Tarrant County Convention Center
1111 Houston Street
Fort Worth, TX.
(817) 884-2222
Seating Capacity: 1500

DRAFT 5/19/95 2:40 PM

MAY-17-1994 09:44 FROM TO 87036960550 P.01

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL

# of pages ▶ 1

To DEIRDRE NURRE

Dept./Agency BASE CLOSURE COMM

Fax # 703/696-0550

From GENE GLUNN

Phone # 913/551-7776

Fax # 913/551-7863

NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

Sunday, May 14, 1995
The Kansas City Star B-3

Chemical training shift supported

Fort Leonard Wood seeks environmental permits from state.

The Associated Press

WAYNESVILLE, Mo. — A proposal to give Fort Leonard Wood the permits it needs to become the only Army facility where soldiers train with chemical agents drew far more supporters than opponents at a public hearing.

About 50 persons spoke Friday night at a four-hour hearing sponsored by the Missouri Department of Natural Resources. Three of them opposed the move.

The Pentagon has proposed shutting down Fort McClellan in Alabama and moving its Army Chemical and Military Police schools to Leonard Wood, in south-central Missouri.

Police patrolled the crowded hearing, but tempers never flared.

"The results (of the studies) show the air will be healthy and that the environment will be protected," said Col. Gary Thiessen, a spokesman for Leonard Wood.

Thiessen's sentiments were echoed by Department of Natural Resources officials.

Towns whose economies depend on Leonard Wood are pleased that the post could gain 2,000 new jobs, train up to 15,000 more soldiers a year and see more than $100 million in new construction.

The mayors of Waynesville, St. Robert, Rolla, Houston, Richland, Salem and Licking spoke in support of the move. Other community leaders also wrote letters backing the proposal.

But Troy Gordon, spokesman for the Ozark chapter of the Sierra Club, said the plan would mean "environmental degradation" in Missouri.

Gordon also said he was concerned about harm to plants and animals and damage to surrounding creeks. He accused the state agency of rushing the environmental permit process for political and economic development reasons.

BARRY PAUL STEINBERG
ATTORNEY AT LAW
ROSSLYN OFFICE:
1655 NORTH FT. MYER DRIVE
SUITE 700
ARLINGTON, VIRGINIA 22209

CELLULAR: (703) 408-2890
EVENING: (703) 273-6087

OFFICE: (703) 351-5273
FACSIMILE: (703) 351-5274

May 18, 1995

Ms. Madelyn R. Creedon, General Counsel
Defense Base Closure and Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, Virginia 22209

Subject: Environmental Permitting at Fort Leonard Wood, Missouri

Dear Ms. Creedon:

As we have discussed previously, serious questions exist with respect to the environmental permits required by Missouri and the United States, in order for the Army's Chemical School, currently located at Fort McClellan, Alabama, to move to Fort Leonard Wood, Missouri. Notwithstanding the representations made by Army officials and the Missouri Department of Natural Resources, the permit process is fraught with procedural and substantive errors. You are already aware of some o these.

As a result of the accelerated consideration of these matters by the Missouri Department of Natu Resources, the review process and public participation have been compromised. While spee consideration is laudable, there has been a failure by the permit applicant to provide an accur description of the waste stream, and an unwillingness by Missouri officials to undertake independent evaluation of the waste stream.

Under such circumstances, the RCRA permit potential has not been properly addressed. I expe provide you with an analysis of the waste stream in the very near future.

Enclosed is an analysis of the permits required, the status of such permits, and the procedural a which are being pursued or may be pursued by aggrieved parties in Missouri. In addition, th non-permit issues which are addressed, because the Army has chosen to ignore them or def until <u>after</u> the Base Closure process is completed.

I am available to address these matters further, should you desire. You can reach me at any of the phone numbers on my letterhead.

Sincerely,

Barry P. Steinberg

BPS/rs

Enclosures: 1. CURRENT STATUS OF ENVIRONMENTAL PERMITS FOR RELOCATION OF THE ARMY'S CHEMICAL SCHOOL TO FORT LEONARD WOOD, MISSOURI -- May 17, 1995

2. Attachments: Tabs A-F

CURRENT STATUS OF ENVIRONMENTAL PERMITS FOR RELOCATION OF THE ARMY'S CHEMICAL SCHOOL TO FORT LEONARD WOOD, MISSOURI
May 17, 1995

I. HOW MANY PERMITS ARE REQUIRED?

A. David Shorr, Director of the Missouri Department of Natural Resources ("MDNR"), in separate letters to the BRAC Commission on May 19, 1993, and to Secretary of Defense Perry on December 23, 1994 *(Tab A)* wrote that <u>four</u> State-issued environmental permits are needed: two air permits, one water permit and one hazardous waste incinerator permit.

B. MDNR Director Shorr in testimony before the BRAC Commission on April 12, 1995, stated that only <u>three</u> permits are needed from the State: two air permits (incinerator and fog oil) and one water permit.

C. Col. Anders B. Aadland, Chief of Staff for Fort Leonard Wood, in a letter to U.S. Congressman Glen Browder dated April 5, 1995, *(Tab B)* stated that Fort Leonard Wood had submitted applications to MDNR for <u>four</u> State permits: an air permit for the CDTF incinerator, an air permit for fog oil smoke training, a stormwater permit and a hazardous waste permit for the CDTF.

D. Based on a detailed analysis of how the Chemical School operates at Fort McClellan, an analysis of Missouri's environmental regulations and information contained in Fort Leonard Wood's permit applications, <u>four</u> environmental permits are needed in Missouri, including a hazardous waste permit for the CDTF incinerator.

II. CDTF INCINERATOR AIR PERMIT.

A. Fort Leonard Wood submitted an application for a <u>permit to construct</u> the CDTF to MDNR on March 1, 1995, based on data and drawings assembled during 1983-1985 on which Fort McClellan's original air permit was issued in Alabama in 1987.

B. MDNR Director Shorr determined that the air emissions from Fort Leonard Wood's CDTF permit application would be *de minimis*, and no public comment period or public hearing was provided by the State on the permit application.

C. MDNR issued a permit to construct the CDTF incinerator on April 10, 1995, conditioned on Fort Leonard Wood conducting and meeting stringent test burns and emission tests after construction of the facility.

D. Special conditions in the Missouri air permit indicate that hazardous waste cannot be burned in the CDTF incinerator, e.g., gas mask filters containing chromium, or materials contaminated with nerve agents (Sarin and VX), etc. Nevertheless, the Review Summary Section of the permit states: "The debris from the training, which can include nerve agents. . . will be burned in the incinerator" (pg. 1) and "While the nerve agents are toxic, they also decompose very rapidly at the temperatures encountered in the incinerator" (pg. 11).

E. Another major discrepancy is that the original June 1, 1987, Alabama air permit used by Fort Leonard Wood to prepare its CDTF permit application in Missouri was withdrawn by the Alabama Department of Environmental Management ("ADEM") on December 17, 1992, when it was replaced by a new air permit on that same date *(Tab C)*. The 1992 permit was issued by ADEM to encompass the dozens of changes and substantive modifications which had been made to the CDTF at Fort McClellan which were not included in Fort Leonard Wood's permit application and are, therefore, not included in the air permit issued by MDNR.

F. EPA-Region VII has indicated that it is concerned when a state regulatory agency says it can issue a permit within such short timetables, and without an opportunity for public review and comment, as was done in Missouri.

G. On April 27, 1995, two individuals and the Missouri Coalition for the Environment filed an appeal of the issuance of the CDTF construction permit before the Missouri Air Conservation Commission. The appeal alleges the air permit was based on incomplete and inaccurate design and operational data, that hazardous wastes will be burned in and emitted from the incinerator, that more than 100 tons/year will be emitted from the incinerator requiring a public hearing process, and numerous other defects. The parties seek denial of the permit and a public hearing on the permit application.

H. On April 27, 1995, the same parties filed a motion with the Missouri Air Commission to expedite and complete the permit appeal process prior to the BRAC Commission decision deadline on June 22, 1995. That motion was opposed by MDNR and was subsequently denied by the Air Commission during a telephone conference call on or about May 9, 1995.

I. The Air Commission's next regularly scheduled meeting is set for May 25, 1995, at which time the Commission is expected to appoint a hearing officer and establish a discovery schedule for the permit appeal. Consequently, the permit appeal process will <u>not</u> be completed before the BRAC Commission's decision date on June 22.

J. The Air Commission's ultimate decision on the permit appeal will be reviewable in the

State circuit court and by the Missouri Court of Appeals. That process typically takes from 18 months to 2 years to complete.

K. In addition, under the requirements of the 1990 Clean Air Act amendments, the CDTF incinerator will also require an operating permit from either the State of Missouri or EPA before it can begin operation. No such permit application has been filed by Fort Leonard Wood with either permitting agency.

III. FOG OIL AIR PERMIT.

A. Fort Leonard Wood submitted an air permit application to MDNR on March 1, 1995, to conduct fog oil smoke training in Missouri without first coordinating with officials at Fort McClellan on the permit requirements in violation of specific instructions from TRADOC to do so.

B. On March 16, 1995, Fort Leonard Wood submitted supplementary information to MDNR modifying their permit application from VOC emissions to PM-10 (particulate) emissions and stating that 63,000 gallons of "light grade mineral oil" will be used per year to generate smoke at Fort Leonard Wood. No permit application for the use of additives in the fog oil or use of obscurants in the smoke training has been submitted by Fort Leonard Wood to MDNR.

C. On March 23, 1995, in response to a request from MDNR, Fort McClellan supplied written information directly to MDNR indicating the Army's average use of fog oil at Fort McClellan over the past five years was over 77,000 gallons per year *(Tab D)*. In addition, Fort McClellan told MDNR that numerous other types of fuel and obscurants are used at Fort McClellan. To date, Fort Leonard Wood has not requested this same information from Fort McClellan, nor have they asked MDNR to include these emissions in their air permit.

D. On April 11, 1995, MDNR issued a proposed air permit to Fort Leonard Wood which limits the Army to the use of no more than 65,000 gallons per year of fog oil. No use of any other type of fuel or obscurants is permitted under MDNR's proposed permit. There is also no mention of the use of anti-freeze type additives which must be mixed with the SGF-2 fog oil (which is 20 weight motor oil, not mineral oil) when the temperature drops below 40° F during the winter months. Numerous Fort Leonard Wood personnel have repeatedly stated publicly in the past two weeks that the air permit will limit them to doing smoke training a maximum of 135 days/year for a maximum of one hour per day. Fort McClellan trains with smoke at least 200 days per year, sometimes as much as 4 to 5 hours per day, depending on weather conditions.

E. On April 24, 1995, Fort Leonard Wood submitted to MDNR an application for a variance from Missouri's State air regulations which impose a maximum 20% opacity limit. The Chemical School's fog oil operations are by design intended to generate a smoke cloud which is 100% effective in obscuring vision. Consequently, Fort Leonard Wood must be granted a variance from the State's air regulations, before the Fort can be issued a fog oil air permit.

F. At the Missouri Air Commission's regularly scheduled meeting on April 27, 1995, the granting of the opacity variance was formally opposed by a number of parties, including three individuals and the Missouri Coalition for the Environment.

G. A required public hearing on the proposed fog oil air permit was held in Waynesville, Missouri, on Friday evening, May 12, 1995. Opposition to the fog oil permit was voiced on the record including individual citizens who are not connected with either the three individual opponents or the Coalition. Formal statements of opposition were also filed by several participants including the Ozark chapter of the Sierra Club.

H. The evidentiary phase of the variance opposition is underway, and numerous depositions of the individual opponents, Fort Leonard Wood personnel, MDNR personnel, and the Coalition's expert witnesses began on May 15 and will be concluded on May 23.

I. The Chairwoman of the Missouri Air Commission appointed herself as hearing officer on the Army's variance request, and that hearing will be conducted on May 25 and 26 following and/or in conjunction with the next regularly scheduled meeting of the Air Commission on May 25.

J. The Air Commission will have to make a decision on the opacity variance before MDNR can issue the air permit for the fog oil smoke operations. Once the Commission makes its decision on the variance, that decision will then be ripe for appeal to State circuit court and the Missouri Court of Appeals, along with a potential request that the issuance of the fog oil air permit be stayed or held in abeyance until the judicial appeal of the variance is decided. That process typically takes 18 months to 2 years to complete, during which time the fate of both the variance and the fog oil air permit will be uncertain.

K. Even presuming the variance is granted and the air permit is issued by MDNR, the issuance of the permit will also be subject to appeal to the Air Commission which will undoubtedly take months beyond the BRAC Commission's June 22 decision deadline.

L. Moreover, the Air Commission's final decision on the air permit appeal will also be reviewable in the State circuit court and by the Missouri Court of Appeals. That process typically takes from 18 months to 2 years to complete.

IV. STORMWATER PERMIT.

A. On January 24, 1994, Fort Leonard Wood submitted a general facility-wide stormwater discharge permit application to MDNR for a number of ongoing activities at Fort Leonard Wood, such as maintenance facilities, fuel storage areas, asphalt plant, airfield operations, landfills, ordnance ranges, etc.

B. On February 17, 1995, MDNR issued Fort Leonard Wood a State operating permit for those discharges, which will be effective for five years in accordance with normal timetables under the Clean Water Act.

C. On March 2, 1995, in a one paragraph letter submission which attached a one page map sketch *(Tabs E and F)*, Fort Leonard Wood requested a modification to the Fort's general stormwater discharge permit to include the proposed fog oil smoke training activities proposed for relocation from Fort McClellan.

D. The very next day, on March 3, 1995, MDNR issued a draft State operating permit modifying the discharge of stormwater from Fort Leonard Wood's operational activities, <u>including</u> the proposed fog oil smoke training activities.

E. On April 4, 1995, MDNR issued a revised State operating permit for stormwater discharges which included fog oil smoke training at several outfalls and additional discharge points at Fort Leonard Wood.

F. On May 3, 1995, three individuals and the Missouri Coalition for the Environment filed an appeal of the issuance of the revised stormwater discharge permit before the Missouri Water Conservation Commission. The appeal alleges that the revised permit does not include necessary control measures required under State law, that the Army failed to seek authority to use flame training and fog oil obscurants which will adversely impact water quality, and that monitoring requirements for heavy metals were not included for discharges into the Big Piney River, along with a number of additional defects in both the Army's application and the permit issued by MDNR. The parties seek denial of the permit by the Water Commission.

G. The next regularly scheduled meeting of the Water Commission is June 21, 1995, the day before the BRAC Commission's June 22, 1995, decision deadline. Consequently, unless the Water Commission decides to deal with this appeal on an expedited basis, the stormwater permit appeal process will <u>not</u> be completed before the BRAC Commission's decision date.

H. The Water Commission's ultimate decision on the permit appeal will also be reviewable in the State circuit court and by the Missouri Court of Appeals. That process typically takes from 18 months to 2 years to complete.

V. HAZARDOUS WASTE PERMIT.

A. As stated in Col. Aadland's April 5, 1995, letter to Congressman Browder, Fort Leonard Wood claims a hazardous waste permit has been filed with MDNR for the CDTF incinerator. However, MDNR has no such permit application on file, and MDNR Director David Shorr now states that a hazardous waste permit is not needed, despite his previous written statements to both the BRAC Commission and to the Secretary of Defense to the contrary.

B. In 1984, the Army filed a RCRA, Part B hazardous waste permit with the Alabama Department of Environmental Management ("ADEM") for the CDTF incinerator at Fort McClellan. However, ADEM decided that it was not necessary at that time for them to issue a permit due to the state of the environmental laws in the mid-1980s. Consequently, the existing CDTF incinerator at Fort McClellan has enjoyed the benefit of the grandfathering provisions in subsequent legislation to avoid the necessity for a RCRA permit. However, a new incinerator at Fort Leonard Wood will be required to meet the more stringent permitting requirements in existing laws. Fort McClellan officials firmly believe that if they were now going through the permitting process for a new CDTF incinerator, a hazardous waste permit would also be required in Alabama.

C. The conditions contained in the CDTF incinerator air permit issued by MDNR clearly state that hazardous waste cannot be burned in the incinerator. However, the Review Summary included in the CDTF air permit states: "Hazardous air pollutants will be emitted from the incinerator, though in minute amounts" (pg. 1).

D. On May 12, 1995, three individuals and the Missouri Coalition for the Environment filed a petition before the Missouri Hazardous Waste Management Commission asking the Commission to prohibit Fort Leonard Wood from constructing and operating the CDTF incinerator without first obtaining a hazardous waste permit. The petition alleges hazardous wastes will be burned in and emitted from the incinerator, and that Fort Leonard Wood has failed to identify the hazardous wastes which will be incinerated because their evaluation is based on outdated information, drawings and operational plans which have been significantly modified by Fort McClellan during the past eight years.

E. The Hazardous Waste Commission's next meeting is set for May 17, 1995, at which time it is expected the Commission will either appoint a hearing officer and establish a discovery schedule on the petition or dismiss the petition.

F. If the Hazardous Waste Commission allows the petition process to go forward, that process will not be completed before the BRAC Commission's June 22, 1995, decision deadline. Moreover, the Waste Commission's ultimate decision on the petition will be reviewable in the State circuit court and by the Missouri Court of Appeals. That process typically takes from 18 months to 2 years to complete.

G. If the Hazardous Waste Commission dismisses the petition, in accordance with Mo. Rev. Stat. § 260.415, any of the parties who filed the petition have the option to immediately file suit for injunctive relief in State circuit court in Missouri.

VI. NUCLEAR PERMITS.

A. One of the vital training components of the Army's Chemical School is the nuclear defense training conducted at Fort McClellan using live nuclear agents. The nuclear training component is included in the proposed relocation to Fort Leonard Wood.

B. The nuclear radiation training facilities at Fort McClellan consist of ten laboratories which utilize 25-30 different radioisotopes, many of which have half lives that last for decades.

C. During the Chemical School's training and testing exercises, the radiation facilities produce low level radioactive waste (LLRW), which averages three 55 gallon drums per year.

D. Because the Chemical School utilizes special nuclear materials and produces LLRW, Fort Leonard Wood will have to obtain ~~two new licenses~~ from the Nuclear Regulatory Commission, a Part 30 license and a Part 70 license. The only NRC license Fort Leonard Wood possesses is a Part 35 license utilized by the base hospital.

E. To date, Fort Leonard Wood has not applied for these two new NRC licenses. In order to do so, the plans and design for the new nuclear facilities at Fort Leonard Wood must be attached to the 100+ page NRC application. The process of designing and preparing those plans is estimated to take 12 months.

F. Once an application is received by the NRC, it can take from 30 days to a year to process, depending on the completeness of the application.

G. Even then, Fort Leonard Wood would have only a Limited Operations License, which would allow only the storage but not the use of radioactive materials. A final Full Operations License would not be issued by the NRC until after the facility at Fort Leonard Wood is constructed and inspected. Optimistic estimates by Fort Leonard Wood engineers

indicate this could take at least three years.

H. As an example of how long this complete licensing process can take, when the Chemical School was moved back to Alabama from Maryland the radiological facility at Fort McClellan received its Limited Operations License in 1980. However, the Chemical School was not allowed to begin full-scale operations until its facilities were finally completed and inspected by the NRC in 1988.

I. During the years before Fort Leonard Wood receives its Full Operations License, nuclear defense training would either have to be continued at Fort McClellan or it would have to be discontinued. Moreover, only after the radioactive materials have been removed from Fort McClellan and that facility is decommissioned by the NRC may that facility close and its two existing licenses be terminated.

VII. ENDANGERED SPECIES.

A. To date the Army has refused to seek consultation with the U.S. Fish and Wildlife Service as required by Section 7 of the Endangered Species Act regarding the impact of this proposed relocation on listed endangered species. Specifically, the American bald eagle and the Indiana and grey bats all reside on Fort Leonard Wood, and a number of scientists are concerned they may be adversely affected by the proposed CDTF facility and/or the Chemical School's proposed fog oil smoke training.

B. Individuals from both the Fish and Wildlife Service and EPA who observed the fog oil tests conducted at Fort Leonard Wood in 1993 voiced their concerns about the impact the fog oil smoke training may have on both endangered species and on human health and safety.

C. Any decision to relocate the Chemical School to Fort Leonard Wood is clearly a federal action within the purview of the Endangered Species Act. As such, Section 7 consultation must be conducted now, <u>before</u> a decision is made by the BRAC Commission. The required consultation cannot wait until some potential NEPA process which "might" occur at some point in the future. Otherwise, the Department of Defense, and perhaps the BRAC Commission itself, will be in violation of the Endangered Species Act and subject to appropriate citizen suits under that Act.

Attachments: Tabs A-F

DEPARTMENT OF NATURAL RESOURCES
OFFICE OF THE DIRECTOR
P.O. Box 176 Jefferson City, MO 65102-0176 (314)751-4422
FAX (314)751-3822

December 23, 1994

The Honorable William J. Perry
Secretary
Department of Defense
The Pentagon
Washington, D.C. 20301

RE: Fort Leonard Wood, Missouri

Dear Secretary Perry:

Enclosed you will find two letters regarding Fort Leonard Wood and the Defense Base Closure and Re-Alignment Commission. The letters relate Missouri's position regarding the transfer of the Chemical School and its Chemical Defense Training Facility (CDTF) from Fort McClellan to Fort Leonard Wood. This letter is to reiterate our position regarding permitting at Fort Leonard Wood.

As expressed in prior letters, the Missouri Department of Natural Resources has indicated that the CDTF is a permitable facility under Missouri law.

As I indicated on June 4, 1993, we anticipate the construction of this facility will require air pollution control, water pollution control and hazardous waste program-related permits. To date, we have not received applications for such permits and eagerly await their submittal so that we can timely review and approve if appropriate.

Missouri is prepared to expedite the review processes for these facilities.

We have an excellent working relationship with the environmental staff at Fort Leonard Wood and the bases' command. Fort Leonard Wood has and continues to demonstrate a commitment to sound environmental stewardship. That relationship certainly will add to our ability to have a prompt review with quick responses.

Should you have any questions, please feel free to contact me directly about any environmental activities at Fort Leonard Wood.

Very truly yours,

DEPARTMENT OF NATURAL RESOURCES

David A. Shorr
Director

DAS:sh

Enclosure

DEPARTMENT OF THE ARMY
HEADQUARTERS
U.S. ARMY ENGINEER CENTER AND FORT LEONARD WOOD
FORT LEONARD WOOD, MISSOURI 65473-5000

REPLY TO
ATTENTION OF

ATZT-CS

5 APR 1995

MEMORANDUM FOR Department of the Army, Office of the Chief of Staff, The Army Basing Study, 200 Army Pentagon, Room 2A684, Washington, DC 20310-0200

SUBJECT: Congressional Inquiry from Congressman Browder

1. As requested by Congressman Browder, environmental permits submitted by Fort Leonard Wood are enclosed as follows:

a. Air permit for the CDTF incinerator

b. Air permit for large area smoke training

c. Installation-wide storm water permit

d. Hazardous waste permit for CDTF

2. As of this date, no official reply has been received from the Missouri Department of Natural Resources regarding any of these permit applications.

FOR THE COMMANDER:

ANDERS B. AADLAND
COL, EN
Chief of Staff

CF (wo/encls):
HQ, TRADOC

ADEM

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Leigh Pegues, Director

1751 Cong. W. L.
Dickinson Drive
Montgomery, AL
36130
(205) 271-7700
FAX 271-7950
270-5612

Field Offices:

110 Vulcan Road
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FAX 941-1603

P.O. Box 953
Decatur, AL
35602
(205) 353-1713
FAX 340-9359

2204 Perimeter Road
Mobile, AL
36615
(205) 450-3400
FAX 479-2593

Guy Hunt
Governor

December 17, 1992

Department of the Army
U. S. Army Chemical and Military
Police Center and Fort McClellan
Director of Engineering and Housing
ATTN: Environmental Management Division
Mr. Shih-Chi Wang
Fort McClellan, AL 36205-5000

Dear Mr. Wang:

RE: Permit No. 301-0017-Z007 (CDTF)

The enclosed revised Air Permit is issued pursuant to the Department's air pollution control rules and regulations. It reflects the installation of a steam autoclave at the CDTF to recycle Battle Dress Overgarments. Note the conditions which must be observed in order to retain this permit. Please return the original copy of Air Permit No. 301-0017-Z007 dated June 1, 1987 which you presently hold.

If you have any questions or require clarification of permit conditions, please write or call Nathan Hartman at 205/271-7861 in Montgomery.

Sincerely,

Ronald W. Gore

Richard E. Grusnick, Chief
Air Division

REG/NH:klh

Enclosure

cc: Doug Lipsey

ADEM

Alabama
Department of Environmental Management

AIR PERMIT

PERMITTEE: U.S. ARMY CHEMICAL AND MILITARY POLICE CENTERS AND FORT MCCLELLAN

LOCATION: FORT MCCLELLAN, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
301-0017-Z007	Chemical Decontamination Training Facility (CDTF) Incinerator with Wet Scrubber

*In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, **Code of Alabama 1975**, §§22-28-1 to 22-28-23 (the "AAPCA") and the Alabama Environmental Management Act, as amended, **Code of Alabama 1975**, §§22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.*

ISSUANCE DATE: December 17, 1992

Alabama Department of Environmental Management

March 23, 1995

Special Assistant to the Commandant

Subject: Request Under the Freedom of Information Act

Mr. John A. Young
State of Missouri Department of Natural Resources
Division of Environmental Quality
Post Office Box 176
Jefferson City, Missouri 65102

Dear Mr. Young,

This letter is in reference to your request regarding fog oil use at Fort McClellan, Alabama. The military stock number of fog oil is 9150-00-261-7895. Other data helpful for identification is Fog Oil: 55 gallon drum (81349) MILF12070 Type SGF-2.

year (gallons of fog oil) (variance due to US Army Reserve training flux)

1994 (93,800) 1993 (116,350) 1992 (56,400) 1991 (54,970) 1990 (65, 860)

If this request is the basis for determining air emission calculations, you should be aware of other types of fuel and obscurants used on Fort McClellan. Smoke generators use gasoline to aerosolize fog oil droplets. The consumption rate is 3 1/2 gallons of gasoline per 55 gallons of fog oil.

Other sources include hexachloroethane smoke pots, colored dye smoke grenades, infrared defeating obscurant grenades (brass flakes) and large area infrared defeating obscurants (graphite powder). Millimeter wave obscurants (similar to radar chaff) are expected to be available for use in the next two years. Environmental assessment information for some of these items are enclosed. The "potential to emit" with 20 mobilizing chemical units, would roughly double the gasoline and fog oil totals per year.

Sincerely,

Edward W. Newing
Lieutenant Colonel, U.S. Army
Special Assistant to the Commandant

Enclosures
Environmental Assessments for Red, White, Plasticized White Phosphorus; Dye Colored Smokes; Hexachloroethane (HC) Smoke

DEPARTMENT OF THE ARMY
UNITED STATES ARMY ENGINEER SCHOOL
FORT LEONARD WOOD, MISSOURI 65473-5000

REPLY TO
ATTENTION OF

March 2, 1995

Mr. Tim L. Stallman
Environmental Specialist - Geologist
Water Pollution Control Program
Division of Environmental Quality
Department of Natural Resources
P.O. Box 176
Jefferson City, Missouri 65102-0176

Dear Mr. Stallman

Please review the attached map of Fort Leonard Wood showing locations which have been considered as possible sites for large area smoke training. These areas were considered in 1993 for this type of training and, due to the recent Base Realignment and Closure Commission anouncement, could be used for this activity in the future. As you realize, modifications might be required in the non point source water discharge permit for the installation.

Sincerely,

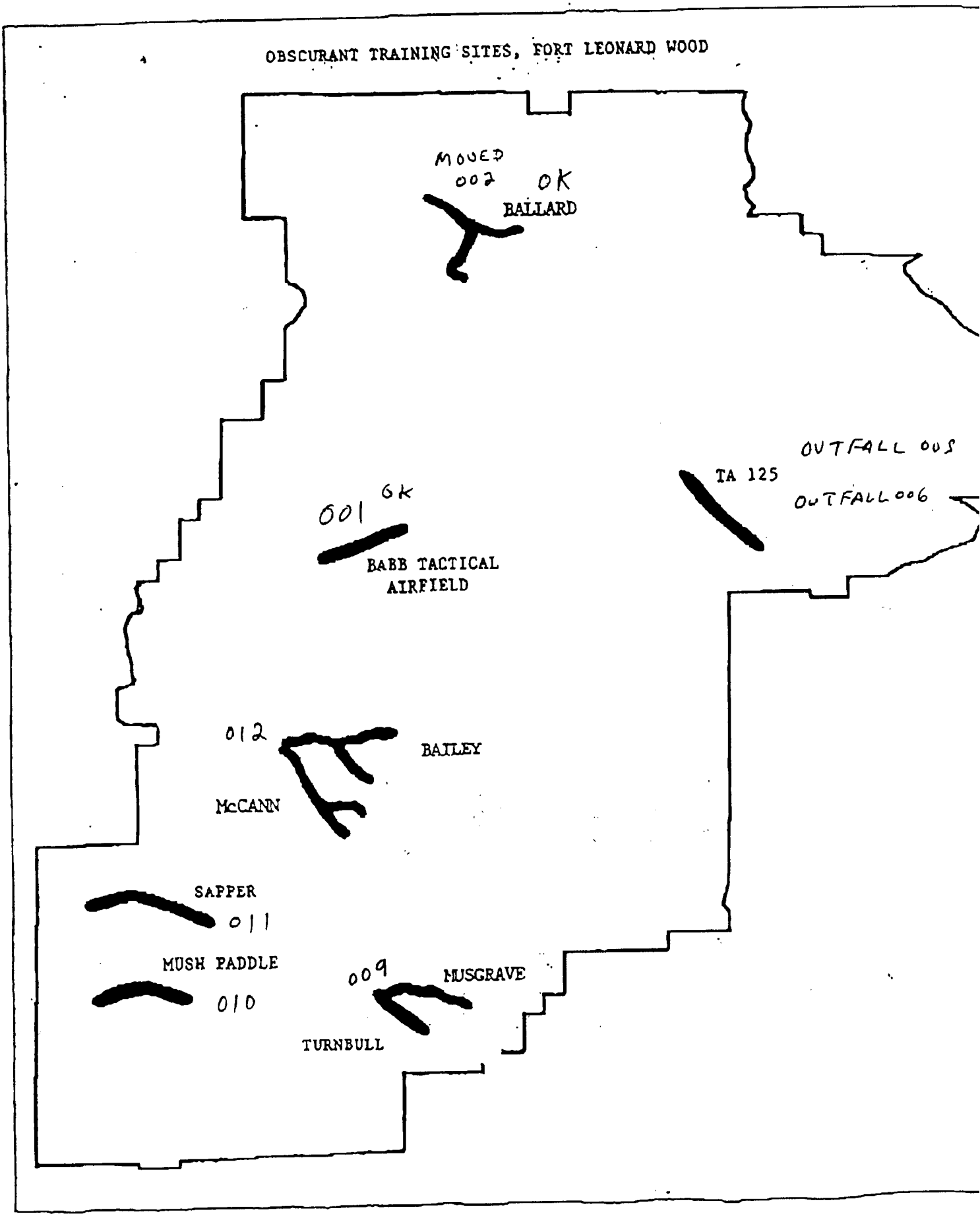
Scott Murrell
Scott Murrell
Chief/ Environment, Energy
and Natural Resources Div.
Directorate of Public Works

Enclosure

Center for Excellence

Produced by: US Army CERL, Champaign ...
Software: GRASS

TITLE: (smoke.buff.11)
LOCATION: Fort Leonard Wood, Missouri



Document Separator

RECEIVED
MAY 12 1995
HAZARDOUS WASTE PROGRAM
MISSOURI DEPARTMENT OF
NATURAL RESOURCES

BEFORE THE MISSOURI
HAZARDOUS WASTE MANAGEMENT COMMISSION

IN THE MATTER OF:	)
	)
WILLIAM A. GIBBS, REBECCA I. GIBBS, WENDY PELTON, AND THE COALITION FOR THE ENVIRONMENT	)
	)
Petitioners,	)
vs.	)
	)
MISSOURI DEPARTMENT OF NATURAL RESOURCES,	)
	)
Respondent.	)

PETITION

Come Now Petitioners, by and through their attorneys, and pursuant to § 260.415 RSMo., request the Hazardous Waste Management Commission to enter its Order prohibiting the U.S. Army Engineering Center and Fort Leonard Wood to construct and operate a Chemical Decontamination Facility and Thermal Treatment Unit (hereafter the "CDTF") without a hazardous waste permit. In support thereof, Petitioners state as follows:

1. Petitioners William A. Gibbs and Rebecca I. Gibbs (hereinafter "the Gibbs") are residents of Newberg, Missouri and own real property near Fort Leonard Wood. The Gibbs and their minor children use for recreational purposes the streams and national forest areas adjacent to Fort Leonard Wood and live and recreate within the potential impact area of the proposed CDTF incinerator site. The Gibbs from time to time visit Fort Leonard Wood and are present on the premises. They will be adversely affected by the emissions resulting from the proposed incinerator.

2. Petitioner Wendy Pelton resides and owns property a

short distance from Fort Leonard Wood. From time to time she drives through the Fort and she frequently floats the Big Piney River a few miles from the Fort. She will be adversely affected by emissions from the proposed incinerator.

3. The Missouri Coalition for the Environment ("Coalition") is a corporation organized and existing under the not-for-profit corporation laws, qualified to do business in Missouri, with its principal office located in St. Louis County, Missouri. The Coalition exists for the purpose of protecting and preserving environmental values in Missouri, and has for years been actively concerned with protecting air quality throughout the state. The Coalition has thousands of members, many of whom seek recreation in floating the Big Piney River, which flows through Fort Leonard Wood, and the Gasconade River, which flows within approximately three miles of the fort, and also in hiking and camping in the Mark Twain National Forest, which surrounds the fort on three sides. The Coalition's interest in protecting and enhancing the quality of the ambient air throughout the state will be adversely affected if the permit is upheld. The Coalition members will be adversely affected by the emissions from the incinerator which is the subject of this appeal, if the permit is upheld. The Coalition files this appeal on its own behalf and on behalf of its members.

4. The Gibbs, Wendy Pelton, and the Coalition are persons "affected in fact" within the meaning of § 260.415 in that each Petitioner has a specific and legally cognizable interest in the subject matter of this administrative action, and the decision of

the Commission will have a direct and substantial impact on that interest.

5. On or about March 1, 1995, the Army submitted to MDNR for approval an Application For Authority to Construct a Thermal Treatment Unit to treat waste generated from a Chemical Decontamination Training Facility ("CDTF") at Fort Leonard Wood in Pulaski County, Missouri. The Army intends to conduct nerve agent training at the proposed facility. Army personnel will identify and decontaminate vehicles and equipment tainted with nerve agents. A copy of Fort Leonard Wood's original application is appended hereto as Exhibit "A".

6. The Army intends to manufacture and use at the CDTF the following nerve agents: GB, VX, and HD. All of these agents are highly toxic and, if mishandled, pose a threat to human health and the environment. Agent GB (Sarin) is a colorless liquid which, when vaporized, is readily absorbed through the skin. It is the same substance implicated in the recent tragedy of the Tokyo subway system, resulting in the death and injuries to hundreds of people. While Agent VX does not volatize as rapidly as agent GB, it is estimated to be 100 times more toxic. Exposure to agents VX and GB can result in death within 15 minutes after exposure to a lethal dose. Agent HD (mustard gas) is a known carcinogen and, when heated, releases toxic fumes. Exposure to lethal doses of HD can result in death within 4 to 6 hours.

7. The operations conducted at the CDTF will include identification and decontamination of live nerve agents. The

decontamination wastes and potentially contaminated materials include clothing, gas mask filters, laboratory wastes, medical and infectious wastes, air filters and washdown water. Debris from the training, laboratory and CDTF will be burned in the incinerator.

8. According to the Permit Application, emissions from the incineration process will include VOCs, carbon monoxide (CO), NOx, sulfur dioxide, particulate matter and toxic substances including Sarin. Through the proposed combustion of the on-site wastes, dioxins and furans will also be emitted. The incinerator will operate 8 hours per day, 250 days per year.

9. The Permit Application is defective in many material respects as it does not accurately and truthfully describe the conditions under which the CDTF will operate at Fort Leonard Wood. The Permit Application is defective and deviates from actual practice at Fort McClellan in that it fails to identify hazardous wastes which will be incinerated in the Thermal Treatment Unit.

Numerous other defects are contained in the Application, as will be developed during the hearing of this case.

10. On April 10, 1995, MDNR approved the Army's application and issued the permit to construct and subsequently operate the CDTF facility. A copy of the Permit to Construct is appended hereto as Exhibit "B".

11. On April 12, 1995, Mr. David A. Schorr, Director of MDNR, testified under oath before the Defense Base Closure and Realignment ("BRAC") Commission that the proposed CDTF

incinerator and related operations would not involve the use, storage or disposal of hazardous wastes and, therefore, a hazardous waste permit was not required. A copy of Mr. Schorr's testimony is appended hereto as Exhibit "C".

12. Mr. Schorr's sworn statements before the BRAC Commission constituted final agency decision within the meaning of § 260.415 RSMo.

13. Had the Fort Leonard Wood Permit Application been accurate, complete and truthful, as required by law, MDNR would have required a RCRA Part B permit for the incinerator.

14. In approving the permit application, MDNR imposed certain Special Conditions including, inter alia, that no hazardous waste be burned in the Thermal Treatment Unit and that emissions from the facility not exceed limits set forth in the approved Permit. Specifically, no detectable limits of GB (Sarin) or VX may be emitted or released from the facility and the Army is prohibited from incinerating gas mask filters containing chromium, a listed hazardous waste under 40 CFR Part 261. Missouri has adopted and incorporated by reference the federal RCRA regulations. See 10 CSR 25-3.260.

15. Some of the materials the Army proposes to incinerate, and which the permit allows the Army to incinerate, are hazardous wastes. Specifically, agent VX is a sulfide bearing material and is a D003 reactive hazardous waste within the meaning of 40 CFR § 261.23(a)(5). Agent VX is absorbed into carbon filters which are then incinerated in the Thermal Treatment Unit. The absorbed VX when exposed to changes in ambient temperatures will have the

opportunity to off gas VX nerve agent which would be sufficient to present a danger to human health. The incineration of these filters account for nearly half of the CDTF's total weight of solid wastes.

16. Upon information and belief, during the course of training Army personnel use nerve agent detectors which utilize pads containing silver nitrate which are then incinerated along which other wastes. Silver is a characteristic listed hazardous waste under 40 CFR Part 261. Laboratory analysis of pads used at Fort McClellan indicate that the material in question exhibits the characteristic of toxicity using the Toxicity Characteristic Leaching Procedure ("TCLP") (appended hereto as Exhibit "D").

17. In addition, upon information and belief, the Army uses in the CDTF laboratories non-halogenated solvents which are listed hazardous wastes under 40 CFR §261.33. These solvents are then incinerated in the Thermal Treatment Unit.

18. By burning Agent VX, silver, non-halogenated solvents in the CDTF incinerator, hazardous waste will escape into the environment which has the potential to cause serious acute injury to public health or the environment.

19. In addition, facilities which manage hazardous waste must comply with the procedures for public participation which include holding a public hearing prior to issuance of the permit. At such a hearing, any interested party may submit information or materials in opposition to the application. See 10 CSR 25-8.010

20. In issuing the Permit, MDNR has failed to properly categorize the installation as requiring a hazardous waste permit

and to hold a public hearing as required by law.

21. Each of the petitioners oppose MDNR's issuance of the Permit To Construct on grounds that they have private rights and/or property interests that will be damaged by the operations at the proposed incinerator site. The injuries that Petitioners presently suffer or may in the future incur as a result of the approval of the Permit and the subsequent construction and operation of the facility including diminished property value, diminished quality of life, detrimental effects upon health, detrimental effect upon quality of the environment and reduced marketability of property.

WHEREFORE, for all the foregoing reasons, Petitioners respectfully request the Commission to:

(a) Grant a full evidentiary hearing as required by law, at which time Petitioners may present evidence regarding their appeal.

(b) Enter its Order enjoining MDNR from issuing an operating permit to Fort Leonard Wood for the CDTF incinerator;

(c) Enter its Order enjoining Fort Leonard Wood from operating the CDTF facility without a hazardous waste permit;

(d) Declaring Petitioners to be prevailing parties in the action and award Petitioners costs and attorneys' fees; and

(e) For such other and further relief as the Commission deems just and proper.

GREEN, HENNINGS & HENRY

By: _____

LEWIS C. GREEN
314 North Broadway, Suite 1830
St. Louis Missouri 63102-2097
(314) 231-4181

Attorney for Petitioners

MAR-01-1995 12:55 DNR AIR POLLUTION CONTROL 3147512706 P.02

Ir. reactor from gas Training agent

Missouri Department of Natural Resources
Air Pollution Control Program
New Source Review Unit
P.O. Box 176, Jefferson City, MO 65102

RECEIVED
95 MAR 1 PM 3 40
AIR POLLUTION
CONTROL PGM

APPLICATION FOR AUTHORITY TO CONSTRUCT

APCP USE ONLY	
Filing Fee: 100	
Check No.: 4187	Check Rec'd: 3/1/95
Check Amount: $ 100	Check Date: 3/1/95
Project Number: 3860-0028	

INSTRUCTIONS ON BACK OF THIS SHEET

COMPANY/FACILITY TO RECEIVE PERMIT:
rmy Engineer Center and Fort Leonard Wood

/FACILITY STREET ADDRESS:
TZT -DPW-EE

/FACILITY MAILING ADDRESS:

/FACILITY CITY: eonard Wood | STATE: MO | ZIP CODE: 65473

ki | 335N | Section: 21 | Township: 8W | Range:

URI SENATORIAL DISTRICT IS COMPANY/FACILITY IN? | WHAT MISSOURI REPRESENTATIVE DISTRICT IS COMPANY/FACILITY IN?

PARENT COMPANY:
ment of Defence

OMPANY MAILING ADDRESS:

OMPANY CITY: | STATE: | ZIP CODE:

CATION IS FOR:
☐ MODIFICATION OR ADDITION TO AN EXISTING FACILITY ☒ NEW FACILITY

D DATE TO COMMENCE CONSTRUCTION: | PROJECTED DATE OF STARTUP:

ON OF NEW OR MODIFIED PROCESSES/EQUIPMENT:

l Treatment Unit to treat waste from a Chemical Decontamination Training Facility

COST OF BASIC EQUIPMENT: | ESTIMATED COST OF AIR POLLUTION CONTROL EQUIPMENT: $ Included in basic equipment

ons Must be Accompanied by a $100 Filing Fee. Processing Fees at the Rate of $50 per Hour of Staff Time will be Assessed at the End of the Review.

'S CERTIFICATION STATEMENT:
I have personally examined and am familiar with the information in this application and believe that the information submitted is accurate and complete. ...ust making a false statement or misrepresentation in this application is grounds for denying or revoking the construction permit. I may also be guilty of a ...r and upon conviction, may be punished by fine or imprisonment.

RESPONSIBLE MEMBER OF THE COMPANY: Scott Murrell | DATE: 3/1/95

INT NAME OF SIGNER: Scott Murrell

F SIGNER: Cheif, Environmental Division | TELEPHONE NUMBER: 514-596-0860

State of Missouri

Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, Missouri 65102

PERMIT APPLICATION

RECEIVED
'95 MAR 1 PM 3 40
AIR POLLUTION
CONTROL PGM

missions Inventory Questionnaire (EIQ)

ORM 1.0 GENERAL PLANT INFORMATION

cility Name emical Decontamination Training Facility hermal Treatment Unit	County No. 3860	Plant No.	Year of Data 1983
cility Street Address TZT-DPW, Northwest Training Area 246	County Name Pulaski		Classification
y ort Leonard Wood	ZIP Code 65473-5000	Facility Phone Number 314-596-0840	
cility Mailing Address SAEC & FLW. ATZT-DPW		Product/Principal Activity Thermal treatment of materials	
y ort Leonard Wood	ZIP Code 65473-5000	Number of Employees 51	Land in Acres 8
ility Contact Person cott Murrell		Where to Send EIQ in Future (Check One) ☐ Facility Mailing Address ☒ Parent Co. Mailing Address	

	Latitude	Longitude	UTM Coordinates	CTSR Coordinates		
egrees	37	92	Horizontal (Km) 5755	Township	Section	Range
inutes	44	09	Vertical (Km)			
conds	30	00	41770	35 north	21	8 west

ent Company Name S Army Engineer Center and ort Leonard Wood	Contact Person Scott Murrell	Phone Number 314-596-08[illegible]	
ling Address TZT-DPW-EE	City Fort Leonard Wood	State MO	ZIP Code [illegible]

EMISSIONS STATEMENT

TOTAL PLANT EMISSIONS (TONS PER YEAR)

	PM10	SOx	NOx	VOC	CO	LEAD/Toxic	Other
25	.35	6.41	1.51	.06	.42	0.00/0.00	.038 lb/yr .055 lb/yr .01 lb/yr

undersigned hereby certifies that they have personally examined and are familiar with the information and ements contained herein and further certifies that they believe this information and statements to be true, rate and complete. The undersigned certifies that knowingly making a false statement or misrepresenting the s presented in this document is a violation of state law.

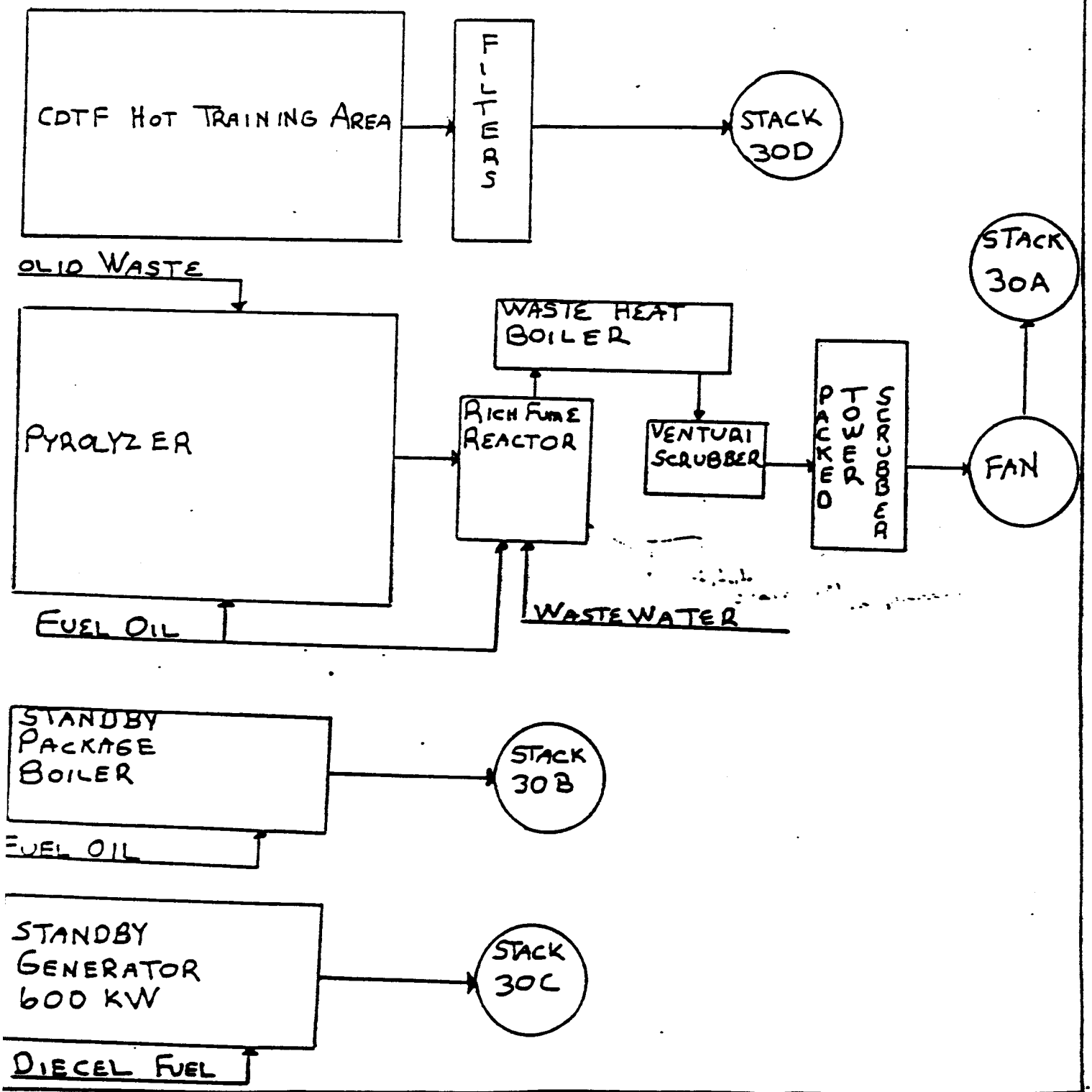
e of Person Completing Form y McCarthy Environmental Engineer	Signature Perry McCarthy	Date 1 Mar 95
e of Authorized Company Representative tt Murrell	Signature Scott Murrell	Date 1 Mar 95

Number MO 780-1431 (10/93)

RM 1.1 PROCESS FLOW DIAGRAM

ility Name	County No.	Plant No.	Year of Data
S. Army Engineer Center	3860	0004	1995

[redacted]



ORM 1.2 SUMMARY OF EMISSION POINTS

cility Name	County No.	Plant No.	Year of Data
hermal Treatment Unit	3860		1983

Total Number of Emission Points

Four

Point No.	[3] Point Description	[4] Worksheet(s) Used with Form 20
0A	Stack from treatment unit	
OB	Stack from Standby Package Boiler	
OC	Stack from Standby 600 KW Generator	
OD	Stack from Ventilation System	

Number MO 780-1431 (10/93) Duplicate this form as needed.

rm 2.0 EMISSION POINT INFORMATION

ility Name	County No.	Plant No.	Year of Data
S. ARMY ENGINEER CENTER	3860	0004	1995

[1] POINT IDENTIFICATION

int No.	SIC Code	Point Description
0A		CDTF Thermal Treatment Waste Heat Boiler

urce Classification Code (SCC)	Emission Factor Unit	Number of SCCs Used with this Point
500205	1000 Gal	

C Description

ternal Combustion Boiler Commercial Distilate Fuel

[2] STACK/VENT PARAMETERS

ck No.	Height (Ft)	Diameter (Ft)	For a non-circular stack: Diameter = (1.128A)^1/2 (A = Cross Sectional Area in sq. feet)
	100	3	

nperature (F)	Velocity (Ft/Min)	Flow Rate (Cu Ft/Min)	List other points sharing this stack.
75	777	5500	

[3] AIR POLLUTION CONTROL EQUIPMENT

vice No.	Device Code	Description of Control Device	CONTROL DEVICE EFFICIENCY TSP	PM10	SOx	NOx	VOC	CO	Lead	Toxics
	054	Venturi Scrubber	94.95	90.96	84.5	84.5	84.5	84.5	94.95	
	099	Packed Tower Scrubber								

[4] OPERATING RATE/SCHEDULE

ual Throughput	Units	Hours/Day	Jan-Mar (%)	Apr-Jun (%)
4	1000 Gallons	8	25.00	25.00
		Days/Week 5		
imum Hourly Design Rate	Units	Weeks/Year	Jul-Sep (%)	Oct-Dec (%)
47	1000 Gallons	50	25.00	25.00

EMISSIONS CALCULATIONS

rce of Emission Factor 1 CEM 2 Stack Test 3 Mass Balance 4 SCC Factor 5 AP42 6 Other
t below in [6]]

[5] List other worksheets used with this form.

ir utant	[6] Source	[7] Emission Factor (Lbs/Unit)	[8] Ash or Sulfur (%)	[9] Control Efficiency (%)	[10] Actual Emissions (Tons/Yr)	Maximum Hourly (Lbs/Hr)	Potential Controlled (Tons/Yr)	Potential Uncontrolled (Tons/Yr)
	4	2.5		94.95	.03			
10	4	2.46		90.96	.05			
	4	143	.05	84.5	2.74			
	4	18		84.5	.69			
	4	.7		84.5	.027			
	4	5		84.5	.19			
d								
ics								

Duplicate this form as needed.

rm 2.0 EMISSION POINT INFORMATION

ility Name	County No.	Plant No.	Year of Data
S. ARMY ENGINEER CENTER	3860	0004	

[1] POINT IDENTIFICATION

nt No.		SIC Code	Point Description
DA	[redacted]		CDTF Thermal Treatment Unit Waste Water

rce Classification Code (SCC)	Emission Factor Unit	Number of SCCs Used with this Point	
	1000 Gallons		[redacted]

C Description

[2] STACK/VENT PARAMETERS

ck No.		Height (Ft)	Diameter (Ft)	For a non-circular stack: Diameter = (1.128A)^1/2 (A = Cross Sectional Area in sq. feet)
	[redacted]	100	3	

perature (F)	Velocity (Ft/Min)	Flow Rate (Cu Ft/Min)	List other points sharing this stack.
75	777	5522	

[3] AIR POLLUTION CONTROL EQUIPMENT

vice No.	Device Code	Description of Control Device	CONTROL DEVICE EFFICIENCY TSP	PM10	SOx	NOx	VOC	CO	Lead	Toxics
	054	Venturi Scrubber	94.95	90.96	84.5	84.5	84.5	84.5	94.95	
	099	Packed Tower Scrubber								

[4] OPERATING RATE/SCHEDULE

ual Throughput	Units	Hours/Day	Jan-Mar (%)	Apr-Jun (%)
0	1000 Gallons	8	25.00	25.00
		Days/Week		
imum Hourly Design Rate	Units	5	Jul-Sep (%)	Oct-Dec (%)
75	1000 Gallons	Weeks/Year 50	25.00	25.00

EMISSIONS CALCULATIONS

rce of Emission Factor: 1. CEM 2. Stack Test 3. Mass Balance 4. SCC Factor 5. AP42 6. Other below in [6]

[5] List other worksheets used with this form.

ir tant	[6] Source	[7] Emission Factor (Lbs/Unit)	[8] Ash or Sulfur (%)	[9] Control Efficiency (%)	[10] Actual Emissions (Tons/Yr)	Maximum Hourly (Lbs/Hr)	Potential Controlled (Tons/Yr)	Potential Uncontrolled (Tons/Yr)
	6	3.88		94.95	.073			
0		3.88		90.96	.131			
		5.3		84.5	.31			
cs				GB VT HD	.038 lb/yr (1) .005 lb/yr (2) .01 lb/yr (3)			

Number MO 780-1431 (10/93) Duplicate this form as needed

orm 2.0 EMISSION POINT INFORMATION

cility Name	County No.	Plant No.	Year of Data
.S. ARMY ENGINEER CENTER	3860	0004	1995

[1] POINT IDENTIFICATION

int No.	SIC Code	Point Description
30A		CDTF Solid Waste Thermal Treatment

urce Classification Code (SCC)	Emission Factor Unit	Number of SCCs Used with this Point
	1000 lbs	

:C Description

[2] STACK/VENT PARAMETERS

ack No.	Height (Ft)	Diameter (Ft)	For a non-circular stack: Diameter = (1.128A)^1/2 (A = Cross Sectional Area in sq. feet)
1	100	3	

mperature (F)	Velocity (Ft/Min)	Flow Rate (Cu Ft/Min)	List other points sharing this stack.
75	777	500	

[3] AIR POLLUTION CONTROL EQUIPMENT

evice No.	Device Code	Description of Control Device	CONTROL DEVICE EFFICIENCY TSP	PM10	SOx	NOx	VOC	CO	Lead	Toxics
1	054	Venturi Scrubber	94.95	90.96	84.5	84.5	84.5	84.5	94.95	
2	099	Packed Tower Scrubber								

[4] OPERATING RATE/SCHEDULE

nual Throughput	Units	Hours/Day	Jan-Mar (%)	Apr-Jun (%)
950	1000 Pounds	8	25.00	25.00
		Days/Week 5	Jul-Sep (%)	Oct-Dec (%)
ximum Hourly Design Rate	**Units**	**Weeks/Year**		
.125	1000 Pounds	50	25.00	25.00

EMISSIONS CALCULATIONS

urce of Emission Factor - 1. CEM 2. Stack Test 3. Mass Balance 4. SCC Factor 5. AP42
st below in [6]

[5] List other worksheets used with this form.

Air llutant	[6] Source	[7] Emission Factor (Lbs/Unit)	[8] Ash or Sulfur (%)	[9] Control Efficiency (%)	[10] Actual Emissions (Tons/Yr)	Maximum Hourly (Lbs/Hr)	Potential Controlled (Tons/Yr)	Potential Uncontrolled (Tons/Yr)
P	6	5.70		94.95	.036			
10	6	5.70		90.96	.06			
x	6	5.78		84.5	.11			
x	6							
C	6							
	6							
ad								
xics								

Duplicate this form as needed.

FORM 2.2P INCINERATOR WORKSHEET - PERMITS

Facility Name	County No.	Plant No.	Year of Data
Thermal Treatment Unit	3860		1983

(1) EQUIPMENT INFORMATION

Point No.	SCC	Make/Model	Serial Number
30		Pyrobatch System	

Incinerator Use (Check One)
☒ Government ☐ Commercial/Institutional ☐ Industrial ☐ Other (Specify)

Equipment Type (Check Appropriate Boxes)
☐ Pathological ☐ Sewage Sludge ☒ Multiple Chambers ☐ Controlled Air ☐ Other (Specify)

Rated Capacity (lbs/hr)	Approximate Firing (lbs/day)	Grate Area (sq. ft.)

Stack Lining
☒ Firebrick ☐ Unlined ☐ Castable

Type of Charging Door
☐ Continuous ☒ Batch ☐ Intermittent

Type of Flue Dampers
☒ Barometric ☐ Guillotine ☒ Both

Type of Draft
☐ Natural ☒ Forced ☒ Induced

Overfire Air (cu. ft./min)	Underfire Air (cu. ft./min)	Excess Air (cu. ft./min)
663	100	2821

PRIMARY CHAMBER

Burner (BTU/hr)	Volume (cu. ft.)	Temperature (F)
2,594,000	378	Min: 1000° Max:

SECONDARY CHAMBER

Burner (BTU/hr)	Volume (cu. ft.)	Temperature (F)
5,778,000	1010	Min: 1450° Max: 2200°

TERTIARY CHAMBER

Burner (BTU/hr)	Volume (cu. ft.)	Temperature (F)
		Min: Max:

(2) WASTE INFORMATION AND THROUGHPUTS

Process Waste Type	Heat Content (BTU/Units)	Annual Throughput	Units
Type 0 (solid)	4610	250,000	lbs/yr
Type 5 (liquid)	-1,000	6,225,000	lbs/yr
TOTAL ANNUAL THROUGHPUT =		6,475,000	Lbs/Yr
TOTAL ANNUAL THROUGHPUT (Tons/Yr) = {Total Annual Throughput (Lbs/Yr)} / 2000		3,237.5	Tons/Yr

Enter the TOTAL ANNUAL THROUGHPUT (Tons/Yr) in Block 4 on Form 2.0, Emission Point Information.

orm 2.0 EMISSION POINT INFORMATION

acility Name	County No.	Plant No.	Year of Data
J.S. ARMY ENGINEER CENTER	3860	0004	1995

[1] POINT IDENTIFICATION

oint No.		SIC Code	Point Description
30B	[redacted]		CDTF Standby Package Boiler

ource Classification Code (SCC)	Emission Factor Unit	Number of SCCs Used with this Point	
10500205	1000 Gallons		[redacted]

CC Description

External Combustion Boiler Commercial Distilate Fuel

[2] STACK/VENT PARAMETERS

ack No.		Height (Ft)	Diameter (Ft)	For a non-circular stack: Diameter = (1.128A)^1/2 (A = Gross Sectional Area in sq feet)
[illegible]	[redacted]	30	1.5	

mperature (F)	Velocity (Ft/Min)	Flow Rate (Cu Ft/Min)	List other points sharing this stack.

[3] AIR POLLUTION CONTROL EQUIPMENT

Device No.	Device Code	Description of Control Device	CONTROL DEVICE EFFICIENCY TSP	PM10	SOx	NOx	VOC	CO	Lead	Toxics

[4] OPERATING RATE/SCHEDULE

nual Throughput	Units	Hours/Day	Jan-Mar (%)	Apr-Jun (%)
1	1000 Gallons	8	25.00	25.00
		Days/Week		
ximum Hourly Design Rate	Units	5	Jul-Sep (%)	Oct-Dec (%)
0455	1000 Gallons	Weeks/Year 50	25.00	25.00

EMISSIONS CALCULATIONS

urce of Emission Factor: 1 CEM [illegible] 3 Mass Balance [illegible] AP42 [illegible] 2 Stack Test [illegible] SCC Factor [illegible] 6 Other [illegible] st below in [6]

[5] List other worksheets used with this form.

Air llutant	[6] Source	[7] Emission Factor (Lbs/Unit)	[8] Ash or Sulfur (%)	[9] Control Efficiency (%)	[10] Actual Emissions (Tons/Yr)	Maximum Hourly (Lbs/Hr)	Potential Controlled (Tons/Yr)	Potential Uncontrolled (Tons/Yr)
P	4	2.5			.11			
110	4	2.46			.11			
x	4	143			3.25			
x	4	18			.82			
C	4	.7			.03			
	4	5			.23			
ad								
xics								

Duplicate this form as needed.

m 2.0 EMISSION POINT INFORMATION

ility Name	County No.	Plant No.	Year of Data
S. ARMY ENGINEER CENTER	3860	0004	1995

[1] POINT IDENTIFICATION

nt No.	SIC Code	Point Description
IC		CDTF Standby Generator 600 KW

rce Classification Code (SCC)	Emission Factor Unit	Number of SCCs Used with this Point
300101	1000 Gallons	

: Description

ciprocating Internal Combustion Engine

[2] STACK/VENT PARAMETERS

:k No.	Height (Ft)	Diameter (Ft)	For a non-circular stack: Diameter = (1.128A)^1/2 (A = Cross Sectional Area in sq. feet)

perature (F)	Velocity (Ft/Min)	Flow Rate (Cu Ft/Min)	List other points sharing this stack.

[3] AIR POLLUTION CONTROL EQUIPMENT

vice lo.	Device Code	Description of Control Device	CONTROL DEVICE EFFICIENCY							
			TSP	PM10	SOx	NOx	VOC	CO	Lead	Toxics

[4] OPERATING RATE/SCHEDULE

ual Throughput	Units	Hours/Day	Jan-Mar (%)	Apr-Jun (%)
9	1000 Gallons	1	25.00	25.00
mum Hourly Design Rate	**Units**	**Days/Week**	**Jul-Sep (%)**	**Oct-Dec (%)**
138	1000 Gallons	1	25.00	25.00
		Weeks/Year 52		

EMISSIONS CALCULATIONS

ce of Emission Factor : 1 CEM 3 Mass Balance 5 AP42
below in [6]) 2 Stack Test 4 SCC Factor 6 Other

[5] List other worksheets used with this form.

r tant	[6] Source	[7] Emission Factor (Lbs/Unit)	[8] Ash or Sulfur (%)	[9] Control Efficiency (%)	[10] Actual Emissions (Tons/Yr)	Maximum Hourly (Lbs/Hr)	Potential Controlled (Tons/Yr)	Potential Uncontrolled (Tons/Yr)
	4	33.5			.01			
3	4	32			.01			
	4	31.2			0			
	4	469			.16			
	4	32.1			.01			
	4	102			.04			
:s								

RM 2.1P FUEL COMBUSTION WORKSHEET - PERMITS

ility Name	County No.	Plant No.	Year of Data
ermal Treatment Unit	3860		1983

[1] COMBUSTION EQUIPMENT INFORMATION

it No.)	Equipment Description	Year Put in Service	Firing Code No.	Maximum Design Rate (Million BTU/Hr)
___-___-_____-XX	Waste Heat Boiler	1984		31.250
ig Method Code No. (Coal Only)	Standby Package Boiler	1984		6.250
ngential				
pposed				
ont				
ry/Wet Bottom				
ther (Specify)				

ibustion Equipment Use (Check One)

ectric Power Generation ☐ Industrial Use ☐ Commercial/Institutional ☒ Space Heating

her (Specify) Thermal treatment

bustion Equipment Category - Coal Use Only (Check One)

ulverized Coal	☐ Pulverized Coal Dry Bottom	☐ Pulverized Coal Wet Bottom	☐ Cyclone
idized Bed	☐ Spreader Stoker	☐ Overfeed Stoker	☐ Underfeed Stoker
nd Fired	☐ Other (Specify)		

[2] FUEL INFORMATION

Fuel Type (Check One Only)

	Gas	Coal	Other
tillate (Fuel Oil 1-4)	☐ Natural Gas	☐ Anthracite	☐ Refuse (Use Form 2.2)
idual (Fuel Oil 5-6)	☐ LPG/Propane	☐ Bituminous	☐ Trade Wastes (Use Form 2.2)
ste Oil		☐ Lignite	☐ Other (Specify)

Fuel Identifier	Annual Throughput	Units	% Sulfur by Wt as Received *	% Ash by Wt as Received *	Heat Content (BTU/Fuel Unit)
fuel oil	585	1000 gal		0.50	140,000
Totals and nted Averages					

ach a copy of the current supplier statement verifying percentage of sulfur and ash contents of the fuel.

[3] CALCULATION OF MAXIMUM HOURLY DESIGN RATE

ert the Heat Content units from BTU per Fuel Unit to Million of BTU per Fuel Unit by dividing the BTU figure by ,000. 0.14

TOTAL MAXIMUM HOURLY DESIGN RATE =

mum Design Rate in Million BTU/Hr) / (Heat Content in Million BTU/Fuel Unit)

Maximum Hourly Design Rate 222.89

Enter the total ANNUAL THROUGHPUT and total MAXIMUM HOURLY DESIGN RATE in Block 4 of Form 2.0, Emission Point Information for this fuel type. Enter the weighted average for the percent ASH/SULFUR in the PM10/SOx box in Block 8 of Form 2.0.

m 2.0 EMISSION POINT INFORMATION

ility Name	County No.	Plant No.	Year of Data
S. ARMY ENGINEER CENTER	3860	0004	1995

[1] POINT IDENTIFICATION

nt No.		SIC Code	Point Description
5D	[redacted]		CDTF Ventilation System

rce Classification Code (SCC)	Emission Factor Unit	Number of SCCs Used with this Point	
	1000 CFM		[redacted]

C Description

[2] STACK/VENT PARAMETERS

ck No.		Height (Ft)	Diameter (Ft)	For a non-circular stack: Diameter = (1.128A)^1/2 (A = Cross Sectional Area in sq. feet)
	[redacted]	75	4	

perature (F)	Velocity (Ft/Min)	Flow Rate (Cu Ft/Min)	List other points sharing this stack.
ient	2515	31,600	

[3] AIR POLLUTION CONTROL EQUIPMENT

vice lo.	Device Code	Description of Control Device	CONTROL DEVICE EFFICIENCY TSP	PM10	SOx	NOx	VOC	CO	Lead	Toxics
		Carbon Filters								99
		HEPA Filters	99.9	99.99						

[4] OPERATING RATE/SCHEDULE

ual Throughput	Units	Hours/Day	Jan-Mar (%)	Apr-Jun (%)
6000	1000 CFM	8	25.00	25.00
		Days/Week		
imum Hourly Design Rate	Units	5	Jul-Sep (%)	Oct-Dec (%)
3	1000 CFM	Weeks/Year 50	25.00	25.00

EMISSIONS CALCULATIONS

rce of Emission Factor below in [6]: 1. CEM 2. Stack Test 3. Mass Balance 4. SCC Factor 5. AP42 6. [redacted]

[5] List other worksheets used with this form.

r tant	[6] Source	[7] Emission Factor (Lbs/Unit)	[8] Ash or Sulfur (%)	[9] Control Efficiency (%)	[10] Actual Emissions (Tons/Yr)	Maximum Hourly (Lbs/Hr)	Potential Controlled (Tons/Yr)	Potential Uncontrolled (Tons/Yr)
0								
l								
cs								

Duplicate this form as needed

JC 3052 p 13
7/8/85

Case-6

Typical Daily Load, Wastewater 15,000 gals/week, RFR 2200F,

Typical Daily Load

No	Item Description	No of Bags	Wt (lbs)	Vol (ft³)
1	Wet Sludge in plastic lined fiber drum	1	180	3.5
2	Chemistry Lab. Trash	1	25	5
3	Training Bay Trash	4	100	20
4	Medical Lab Trash	1	15	5
5	Laundry Trash	1	15	5
6	Office & class room Trash	4	60	20
7	Grounds Trash	1	25	5
Bed # 8	Carbon filters in PVC bags	2	448.4	18
9	Extra PVC Bags	5	20	5
10	Hoods, Boots & Gloves	1	6	1
11	Overgarments (Hoods, Boots & Gloves)	1	8	1
12	Overgarments	6	80	30
13	Gas Mask Filters	1	18	1
	Totals	29	1000.4	119.5

Garbage Composition

1.	Wet Sludge	95% water, 2% solids, 3% drum paper	+ pvc bag
2.	Chem Lab Trash	20% glass, 10% metal, 20% rags, 50% paper	+ pvc bag
3.	Training Bay Trash	10% glass, 10% metal, 40% rags, 40% paper	+ bag
4.	Medical Lab Trash	40% plastic, 30% paper, 30% rags	+ bag
5.	Laundry Trash	50% cloth, 50% paper	+ bag
6.	Office & classroom trash	100% paper	+ bag
7.	Grounds Trash	30% paper, 30% plastic, 20% glass, 20% metal	+ bag
Bed # 8.	Carbon Filters in PVC bags	28% water, 33% metal, 39% carbon	+ bag
9.	pvc bags	100% pvc	+ bag
10.	Hoods, boots & gloves	rubberized material 100%	+ bag
11.	" from overgarments	" 100%	+ bag
12.	Overgarments	" 100%	+ bag
13.	gas mask filters	inerts 30%, 30% carbon, 20% metal, 20% plastic	+ b.

Re[illegible] FLOWS 7/2/85

Case-No.	1	2	3	4	5	6
[illegible]scription	Oil Firing	Oil Firing	Oil Firing	Oil Firing	Oil Firing	Oil Firing
	20% xsair	= 100% xsair	20% xsair	20% xsair	20% xsair	20% xsair
	= 2800F RFI	2200F RFI	2200F RFI	2200F RFI	2200F RFI	2200F RFI
	No Pyrolysis	No Pyrolysis	No Pyrolysis	400 lbs/hr PVC	1000 lbs/hr PVC	Avg Daily Load
	No Wastewater	No wastewater	3130 lb/hr water	3130 lb/hr water	3130 lb/hr water	3130 lbs/hr water
	12,000 lb/hr steam 60psig	12000 lb/hr steam 60psig	12000 lb/hr steam 60psig	12000 lb/hr steam 60psig	12000 lb/hr steam 60psig	12000 lb/hr steam 60psig
[illegible]batch Furnace: OIL	- - -	—	—	52.65 lbs/hr	52.65 lbs/hr	52.65 lbs/hr
BTU/hr	—	—	—	1.0×10^6	1.0×10^6	1.0×10^6
Combn Air	—	—	—	913.96 lbs/hr	913.96 lbs/hr	913.96 lbs/hr
[illegible]I Temp °F	~2800	2200	2200	2200	2200	2200
• PILOTS OIL	26.325	26.325	26.325	26.325	26.325	26.325 lbs/hr
BTU/hr	0.5×10^6	0.5×10^6	0.5×10^6	0.5×10^6	0.5×10^6	0.5×10^6 BTU
Combustion Air	456.98	456.98	456.98	456.98	456.98	456.98 lbs/h
• Wastewater	3130	3130	3130	3130	3130	3130 lbs/h
BTU/hr	41,043	41043	41043	41043	41043	41043 BTU
Combustion Air	46.02	46.02	46.02	46.02	46.02	46.02 lb.
• Oil Combustion	763.37	830.594	1024.0705	837.5648	525.4286	854.08 lbs/h.
BTU/hr	14.5×10^6	15.775×10^6	19.45×10^6	15.91×10^6	9.98×10^6	16.22×10^6 BTU/hr
Combustion Air	13251	23365	17777	17777	17777	17777 lbs/h
[illegible]er Stackgas Temp	500	500	582	656	662	714 °F
[illegible]R/ BOILER FLOWS						
O_2	525	2627	699	740	856	409
N_2	10435	18134	13916	14612	14613	14625
CO_2	2523	2648	3364	3599	3595	4022
[illegible]20	1009	1174	4470	4484	4367	4958
SO_2	6.00	6.52	7.99	8.10	7.40	11.72
HCl	-	--	0.80	187.56	467.70	28.61
HF	-	-	0.0018	0.0018	0.0018	0.0018
P_2O_5	-	-	0.0092	0.0092	0.0092	0.0092
Inerts / Ash	0.0826	0.0826	1.5439	3.1784	5.6193	7.2487
NaOH	-	-	0.2297	0.2297	0.2297	0.2297
TOTALS	14498	24590	22460	23634	23912	24062

DOD Hazar us Materials Information stem
DoD 6050.5-LR
AS OF October 1994
Proprietary Version - For U.S. Government Use Only

'SC: 6850
IIN: 007534827
lanufacturer's CAGE: 80706
'art No. Indicator: A
'art Number/Trade Name: DECONTAMINATING AGENT DS2

General Information

tem Name: DECONTAMINATING AGENT
anufacturer's Name: U.S. ARMY ARMAMENT, MUNITIONS & CHEMICAL COMMAND
anufacturer's Street: SMCCR-SFS. HDQ, BLDG E5101
anufacturer's P. O. Box:
anufacturer's City: ABERDEEN PROVING GROUND
anufacturer's State: MD
anufacturer's Country: US
anufacturer's Zip Code: 21010-5423
anufacturer's Emerg Ph #: 301-278-5201 (WORK HOURS)
anufacturer's Info Ph #: 301-278-5201 (AFTER DUTY HOURS)
istributor/Vendor # 1: POLY RESEARCH CORPORATION (516-758-0460)
istributor/Vendor # 1 Cage: 64713
istributor/Vendor # 2: ASTRO DEVELOPMENT LABORATORY INC
istributor/Vendor # 2 Cage: 7K997
istributor/Vendor # 3: TIMMERMAN
istributor/Vendor # 3 Cage: TIMMR
istributor/Vendor # 4: WRIGHT CHEMICAL CORP
istributor/Vendor # 4 Cage: 5U648
afety Data Action Code:
afety Focal Point: A
ecord No. For Safety Entry: 003
ot Safety Entries This Stk#: 006
tatus: SMU
ate MSDS Prepared: 28SEP84
afety Data Review Date: 15JAN92
upply Item Manager: CX
SDS Preparer's Name:
'eparer's Company:
'eparer's St Or P. O. Box:
'eparer's City:
'eparer's State:
'eparer's Zip Code:
her MSDS Number:
SDS Serial Number: BFNDS
ecification Number: MIL-D-50030
ec Type, Grade, Class: REV F
'ard Characteristic Code: J6
it Of Issue: CN
it Of Issue Container Qty: 1.3 QUARTS
pe Of Container:
't Unit Weight:
C/State License Number:
't Explosive Weight:
't Propellant Weight-Ammo:
ast Guard Ammunition Code:

Report for NIIN: 0075348

Ingredients/Identity Information

Proprietary: NO
Ingredient: DIETHYLENE TRIAMINE
Ingredient Sequence Number: 01
Percent: 69.-71.
Ingredient Action Code:
Ingredient Focal Point: A
NIOSH (RTECS) Number: IE1225000
CAS Number: 111-40-0
OSHA PEL: 1 PPM
ACGIH TLV: S, 1 PPM; 9192
Other Recommended Limit:

Proprietary: NO
Ingredient: 2-METHOXYETHANOL (EGME) (SARA III)
Ingredient Sequence Number: 02
Percent: 27.-29.
Ingredient Action Code:
Ingredient Focal Point: A
NIOSH (RTECS) Number: KL5775000
CAS Number: 109-86-4
OSHA PEL: S, 25 PPM
ACGIH TLV: S, 5 PPM; 9192
Other Recommended Limit:

Proprietary: NO
Ingredient: SODIUM HYDROXIDE (SARA III)
Ingredient Sequence Number: 03
Percent: 1.9-2.1
Ingredient Action Code:
Ingredient Focal Point: A
NIOSH (RTECS) Number: WB4900000
CAS Number: 1310-73-2
OSHA PEL: 2 MG/M3
ACGIH TLV: C 2 MG/M3; 9293
Other Recommended Limit:

Proprietary: NO
Ingredient: MATERIAL MANUFACTURED FOR ARMY IAW THE REQMTS OF SPEC.; ARMY'S CHEM. RES. & DEV. CTR. PROVIDED THE MASTER MSDS.
Ingredient Sequence Number: 04
Percent:
Ingredient Action Code:
Ingredient Focal Point: A
NIOSH (RTECS) Number: 99999997Z
CAS Number:
OSHA PEL:
ACGIH TLV:
Other Recommended Limit:

Physical/Chemical Characteristics

Appearance And Odor: CLEAR AMBER SOLUTION WITH AMMONIA-LIKE ODOR
Boiling Point: 380F,193C
Melting Point: N/K

crt for NIIN: 00753482

or Pressure (MM Hg/70 F): N/K
or Density (Air=1): N/K
cific Gravity: 0.97 - 0.98
omposition Temperature: UNKNOWN
poration Rate And Ref: UNKNOWN
ubility In Water: UNKNOWN
cent Volatiles By Volume: N/K
cosity: N/K
>12.5
lioactivity:
m (Radioactive Matl):
netism (Milligauss):
rosion Rate (IPY): UNKNOWN
oignition Temperature: N/K

Fire and Explosion Hazard Data

ash Point: 168F,76C
ash Point Method: N/K
er Explosive Limit: N/K
er Explosive Limit: N/K
inguishing Media: CARBON DIOXIDE, ALCOHOL FOAM, WATER
cial Fire Fighting Proc: NONE CITED
sual Fire And Expl Hazrds: NEVER MIX OR STORE WITH ACIDS, OXIDIZING
ENT OR STB (UPER TROPICAL BLEACH); FIRE OR EXPLOSION MAY RESULT.

Reactivity Data

bility: YES
d To Avoid (Stability): EXPOSURE TO AIR, DS2 WILL DETERIORATE IN AIR.
POSURE OF 48 HOURS OR MORE TO OPEN AIR PRODUCES GELATIN-LIKE BODIES.
erials To Avoid: CORROSIVE. INCOMPATIBLE WITH AL, CD, ZN, PAINT, WOOL,
IDIZING MATERIALS.
ardous Decomp Products: NONE CITED
ardous Poly Occur: NO
nditions To Avoid (Poly):

Health Hazard Data

50-LC50 Mixture: N/K
ute Of Entry - Inhalation: YES
ute Of Entry - Skin: YES
ute Of Entry - Ingestion: YES
alth Haz Acute And Chronic: ACUTE: CORROSIVE TO TISSUE & HIGHLY IRRITANT
RESPIRATORY TRACT: CHRONIC: REPEATED EXPOSURE TO "DETA" CAN CAUSE SKIN
NSITIZATION & ASTHMA; SUFFICIENT EXPOSURE TO "EGME" MAY CAUSE "CNS"
PRESSION & LIVER DAMAGE. ALTHOUGH NOT DEFINITELY ESTABLISHED IN HUMANS,
PRODUCTIVE EFFECTS ARE ALSO A MAJOR CONCERN.
rcinogenicity - NTP: NO
rcinogenicity - IARC: NO
rcinogenicity - OSHA: NO
planation Carcinogenicity:
gns/Symptoms Of Overexp: NO TOX. DATA AVAILABLE ON DS2. HOWEVER, DS2:
KALI WHICH ON CONTACT WILL CORRODE TISSUE. EFFECTS EXHIBITED ARE A
NCTION OF ROUTE OF EXPOS., AMT. OF SUBST. PRESENT & DURATION OF EXPOSURE;
ALTH EFFECTS RANGE FROM MILD BURNS & PRIMARY IRRITATION TO CORNEAL
ACIFICATION, SEVERE BURNS. NAUSEA, VOMITING(SEE SUPPL DATA)

ɔort for NIIN: 007534827

ı Cond Aggravated By Exp: PRE-EXISTING RESPIRATORY CONDITIONS.
ırgency/First Aid Proc: SKIN: FLUSH AWAY W/WATER UNTIL "SOAPINESS" IS NO
ıGER PRESENT; EYES: IMMEDIATELY FLUSH W/COPIOUS AMTS. OF WATER FOR AT
ıST 15 MINS. IN EITHER CASE, SEEK MEDICAL ATTN.; INHAL: REMOVE TO FRESH
ı -GIVE CPR/O*2 AS SITUATION DICTATES. ADDITIONAL SUPPORTIVE MEASURES MAY
REQUIRED; INGEST: IF CONSCIOUS, GIVE PATIENT AS MUCH MILK OR WATER AS
ıSIBLE. DO NOT INDUCE VOMITING. GET MED. ATTN. IMMED.

Precautions for Safe Handling and Use

ps If Matl Released/Spill: SPILLS ON POROUS SURFACES(CONCRETE, WOOD,
.) SHOULD BE CLEANED & NEUTRALIZED IMMEDIATELY. OTHERWISE, IT WILL BE
ORBED & BECOME AN INDEFINITE HAZARD. CONTAIN SPILL, NEUTRALIZE, ABSORB
VERMICULITE, CLAY OR DIATOMACEOUS EARTH. SCOOP UP IN DRUM!
tralizing Agent: SODIUM BISULFATE
te Disposal Method: CHOICE OF METHOD DEPENDS ON PHYSICAL CONDITION OF
TE & FACILITY'S CAPABILITY.FOR EXCESS STOCK,COORDINATE W/LOCAL DRMO;
RSEAS:OPERATE W/IN HOST COUNTRY & DRMO REGS.; WASTE CORROSIVE(PH >12.5)
PA HAZ. NO:D002; INCINERATE OR NEUTRALIZE.
cautions-Handling/Storing: AVOID EXTREME TEMPERATURES(I.E. 160F/71C)
STORAGE! AVOID CONTACT W/LEAKING LIQUID OR VAPOR.
er Precautions: SPILL/RELEASE PROCEDURE CONTD: SCOOP UP MATERIAL &
TAMIN. MATTER, PLACE IN EPOXY COATED DRUM W/REMOVABLE HEAD, IAW EPA & DOT
TS.; DURING CLEAN-UP,WEAR FULL FACE RESPIR. W/ORGANIC VAPOR CARTRIDGE,
-LENGTH RUBBER GLOVES & RUBBER APRON.

Control Measures

ɔiratory Protection: FOR DS2 AIRBORNE CONC. <5 PPM, USE FULL FACEPIECE
NE OF THE FOLLOWING: A) CHEM. CARTRIDGE RESP. W/AMINE CARTDGE; B) SUPPL.
RESP; C) SUPPL. AIR RESP. IN POSITIVE PRESS. ON CONTIN. FLOW MODE; FOR
C. >5 PPM OR EMERGENCIES,USE "SCBA"
ıilation: LOCAL EXHAUST: NECESSARY IF TLV(TWA) EXCEEDED.
ıective Gloves: BUTYL RUBBER: ARM'S LENGTH TYPE
Protection: SPLASHPROOF GOGGLES /FULL FACE SHIELD
er Protective Equipment: AS REQUIRED FOR TASK AT HAND; CORROSIVE
ISTANT(I.E. RUBBER) GAUNTLET, BOOTS, & APRON
ı Hygienic Practices: USE MATERIAL IAW THE GUIDELINES & INSTRUCTIONS
FORTH IN USER'S TECH MANUAL.
ɔl. Safety & Health Data: SIGNS & SYMPTOM OVEREXP. CONTD: RESPIRATORY
ITATION, SKIN SENSITIZATION.

Transportation Data

ısportation Action Code:
ısportation Focal Point: A
ıs Data Review Date: 92276
FSN Code: DWE
Symbol:
Proper Shipping Name: CORROSIVE LIQUIDS, N.O.S.
Class: 8
ID Number: UN1760
Pack Group: II
Label: CORROSIVE
DoD Exemption Number:
FSN Code: APB
Proper Shipping Name: ALKALINE CAUSTIC LIQUIDS, N.O.S.

port for NIIN: 00753482.

IO Regulations Page Number: SEE 8136
IO UN Number: 1719
IO UN Class: 8
IO Subsidiary Risk Label: -
TA PSN Code: FSU
TA UN ID Number: 1719
TA Proper Shipping Name: CAUSTIC ALKALI LIQUID, N.O.S.
TA UN Class: 8
TA Subsidiary Risk Class:
TA Label: CORROSIVE
I PSN Code: FSU
I Symbols:
I Prop. Shipping Name: CAUSTIC ALKALI LIQUIDS, N.O.S.
I Class: 8
I ID Number: UN1719
I Pack Group: I
I Label: CORROSIVE
I Special Prov:
I Basic Pac Ref: 12-4
IAC Code:
O.S. Shipping Name: ALKALINE (CORROSIVE) LIQUID, N.O.S.
ditional Trans Data:

Disposal Data

sposal Data Action Code:
sposal Data Focal Point:
sposal Data Review Date:
c # For This Disp Entry:
t Disp Entries Per NSN:
ndfill Ban Item:
sposal Supplemental Data:
t EPA Haz Wst Code New:
t EPA Haz Wst Name New:
t EPA Haz Wst Char New:
t EPA Acute Hazard New:
d EPA Haz Wst Code New:
d EPA Haz Wst Name New:
d EPA Haz Wst Char New:
d EPA Acute Hazard New:
d EPA Haz Wst Code New:
d EPA Haz Wst Name New:
d EPA Haz Wst Char New:
d EPA Acute Hazard New:

Label Data

bel Required: YES
chnical Review Date: 05SEP91
bel Date: UNKNOWN
R Label Number: NONE
bel Status: D
mon Name: DECONTAMINATING AGENT DS2
ronic Hazard: X
gnal Word: WARNING!
ute Health Hazard-None:
ute Health Hazard-Slight:

ort for NIIN: 007534827

te Health Hazard-Moderate: X
te Health Hazard-Severe:
tact Hazard-None:
tact Hazard-Slight:
tact Hazard-Moderate: X
tact Hazard-Severe:
e Hazard-None:
e Hazard-Slight: X
e Hazard-Moderate:
e Hazard-Severe:
ctivity Hazard-None:
ctivity Hazard-Slight: X
ctivity Hazard-Moderate:
ctivity Hazard-Severe:
cial Hazard Precautions: CORROSIVE TO TISSUE & HIGHLY IRRITANT TO
PIRATORY TRACT; REPEATED EXPOSURE TO "DETA" CAN CAUSE SKIN SENSITIZATION
STHMA; SUFFICIENT EXPOSURE TO "EGME" MAY CAUSE "CNS" DEPRESSION & LIVER
AGE. AVOID EXTREME TEMPERATURES(I.E. 160F/71C) FOR STORAGE! AVOID
TACT W/LEAKING LIQUID OR VAPOR. FIRST AID: SKIN: FLUSH AWAY W/WATER
IL "SOAPINESS IS NO LONGER PRESENT; EYES: IMMEDIATELY FLUSH W/COPIOUS
S. OF WATER FOR AT LEAST 15 MINS. IN EITHER CASE, SEEK MEDICAL ATTN.;
AL: REMOVE TO FRESH AIR -GIVE CPR/O*2 AS SITUATION DICTATES/ ADDITIONAL
PORTIVE MEASURES MAY BE REQUIRED. INGEST: IF CONSCIOUS, GIVE PATIENT
< OR WATER. GET DOCTOR
tect Eye: X
tect Skin: X
tect Respiratory: X
el Name: U.S. ARMY ARMAMENT,MUNITIONS & CHEMICAL
MAND
el Street: ATTN: SMCCR-SFS, HDQ. BLDG. E5101
el P.O. Box:
el City: ABERDEEN PROVING GROUND
el State: MD
el Zip Code: 21010-5423
el Country: US
el Emergency Number: 301-671-4411 (0800 - 1630 EST)
- Procured: 1974

DOD Hazardous Materials Information System
DoD 6050.5-LR
AS OF October 1994
Proprietary Version - For U.S. Government Use Only

SC: 6850
IIN: 002976653
anufacturer's CAGE: PENNS
art No. Indicator: A
art Number/Trade Name: DECONTAMINATING AGENT, STB

General Information

tem Name: DECONTAMINATION AGENT, SUPER TROPICAL BLEACH (STB)
anufacturer's Name: PENNSALT CHEMICAL CORPORATION
anufacturer's Street: COMPANY SHUT DOWN STB PLANT IN 1954
anufacturer's P. O. Box:
anufacturer's City:
anufacturer's State:
anufacturer's Country: US
anufacturer's Zip Code:
anufacturer's Emerg Ph #:
anufacturer's Info Ph #:
istributor/Vendor # 1:
istributor/Vendor # 1 Cage:
istributor/Vendor # 2:
istributor/Vendor # 2 Cage:
istributor/Vendor # 3:
istributor/Vendor # 3 Cage:
istributor/Vendor # 4:
istributor/Vendor # 4 Cage:
afety Data Action Code:
afety Focal Point: D
ecord No. For Safety Entry: 001
ot Safety Entries This Stk#: 005
tatus: S
ate MSDS Prepared: 04NOV92
afety Data Review Date: 04NOV92
upply Item Manager: CX
SDS Preparer's Name: DGSC-SSH
reparer's Company: DEFENSE GENERAL SUPPLY CENTER
reparer's St Or P. O. Box: 8000 JEFFERSON DAVIS HWY
reparer's City: RICHMOND
reparer's State: VA
reparer's Zip Code: 23297
ther MSDS Number:
SDS Serial Number: BPFWX
pecification Number: MIL-12468
pec Type, Grade, Class: NOT APPLICABLE
azard Characteristic Code: D2
nit Of Issue: DR
nit Of Issue Container Qty: 8 GALLONS
ype Of Container: SPECIAL DRUM
et Unit Weight: 50 LBS.
RC/State License Number: N/R
et Explosive Weight: N/R
et Propellant Weight-Ammo: N/R
last Guard Ammunition Code: N/R

leport for NIIN: 00297665

Ingredients/Identity Information

roprietary: NO
ngredient: CHLORINATED LIME
ngredient Sequence Number: 01
ercent: 93.4
ngredient Action Code:
ngredient Focal Point: D
IOSH (RTECS) Number: 1008716CL
AS Number: UNKNOWN
SHA PEL: 0.5 PPM (CHLORINE)
CGIH TLV: 0.5 PPM (CHLORINE)
ther Recommended Limit: NONE RECOMMENDED

---

roprietary: NO
ngredient: CALCIUM OXIDE
ngredient Sequence Number: 02
ercent: 6.6
ngredient Action Code:
ngredient Focal Point: D
IOSH (RTECS) Number: EW3100000
AS Number: 1305-78-8
SHA PEL: 5 MG/M3
CGIH TLV: 2 MG/M3; 9293
ther Recommended Limit: NONE RECOMMENDED

Physical/Chemical Characteristics

pearance And Odor: WHITE POWDER, STRONG CHLORINE ODOR.
oiling Point: N/R
elting Point: UNKNOWN
apor Pressure (MM Hg/70 F): UNKNOWN
apor Density (Air=1): 1.2 (HCL)
ecific Gravity: 0.75
composition Temperature: >120F,>49C
aporation Rate And Ref: NOT APPLICABLE
olubility In Water: APPRECIABLE
rcent Volatiles By Volume: N/R
scosity: N/R
: BASIC
dioactivity: N/R
rm (Radioactive Matl): N/R
gnetism (Milligauss): N/R
rrosion Rate (IPY): FAST
toignition Temperature: NONE

Fire and Explosion Hazard Data

ash Point: NONE
ash Point Method: N/R
wer Explosive Limit: UNKNOWN
per Explosive Limit: UNKNOWN
tinguishing Media: USE WATER, PREFERABLY IN FORM OF SPRAY.
ecial Fire Fighting Proc: WEAR A NIOSH APPROVED SELF-CONTAINED BREATHING
PARATUS AND FULL PROTECTIVE EQUIPMENT WHEN FIGHTING FIRES.
usual Fire And Expl Hazrds: POWERFUL OXIDIZING MATERIAL. NOT COMBUSTIBLE

UT EVOLVES OXYGEN AT HIGHER TEMPERATURES. READILY IGNITES COMBUSTIBLE OR RGANIC MATERIALS WHEN IN CONTACT.

Reactivity Data

tability: NO
ond To Avoid (Stability): HIGH TEMPERATURES AND MOIST CONDITIONS.
aterials To Avoid: MOISTURE, SOLVENTS, ACIDS, AND ORGANIC MATERIALS.
azardous Decomp Products: MAY UNDERGO ACCELERATED DECOMPOSITION WITH VOLUTION OF HEAT, HYDROGEN CHLORIDE AND CHLORINE GAS.
azardous Poly Occur: NO
onditions To Avoid (Poly): NOT APPLICABLE

Health Hazard Data

D50-LC50 Mixture: ORAL LD50 (RAT) IS 900 MG/KG (HCL)
oute Of Entry - Inhalation: YES
oute Of Entry - Skin: YES
oute Of Entry - Ingestion: YES
ealth Haz Acute And Chronic: EYE, SKIN & RESPIRATORY TRACT IRRITATION.
arcinogenicity - NTP: NO
arcinogenicity - IARC: NO
arcinogenicity - OSHA: NO
xplanation Carcinogenicity: NONE OF THE COMPOUNDS IN THIS PRODUCT IS ISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN.
igns/Symptoms Of Overexp: CAN CAUSE BURNS TO EYES AND SKIN. INHALATION OF APORS, FUMES AND DUST CAN CAUSE IRRITATION TO MUCOUS MEMBRANES.
ed Cond Aggravated By Exp: OVEREXPOSURE MAY AGGRAVATE EXISTING CHRONIC ESPIRATORY CONDITIONS SUCH AS ASTHMA, BRONCHITIS AND INFLAMMATORY OR IBROTIC RESPIRATORY DISEASE.
mergency/First Aid Proc: INHALATION: REMOVE TO FRESH AIR. IF NOT REATHING, GIVE ARTIFICIAL RESPIRATION. GET MEDICAL ATTENTION. EYES: MMEDIATELY FLUSH WITH PLENTY OF WATER FOR 15 MINUTES. GET MEDICAL TTENTION. SKIN: FLUSH WITH WATER. REMOVE CONTAMINATED CLOTHING. INGESTION: IISON! IF CONSCIOUS, GIVE MILK. EGG WHITE, STARCH PASTE OR MILK OF AGNESIA BY MOUTH. DO NOT INDUCE VOMITING. GET IMMEDIATE MEDICAL ATTENTION.

Precautions for Safe Handling and Use

eps If Matl Released/Spill: ELIMINATE SOURCES OF IGNITION. WEAR NIOSH PPROVED RESPIRATOR OR SCBA, GOGGLES, GLOVES & BOOTS. KEEP AWAY FROM GANIC MATERIAL. MIX WITH DRY EARTH OR SAND AND PLACE IN DISPOSAL DRUM. USH RESIDUE WITH LARGE QUANTITIES WATER.
utralizing Agent: DILUTE WITH LARGE AMOUNTS OF WATER
ste Disposal Method: DISPOSAL SHOULD BE MADE IN ACCORDANCE WITH ALL PLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.
ecautions-Handling/Storing: STORE IN COOL, DRY PLACE AWAY FROM ALL URCES OF HEAT. DO NOT STORE NEAR COMBUSTIBLES, ACIDS OR OTHER ORGANIC ATTER. PROTECT & INSPECT CONTAINERS.
her Precautions: KEEP CONTAINERS CLOSED WHEN NOT IN USE. PROTECT AGAINST YSICAL DAMAGE. DRUMS MAY RUPTURE FROM EXPOSURE TO HEAT. AVOID STORAGE FOR OLONGED PERIODS, PARTICULARLY AT SUMMER TEMPERATURES.

Control Measures

spiratory Protection: SELECT A NIOSH APPROVED RESPIRATOR BASED ON NTAMINATION LEVELS FOUND IN THE WORK PLACE. FOR HIGH LEVELS, A SELF-

eport for NIIN: 002976653

ONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN PRESSURE
EMAND OR POSITIVE PRESSURE IS RECOMMENDED.
entilation: LOCAL EXHAUST WHERE DUST MIGHT OCCUR.
rotective Gloves: RUBBER, NEOPRENE OR PVC
ye Protection: FACE SHIELD/SAFETY GOGGLE
ther Protective Equipment: EYE WASH STATION AND SAFETY SHOWER.
NDUSTRIAL-TYPE WORK CLOTHING AND APRON AS REQUIRED. SHOULD WEAR SAFETY
OTS.
rk Hygienic Practices: WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING,
RINKING OR SMOKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.
ppl. Safety & Health Data: SUPERTROPICAL BLEACH IS A MIXTURE OF
HLORINATED LIME AND CALCIUM OXIDE IN A WHITE POWDER FORM. WHEN
ANUFACTURED IT CONTAINS 30 PERCENT AVAILABLE CHLORINE. STB DECOMPOSES
LOWLY IN STORAGE EASILY RECOGNIZED BY THE CHLORINE LIKE ODOR. IT IS
ORROSIVE TO MOST METALS AND INJURIOUS TO MOST FABRICS.

==========

Transportation Data

==========

ansportation Action Code:
ansportation Focal Point: D
ans Data Review Date: 92309
IT PSN Code: CQW
IT Symbol:
IT Proper Shipping Name: CALCIUM HYPOCHLORITE MIXTURES, DRY,
T Class: 5.1
T ID Number: UN2208
T Pack Group: III
T Label: OXIDIZER
T/DoD Exemption Number: N/R
O PSN Code: CFB
O Proper Shipping Name: BLEACHING POWDER
O Regulations Page Number: SEE 5138
O UN Number: 2208
O UN Class: 5.1
O Subsidiary Risk Label: -
TA PSN Code: EYV
TA UN ID Number: 2208
TA Proper Shipping Name: CALCIUM HYPOCHLORITE MIXTURES,DRY
TA UN Class: 5.1
TA Subsidiary Risk Class:
TA Label: OXIDIZER
I PSN Code: EYV
I Symbols:
I Prop. Shipping Name: CALCIUM HYPOCHLORITE MIXTURES,DRY
I Class: 5.1
I ID Number: UN2208
I Pack Group: III
I Label: OXIDIZER
I Special Prov: A1,A29,N34
I Basic Pac Ref: 9-10
AC Code:
D.S. Shipping Name: CHLORINATED LIME
ditional Trans Data: THIS MATERIAL DOES NOT CONTAIN CALCIUM
POCHLORITE.

eport for NIIN: 00297665

Disposal Data

isposal Data Action Code:
isposal Data Focal Point:
isposal Data Review Date:
ec # For This Disp Entry:
ot Disp Entries Per NSN:
andfill Ban Item:
isposal Supplemental Data:
st EPA Haz Wst Code New:
st EPA Haz Wst Name New:
st EPA Haz Wst Char New:
st EPA Acute Hazard New:
nd EPA Haz Wst Code New:
nd EPA Haz Wst Name New:
nd EPA Haz Wst Char New:
nd EPA Acute Hazard New:
rd EPA Haz Wst Code New:
rd EPA Haz Wst Name New:
rd EPA Haz Wst Char New:
rd EPA Acute Hazard New:

Label Data

abel Required: YES
echnical Review Date: 04NOV92
abel Date: UNDATED
FR Label Number: N/R
abel Status: D
ommon Name: DECONTAMINATING AGENT, STB
hronic Hazard: X
ignal Word: DANGER!
cute Health Hazard-None:
cute Health Hazard-Slight:
cute Health Hazard-Moderate: X
cute Health Hazard-Severe:
ontact Hazard-None:
ontact Hazard-Slight:
ontact Hazard-Moderate:
ontact Hazard-Severe: X
ire Hazard-None:
ire Hazard-Slight: X
ire Hazard-Moderate:
ire Hazard-Severe:
eactivity Hazard-None:
eactivity Hazard-Slight: X
eactivity Hazard-Moderate:
eactivity Hazard-Severe:
pecial Hazard Precautions: MAY BE FATAL IF SWALLOWED. MAY CAUSE BURNS.
ARMFUL IF INHALED. STRONG OXIDANT. USE EXTREME CAUTION WHEN OPENING -
ONTENTS MAY SPRAY! AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID
REATHING DUST. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER
ANDLING. AVOID CONTAMINATION OF CHLORINATED LIME WITH ACIDS AND OXIDIZABLE
ATERIALS SUCH AS FUELS, OILS, PAINT PRODUCTS, DISINFECTANTS, AND AMMONIA.
UCH CONTAMINATION CAN CAUSE RELEASE OF HAZARDOUS GASES. POISONOUS GASES
AY BE PRODUCED WHEN HEATED. KEEP CONTAINER CLOSED AND STORED IN A COOL DRY

eport for NIIN: 002976653

LACE. MIX ONLY IN ACCORDANCE WITH DIRECTIONS FOR USE. SEE MSDS FOR FIRST
ID INFORMATION.
rotect Eye: X
rotect Skin: X
rotect Respiratory: X
abel Name: PENNSALT CHEMICAL CORPORATION
abel Street: COMPANY SHUT DOWN STB PLANT IN 1954
abel P.O. Box:
abel City:
abel State:
abel Zip Code:
abel Country: US
abel Emergency Number:
ear Procured: 1954

>

Appendix V—Examples of Potentially Incompatible Waste

Many hazardous wastes, when mixed with other waste or materials at a hazardous waste facility, can produce effects which are harmful to human health and the environment, such as (1) heat or pressure, (2) fire or explosion, (3) violent reaction, (4) toxic dusts, mists, fumes, or gases, or (5) flammable fumes or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which result from mixing materials in one group with materials in another group. The list is intended as a guide to owners or operators of treatment, storage, and disposal facilities, and to enforcement and permit granting officials, to indicate the need for special precautions when managing these potentially incompatible waste materials or components.

This list is not intended to be exhaustive. An owner or operator must, as the regulations require, adequately analyze his wastes so that he can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction (e.g., adding acid to water rather than water to acid) or that neutralizes them (e.g., a strong acid mixed with a strong base), or that controls substances produced (e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator).

In the lists below, the mixing of a Group A material with a Group B material may have the potential consequence as noted.

Group 1-A

Acetylene sludge

Alkaline caustic liquids

Alkaline cleaner

Alkaline corrosive liquids

Alkaline corrosive battery fluid

Caustic wastewater

Lime sludge and other corrosive alkalies

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Lime wastewater

Lime and water

Spent caustic

Group 1-B

Acid sludge

Acid and water

Battery acid

Chemical cleaners

Electrolyte, acid

Etching acid liquid or solvent

Pickling liquor and other corrosive acids

Spent acid

Spent mixed acid

Spent sulfuric acid

Potential consequences: Heat generation; violent reaction.

Group 2-A

Aluminum

Beryllium

Calcium

Lithium

Magnesium

Potassium

Sodium

Zinc powder

Other reactive metals and metal hydrides

Group 2-B

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Any waste in Group 1-A or

1-B

Potential consequences: Fire or explosion; generation of flammable hydrogen gas.

Group 3-A

Alcohols

Water

Group 3-B

Any concentrated waste in Groups 1-A or 1-B

Calcium

Lithium

Metal hydrides

Potassium

SO_2Cl_2, $SOCl_2$, PCl_3, CH_3SiCl_3

Other water-reactive waste

Potential consequences: Fire, explosion, or heat generation; generation of flammable or toxic gases.

Group 4-A

Alcohols

Aldehydes

Halogenated hydrocarbons

Nitrated hydrocarbons

Unsaturated hydrocarbons

Other reactive organic compounds and solvents

Group 4-B

Concentrated Group 1-A or 1-B wastes

Group 2-A wastes

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Potential consequences: Fire, explosion, or violent reaction.

Group 5-A

Spent cyanide and sulfide solutions

Group 5-B

Group 1-B wastes

Potential consequences: Generation of toxic hydrogen cyanide or hydrogen sulfide gas.

Group 6-A

Chlorates

Chlorine

Chlorites

Chromic acid

Hypochlorites

Nitrates

Nitric acid, fuming

Perchlorates

Permanganates

Peroxides

Other strong oxidizers

Group 6-B

Acetic acid and other organic acids

Concentrated mineral acids

Group 2-A wastes

Group 4-A wastes

Other flammable and combustible wastes

Potential consequences: Fire, explosion, or violent reaction.

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Source: "Law, Regulations, and Guidelines for Handling of Hazardous Waste." California Department of Health, February 1975.

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>

Appendix V—Examples of Potentially Incompatible Waste

Many hazardous wastes, when mixed with other waste or materials at a hazardous waste facility, can produce effects which are harmful to human health and the environment, such as (1) heat or pressure, (2) fire or explosion, (3) violent reaction, (4) toxic dusts, mists, fumes, or gases, or (5) flammable fumes or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which result from mixing materials in one group with materials in another group. The list is intended as a guide to owners or operators of treatment, storage, and disposal facilities, and to enforcement and permit granting officials, to indicate the need for special precautions when managing these potentially incompatible waste materials or components.

This list is not intended to be exhaustive. An owner or operator must, as the regulations require, adequately analyze his wastes so that he can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction (e.g., adding acid to water rather than water to acid) or that neutralizes them (e.g., a strong acid mixed with a strong base), or that controls substances produced (e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator).

In the lists below, the mixing of a Group A material with a Group B material may have the potential consequence as noted.

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Group 1-A	Group 1-B
Acetylene sludge	Acid sludge
Alkaline caustic liquids	Acid and water
Alkaline cleaner	Battery acid
Alkaline corrosive liquids	Chemical cleaners
Alkaline corrosive battery fluid	Electrolyte, acid
Caustic wastewater	Etching acid liquid or
Lime sludge and other corrosive alkalies	Pickling liquor and oth corrosive acids
Lime wastewater	Spent acid
Lime and water	Spent mixed acid
Spent caustic	Spent sulfuric acid

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DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Potential consequences: Heat generation; violent reaction.

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Group 2-A	Group 2-B
Aluminum	Any waste in Group 1-A
Beryllium	
Calcium	
Lithium	
Magnesium	
Potassium	
Sodium	
Zinc powder	
Other reactive metals and metal hydrides	

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Potential consequences: Fire or explosion; generation of flammable hydrogen gas.

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Group 3-A	Group 3-B
Alcohols	Any concentrated waste : Groups 1-A or 1-B
Water	Calcium
	Lithium
	Metal hydrides
	Potassium
	SO2Cl2,SOCl2, PCl3, CH 3SiCl3
	Other water-reactive wa:

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Potential consequences: Fire, explosion, or heat generation; generation of flammable or toxic gases.

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Group 4-A	Group 4-B
Alcohols	Concentrated Group 1-A or wastes

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Group 2-A wastes

Aldehydes
Halogenated hydrocarbons
Nitrated hydrocarbons
Unsaturated hydrocarbons
Other reactive organic compounds and solvents

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Potential consequences: Fire, explosion, or violent reaction.

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Group 5-A

Spent cyanide and sulfide solutions

Group 5-
Group 1-B wastes

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Potential consequences: Generation of toxic hydrogen cyanide or hydrogen sulfide gas.

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Group 6-A

Chlorates

Chlorine
Chlorites
Chromic acid
Hyphochlorites

Nitrates
Nitric acid, fuming
Perchlorates
Permanganates
Peroxides
Other strong oxidizers

Group 6-B

Acetic acid and other o
acids
Concentrated mineral ac
Group 2-A wastes
Group 4-A wastes
Other flammable and com
wastes

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Potential consequences: Fire, explosion, or violent reaction.

Source: "Law, Regulations, and Guidelines for Handling of Hazardous Waste." California Department of Health, February 1975.

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STATE OF MISSOURI
Mel Carnahan, Governor • David A. Shorr, Director
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

April 11, 1995

HAND DELIVERED: SHARON TURPIN, Environmental Engineer

Mr. Scott Murrell
Chief, Environmental Division
U.S. Army Engineering Center and
Fort Leonard Wood
ATZT-DPW-EE
Fort Leonard Wood, MO 65473

RE: Air Permit Application - Project/Facility No. 3860-0004-026

Dear Mr. Murrell:

Enclosed with this letter is your permit to construct. Please note the special conditions, if any, on accompanying pages. Operation in accordance with these conditions and your permit application is necessary for continued compliance. The document entitled "Review of Application for Authority to Construct" is part of the permit as well and should be kept with the permit in your files.

The reverse side of your permit certificate has important information concerning standard permit conditions, and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions or need additional information regarding this permit, you can contact me by phone at (314) 751-4817 or you may write to me at the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P. E.
Environmental Engineer

MJS:tb

Enclosures

c: Jefferson City Regional Office
Source File

Permit No.: 0495-013

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the facility described below, in accordance with the laws, rules, and conditions as set forth herein.

Permit Number: 0495-013 Facility I.D. Number: 3860-0004-026

Owner: U.S. Army Engineering Center and Fort Leonard Wood

Owner's Address: ATZT-DPW-EE, Fort Leonard Wood, MO 65473

Facility Name: U.S. Army Engineering Center and Fort Leonard Wood

Facility Address: ATZT-DPW-EE, Fort Leonard Wood, MO 65473

Legal Description: Pulaski County, S21, T35N, R8W

Application for Authority to Construct was made for:

**** a Chemical Decontamination Training Facility and Thermal Treatment Unit. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, "Construction Permits Required." ****

☐ Special Conditions are not applicable to this permit.

☒ Special Conditions do apply to this permit and are listed as attachments starting on page 2.

April 10, 1995
EFFECTIVE DATE

John A. Young
DIRECTOR
DIVISION OF ENVIRONMENTAL QUALITY

MO 780-1204 (3-88)

PERMIT NUMBER
0495-013

FACILITY I D NUMBER
3860-0004-026

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

Materials Which May Not Be Charged to the Incinerator

a. No hazardous wastes may be charged to this incinerator. A waste is considered to be hazardous if, in order that it be charged to an incinerator, a permit from the Missouri Hazardous Waste Program would first be required in order that such a waste be charged to an incinerator.

b. Certain gas mask filters may not be charged to the incinerator because these filters contain levels of chromium sufficient to characterize the filters as a hazardous waste. Specifically, C2 filter masks, stock number 4240-01-119-2315 may not be charged to the incinerator.

Emission Limits:

a. Particulate matter (as PM_{10}) - 30 milligrams per dry standard cubic meter (0.013 grains per dry standard cubic foot).

b. Carbon monoxide - 50 parts per million by volume.

c. Dioxins/furans - 1.9 nanograms per dry standard cubic meter, toxic equivalency (1989 toxic equivalency factors).

d. Hydrogen chloride - 42 parts per million by volume or 97% reduction (9-hour average), whichever is more stringent.

e. Mercury - 0.47 milligrams per dry standard cubic meter (0.22 grains per million dry standard cubic feet) or 85% reduction, whichever is more stringent.

f. Nerve Agents - no detectable quantity of either GB (sarin) or VX. For purposes of determining a detectable level of either nerve agent, it shall be sufficient to use equipment which is at least as sensitive to GB (sarin) and VX as the gas chromatographs used in the automatic continuous air monitoring system (ACAMS) units located adjacent to the "hot areas" in the training building.

PERMIT NUMBER
0495-013
FACILITY I.D. NUMBER
3860-0004-026

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

Performance Testing Conditions

a. Within 90 days of reaching full operation, but in no case later than 180 days after initial startup, an emission test shall be conducted in order to quantify air pollutant emissions. The stack test shall determine the emission rates of particulate matter (as PM_{10}), carbon monoxide, dioxins/furans, hydrogen chloride, mercury, and the nerve agents GB (sarin) and VX. A completed Proposed Test Plan Form (copy enclosed) will serve the purpose of notification and must be approved by the Air Pollution Control Program staff director prior to conducting emission testing.

b. The date on which performance tests are conducted must be pre-arranged with the Air Pollution Control Program (APCP) a minimum of 30 days prior to the proposed test date so that this Program may arrange a pretest meeting, if necessary, and assure that the test date is acceptable for an observer to be present. A completed Proposed Test Plan form enclosed may serve the purpose of notification and must be approved by the APCP prior to conducting the required emission testing.

c. Two copies of a written report of the performance test results shall be submitted to the Director of the Air Pollution Control Program within 30 days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required EPA Test Methods for at least one sample run.

d. The test report is to fully account for all operational and emission parameters addressed both in the permit conditions as well as in any other applicable state or federal rules or regulations.

e. Performance testing shall be conducted under the condition of maximum process/production rate, or within ten per cent (10%) of this rated capacity. The process/production rate at which performance testing is conducted shall become the maximum process/production rate at which the incinerator is permitted to operate, under the authority granted by this permit.

PERMIT NUMBER
0495-013

FACILITY I D NUMBER
3860-0004-026

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

f. Actual conditions under which performance testing is conducted shall be recorded every fifteen (15) minutes throughout each of the test runs. These conditions are to include all relevant process/production parameters as well as all parameters relating to the status of emission controls: this data is to be included in the emissions test report. No maintenance or upgrade of emission control efficiency shall be undertaken during emission testing.

g. Testing shall be conducted during periods of representative conditions at the maximum process/production rates, not to include periods of startup, shutdown, or malfunction.

h. Emission testing results, in "mass of pollutant/volume of air," shall be reported for the pollution source airstream, free from any extraneous source of dilution air. Potential dilution airstreams shall either be sealed off prior to testing or else be measured by appropriate EPA test Methods and subtracted from the total airflow at the sampling location. Failure to account for dilution air can lead to cancellation of testing and/or a violation notice for "circumvention."

i. The owner or operator shall provide, or cause to be provided, performance testing facilities as follows:

   i. Safe sampling platform(s).
   ii. Safe access to sampling platform(s).
   iii. Utilities for sampling and testing equipment.
   iv. Sampling ports adequate for test methods applicable to this facility. This includes:
      (1) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures;
      (2) Providing a stack or duct free of cyclonic flow during performance tests, and;
      (3) Removal of the port caps 24 hours prior to testing to verify both their removability as well as full-diameter clearance to the stack; caps may be retained hand tight.

PERMIT NUMBER
0495-013

FACILITY I.D NUMBER
3860-0004-026

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

j. Performance tests shall be conducted, and data reduced, in accordance with specified EPA Test Methods unless an equivalent or alternative test method is otherwise approved by the Director.

k. Unless otherwise specified, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard.

l. For the purpose of determining compliance with applicable standards, the arithmetic mean of results of the three runs shall apply. Only, under rare circumstances and upon approval by the Director, may compliance be determined by the arithmetic mean of two runs.

PROPOSED TEST PLAN

Submitted to: MO Dept. of Natural Resources,
Air Pollution Control Program
P.O. Box 176, Jefferson City, MO 65102

Date Submitted: _____

Attention: _____

Proposed Test Date: _____

1.) FACILITY INFORMATION:		
Name:		
Address:		
City	State:	Zip:
Name & title of Contact Person:		
Phone No. of Contact Person:	Fax No.:	

2.) AIR POLLUTION SOURCE TO BE TESTED:				
Type of Source:				
Reason for Test:		Condition of Permit		Consent Agreement
		Administrative Order		
		Other (specify)		
Permit No. of Source to Be Tested:				
Address of Source:				
Directions to Source (or map attached):				
Initial Start-up Date:				

3.) TESTING FIRM INFORMATION:		
Name of Firm:		
Address:		
City	State:	Zip:
Name & title of Contact Person:		
Phone No. of Contact Person:	Fax No.:	
	Number of employees of firm:	
	No. of employees actually engaged in air pollution source testing:	
Organizational chart with names & title of personnel: (please attach)		

3.) TESTING FIRM INFORMATION: (cont.)

Location & description of laboratory facilities:

Subcontractor(s) utilized by firm for source testing activities:

Number of air pollution sources previously tested by firm:

Sources tested by firm in Missouri in past 3 years (source, test, date):

4.) PERFORMANCE TEST INFORMATION:

	Pollutant	No. of Sampling Points	Total Time per Test Run	No. of Test Runs	Test Method to be Used
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

PRELIMINARY METHOD 1 DATA

Duct to be Sampled:

Duct Dimensions:

From inside far wall to outside of port	
Nipple length	
Depth (or diameter) of duct	
Width (rectangular duct)	

Equivalent Diameter:

$$D_e = \frac{2 \times \text{Depth} \times \text{Width}}{\text{Depth} + \text{Width}} = \frac{2(\quad)(\quad)}{(\quad + \quad)} = \_\_\_\_\_$$

Distance from Ports to Nearest Flow Disturbance

	Upstream	Downstream
Diameters		
Diameters		

Stack Area = IN^2

Calculated by:

Sketch of Stack or Duct with Port Locations & Distances Shown:

LOCATION OF TRAVERSE POINTS IN CIRCULAR STACKS

	6	8	9	10	12	14	16	18	20	22	24
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

LOCATION OF TRAVERSE POINTS IN RECTANGULAR STACKS

	2	3	4	5	6	7	8	9	10	11	12
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9								[illegible]	[illegible]	[illegible]	[illegible]
10									[illegible]	[illegible]	[illegible]
11										[illegible]	[illegible]
12											[illegible]

POINT	% of Stack I.D.	Stack I.D.	Distance from Outside Wall	Nipple Length	Distance from Outside of Port

NOTE: Cyclonic flow must be measured by instrument and shown to be absent prior to the initiation of sampling.

5.) GENERAL

A. Sampling Equipment Information:

The manufacturer and model of the sampling equipment to be used by the tester for the performance tests, along with a description of any equipment which may differ from that required by the specified method(s).

_____

_____

B. Test Procedures:

A description of any test procedures to be used in the conduct of the performance tests which may differ from the specified method(s).

_____

_____

NOTE: Deviations from EPA test methods observed during test procedures will not necessarily be corrected by agency observer and could result in agency rejection of test results.

C. Analytical Procedures:

A description of any analytical procedures which differ from the specified method(s).

_____

_____

D. Data Sheets:

A sample of all field data sheets which do not provide the data shown on the example sheets in 40 CFR 60 for the specified method(s).

E. Air Pollution Control Equipment:

Types and manufacturers of all control equipment:

_____

_____

Design or guarantee efficiency: _____

Design gas volume at full load (acfm): _____

Design pressure drop: _____

Maintenance schedule and method of recordkeeping: _____

6.) SPECIFIC: for Incinerators			
Provide a full description of the source operation, including as a minimum the following:			
A. Manufacturer and type of incinerator:			
B. Type of feed (batch, intermittent, continuous) and frequency:			
C. Design feed rate (lbs/hr, lbs/batch):			
D. Expected normal feed rate:			
E. Type of scales			
F. 24 hour operational flow scheme (ash removal, preheat, burn cycle, postheat, etc.):			
G. Type of fuel:			
H. Secondary chamber volume _____ (cubic feet) & sketch of chamber with inside dimensions:			
I. Type of secondary chamber temperature continuous chart recorder:			
J. Type(s) of waste and relative percentages:			
K. Hospital:	YES	NO	Licensed No. of Beds:
Average bed occupancy:			

7.) CONTINUOUS MONITORING SYSTEM
A description of continuous monitoring system(s) including the following:
A. Manufacturer of each monitor:
B. Model number and serial number of each monitor:
C. Description of interface system (for extractive monitors):
D. Description of data acquisition and handling system:
E. Number of copies of operator's manual supplied with each monitor:
F. Name of testing firm that will perform the reference method tests for sulfur dioxide and/or nitrogen oxides during the continuous monitoring system performance evaluations:
G. Name of organization that will perform the continuous monitoring system performance evaluations (Source operator, monitoring system manufacturer or representative, or testing firm):
H. Anticipated starting date of the conditioning period for the monitoring systems:
I. Drawing of the monitoring system location(s) showing stack or duct dimensions, air pollution control equipment, fans, and location(s) of disturbances which affect monitor location(s) determination (May be shown on drawing required on Preliminary Test Method Page or attach to this document).

SOURCE TESTING REPORT FORMAT

COVER
- Plant name and location
- Source sampled
- Testing company or agency, name, and address

CERTIFICATION
- Certification by team leader
- Certification by reviewer (e.g.: Professional Engineer)

INTRODUCTION
- Test purpose
- Test location, type of process
- Test dates
- Pollutants tested
- Observers' names (industry and agency)
- Any other important background information

SUMMARY OF RESULTS
- Emission results
- Process data, as related to determination of compliance
- Allowable emissions
- Description of collected samples
- Visible emissions summary
- Discussion of errors, both real and apparent

SOURCE OPERATION
- Description of process and control device
- Process and control equipment flow diagram
- Process data and results, with example calculations
- Representatives of raw materials and products
- Any specially required operation demonstrated

SAMPLING and ANALYSIS PROCEDURES
- Sampling port location and dimensioned cross section
- Sampling port description, including labeling system
- Sampling train description
- Brief description of sampling procedures, with discussion of deviations from standard methods
- Brief description of analytical procedures, with discussion of deviations from standard methods

APPENDIX
- Complete results with example calculations
- Raw field data (original, not computer printouts)
- Laboratory report, with chain of custody
- Test log
- Calibration procedures and results
- Project participants and titles
- Related correspondence

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project/Facility No: 3860-0004-026
Permit No: [illegible]

U.S. Army Training Center and Fort Leonard Wood
ATZT-DPW-EE
Fort Leonard Wood, MO 65473

Complete: March 1, 1995
Reviewed: March 28, 1995

Pulaski County, S21, T35N, R8W

REVIEW SUMMARY

- This is a de minimis addition to an existing major source, and is reviewed in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required.*
- No adverse ambient air quality impact is expected to occur as a result of the operation of the proposed training facility.
- Hazardous air pollutants will be emitted from the incinerator, though in minute amounts. No nerve agents will be emitted from this training facility, as the training exercises themselves, in association with the incinerator, insure that these agents are neutralized.
- There are no New Source Performance Standards (NSPS) or National Emissions Standards for Hazardous Air Pollutant (NESHAP) standards which will apply to this training facility.
- Approval of this permit application is recommended.

PROJECT DESCRIPTION

The U.S. Army Engineering Center and Fort Leonard Wood has applied for authority to install a Chemical Decontamination Training Facility (CDTF) at its facility in Pulaski County. The CDTF will include a hot training area, an incinerator for disposing of training wastes, a standby package boiler, and a 600 kW standby electrical generator. The facility will be used to train army personnel on the identification, handling and decontamination of vehicles and other equipment tainted with nerve agents. As part of the training, instructors will contaminate various pieces of equipment with drops of nerve agents, which will be applied with a syringe. The soldiers will then identify and decontaminate the equipment using decontamination agents and water. The debris from the training, which can include nerve agents, wastewater, uniforms and cleaning materials,

will be burned in the incinerator. The nerve agents involved are binary agents, requiring the mixing of two separate compounds to produce the nerve agents. The binary agents themselves are kept in separate, guarded, locked areas.

The nerve agents which will be used in the training are GB (sarin) and VX. Sarin is a colorless liquid with a vapor pressure of 2.9 mm Hg @ 25°C, a vapor density of 4.86, and a volatility of 22,000 mg/m3 @ 25°C. VX is an odorless amber colored liquid similar in appearance to motor oil. It has a vapor pressure of 0.0007 mm Hg @ 25°C, a vapor density of 9.2, and a volatility of 10.5 mg/m3 @ 25°C. Both of these agents volatilize readily, and being heavier than air, stay low to the ground. Both agents are highly toxic. Both agents degrade readily and rapidly in the presence of caustic agents.

The building in which the training is conducted is constructed as a "building within a building." The training building is functionally divided into a hot area and a cold area. The hot area is where the nerve agents are used, while the cold area is kept uncontaminated. The hot training area is divided into eight functionally separate areas, with each area kept under negative pressure and vented through filter trains made up of prefilters, activated carbon absorption systems and high efficiency particulate air (HEPA) filters. All hot areas are assumed to have air contaminated with nerve agents and chemical decontaminants. The hot area ventilating system is designed to maintain a negative pressure in the hot areas with respect to the cold areas of the building. The pressure in the hot areas varies with expected contamination levels, being least negative in areas adjacent to the cold areas, and becoming increasingly negative from front to rear of the hot area to force any air infiltration to flow from cold areas to hot areas. The air in each zone is exhausted through two sets of HEPA and activated carbon filters for redundancy in each filter train. Each of the filter trains is independent, and has a cross-sectional area sized for its design air flow. Seven automatic continuous air monitoring system (ACAMS) units will be located adjacent to hot areas in the training building. Each ACAMS unit consists of an air pump (1 liter/minute) and two gas chromatographs, one monitoring for sarin and the other monitoring for VX. Nerve agent concentrations are continuously recorded on a strip chart. If either nerve agent is detected at levels equal to or greater then occupationally safe levels established by the Surgeon General, then alarms are triggered on the monitor itself, and in the building control room. The alarm levels are 0.01 ng/l (nanogram/liter) for VX and 0.1 ng/l for sarin. All ACAMS units are backed up by the M43/M43A2 Chemical Agent Detector connected to a M8 Chemical Agent Alarm. This system has a sensitivity of 400 ng/l for VX and 200 ng/l for sarin. The detectors are based on electrochemical (M43 detectors) or ion mobility (M43A2 detectors) technology. In addition to the ACAMS, a Depot Air Monitoring System (DAMS) will be used to monitor for nerve agent air concentrations. The DAMS consist of an air pump (1 liter/minute) and a porous polymer filled tube. Air monitoring will be conducted by pumping air (40 liters total) through the DAMS tube followed by CDTF laboratory analysis of the sorbent. The DAMS monitors are twice as sensitive as the ACAMS units. This system insures that there is no chance that nerve agents will escape the building.

The incinerator is a Midland Ross Pyrobatch model forced draft, batch type, dual chamber unit. It has a rated design capacity of 125 pounds per hour of solid waste; the maximum design heat

release rate is 4,610 BTU/lb. The emissions from the incinerator are ducted through a rich fume reactor, a venturi scrubber, and a packed tower scrubber. A package boiler with a rated heat input capacity of 31.25 MMBTU/hr, fired with No. 2 fuel oil, is associated with the incinerator. The steam from this package boiler is used for space heat and process heat. The standby package boiler is fired with No. 2 distillate fuel, and has a rated heat input capacity of 6.25 MMBTU/hr. The 600kW standby generator uses a reciprocating engine, and is also fired with No. 2 fuel oil.

Fort Leonard Wood has stated in the application that the incinerator will (1) have an operable door lockout mechanism, (2) will be equipped with a continuous chart recorder which will monitor and record the temperature in the secondary chamber (to an accuracy of ±2%), (3) will keep complete paper records of operators on duty, emission tests performed, incinerator maintenance, combustion chamber temperatures and the quantity, type, and suppliers of any off-site waste which is incinerated, (4) will provide training to all incinerator operators, said training to include basic combustion theory, operating procedures, monitoring of combustion control parameters of the incinerator, and all emergency procedures to be followed if the incinerator should malfunction or exceed operating parameters, and (5) will stack test the incinerator within 90 days of reaching full operation in order to determine combustion efficiency and particulate emission rate. In view of the nature of materials incinerated at this facility, additional testing will be required to demonstrate that the incinerator will operate safely.

EMISSIONS/CONTROLS EVALUATION

Emissions are calculated using emissions factors from the U.S. Environmental Protection Agency document AP-42, *Compilation of Air Pollutant Emission Factors*, and from information supplied by the applicant. Emissions calculations are detailed in an appendix to this report. Potential emissions from the operation of this facility are listed in the following table. Potential emissions are calculated based on the operation of the facility for 8,760 hours per year, with all controls in place and operational. Potential emissions from this facility are below the deminimis emissions levels for all pollutants.

CDTF Decontamination Facility		
Pollutant	Hourly Emissions (lbs/hr)	Annual Emission (tons/yr)
PM_{10}	0.28	1.12
Sulfur Dioxide	1.59	7.00
Nitrogen Oxides	7.72	33.71
Carbon Monoxide	3.24	14.36
Volatile Organic Compounds	0.34	1.48
Lead	0.004600	0.020000
Hydrochloric Acid	0.032000	0.142000
Total PCB	0.000001	0.000002

CDTF Decontamination Facility		
Pollutant	Hourly Emissions (lbs/hr)	Annual Emission (tons/yr)
Antimony	0.000800	0.003500
Arsenic	0.000015	0.000070
Beryllium	0.000001	0.000002
Cadmium	0.000300	0.001500
Chromium	0.000048	0.000212
Manganese	0.000035	0.000160
Mercury	0.006690	0.029290
Nickel	0.000037	0.000162
Hydrogen Fluoride	0.001443	0.006322
Chlorine	0.001017	0.004500
TCDD	0.00000006	0.00000027
HxCDD	0.0000000001	0.0000000005
HpCDD	0.0000000003	0.0000000014
OCDD	0.0000000014	0.0000000100
Total CDD	0.00000133	0.00000583
TCDF	0.00000045	0.00000197
PcCDF	0.0000000002	0.0000000010
HxCDF	0.0000000011	0.0000000050
HpCDF	0.0000000013	0.0000000100
OCDF	0.0000000046	0.0000000200
Total CDF	0.00000447	0.00001957

PERMIT RULE APPLICABILITY

This permit review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

APPLICABLE REQUIREMENTS

I. Installation Level: U.S. Army Engineering Center, Fort Leonard Wood

A. General

1. Applicable Requirements: Submission of Emission Data, Emission Fees and Process Information
   a. Regulatory Authority: 10 CSR 10-6.110
   b. Payment of Fees: $25.70 per ton of pollutant as of 1994
   c. Recordkeeping Requirement: Emissions Inventory Questionnaire (EIQ)
   d. Reporting Requirement: April 1 for previous year's emissions (EIQ)

2. Applicable Requirements: Operating Permits
   a. Regulatory Authority: 10 CSR 10-6.065
   b. Emission Limitation: none
   c. Recordkeeping Requirement: none
   d. Monitoring Requirement: none
   e. Reporting Requirement: none

B. Visible Emissions

1. Applicable Requirements: Restriction of Emission of Visible Air Contaminants
   a. Regulatory Authority: 10 CSR 10-3.080
   b. Emission Limitation: Emissions may not exceed an opacity of 20%
   c. Recordkeeping Requirement: none
   d. Monitoring Requirement: Visual Inspection, EPA Method 9
   e. Reporting Requirement: none

C. Odors

1. Applicable Requirements: Restriction of Emission of Odors
   a. Regulatory Authority: 10 CSR 10-3.090
   b. Emission Limitation: Odorous matter may not be emitted in concentrations and frequencies or for durations where odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air
   c. Recordkeeping Requirement: none
   d. Monitoring Requirement: Measurements made with a scentometer as manufactured by the Barneby-Cheney Company, or similar technique that will give equivalent results
   e. Reporting Requirement: none

II. Emission Point Level: CDTF Decontamination Incinerator

A. Particulate Matter

1. Applicable Requirements: Restriction of Emissions of Particulate Matter from Industrial Processes
   a. Regulatory Authority: 10 CSR 10-3.050

b. Emission Limitation: 5.78 pounds per hour. The incinerator emissions are expected to be approximately 0.73 pounds per hour, which will be in compliance with this rule.
c. Recordkeeping Requirement: none
d. Monitoring Requirement: none
e. Reporting Requirement: none

B. Sulfur Dioxide
1. Applicable Requirements: Restriction of Emission of Sulfur Compounds
a. Regulatory Authority: 10 CSR 10-3.100
b. Emission Limitation: Gases emitted from the incinerator shall not contain sulfur compounds in concentrations in excess of 500 parts per million by volume (ppmv). The incinerator exhaust gas is expected to have a sulfur concentration of 14.8 ppmv, which will be in compliance with this rule.
c. Recordkeeping Requirement: none
d. Monitoring Requirement: none
e. Reporting Requirement: none

III. Emission Point Level: Standby Package Boiler
A. Particulate Matter
1. Applicable Requirements: Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating
a. Regulatory Authority: 10 CSR 10-3.060
b. Emission Limitation: 3.75 pounds per hour. The boiler emissions are expected to be approximately 0.3 pounds per hour, which will be in compliance with this rule.
c. Recordkeeping Requirement: none
d. Monitoring Requirement: none
e. Reporting Requirement: none

B. Sulfur Dioxide
1. Applicable Requirements: Restriction of Emissions of Sulfur Compounds From Indirect Heating Sources
a. Regulatory Authority: 10 CSR 10-3.150
b. Emission Limitation: 8 lbs/MMBTU, equivalent to 250 pounds per hour of sulfur dioxide. The boiler emissions are expected to be 0.3 pounds per hour, which will be in compliance with this rule.
c. Recordkeeping Requirement: none
d. Monitoring Requirement: none
e. Reporting Requirement: none

IV. Emission Point Level: 600 kW Standby Generator
A. Sulfur Dioxide
1. Applicable Requirements: Restriction of Emission of Sulfur Compounds

a. Regulatory Authority: 10 CSR 10-3.100
b. Emission Limitation: Gases emitted from the generator shall not contain sulfur compounds in concentrations in excess of 500 parts per million by volume (ppmv). The generator exhaust gas is expected to have a sulfur concentration of 18 ppmv, which will be in compliance with this rule.
c. Recordkeeping Requirement: none
d. Monitoring Requirement: none
e. Reporting Requirement: none

AMBIENT AIR QUALITY IMPACT ANALYSIS

Because of the nature of the mission of this facility, ambient air quality modeling was performed. The model chosen is a highly conservative model, meaning that it tends to overestimate actual ambient impacts. Ambient impacts are given as 1-hour averages. Modeling results are detailed in the following table.

CDTF Decontamination Facility				
Pollutant	Ambient Impact ($\mu g/m^3$)		Ambient Standard ($\mu g/m^3$)	
PM_{10}	0.58	24-hr	150.00	24-hr
Sulfur Dioxide	8.82	1-hr	1300.00	3-hr
Nitrogen Oxides	17.36	24-hr	100.00	annual
Carbon Monoxide	18.13	1-hr	40000.00	1-hr
Volatile Organic Compounds	1.88	1-hr	235.00	1-hr
Lead	0.0100	1-hr	1.50	quarterly

CDTF Decontamination Facility				
Pollutant	Ambient Impact ($\mu g/m^3$)		Acceptable Ambient Level ($\mu g/m^3$)	
Antimony	0.0046	1-hr	6.67	8-hr
Arsenic	0.0001	1-hr	0.03	8-hr
Beryllium	0.000004	1-hr	30.00	8-hr
Cadmium	0.0020	1-hr	50.00	8-hr
Chromium	0.0003	1-hr	1.36	24-hr
Manganese	0.0002	1-hr	0.89	8-hr
Mercury	0.0027	8-hr	0.01	8-hr
Nickel	0.0002	8-hr	1.33	8-hr
Hydrogen Fluoride	0.0033	24-hr	0.68	24-hr

CDTF Decontamination Facility				
Pollutant	Ambient Impact ($\mu g/m^3$)		Acceptable Ambient Level ($\mu g/m^3$)	
Chlorine	0.0024	1-hr	3.95	24-hr
TCDD	0.00000040	1-hr	no standard	
HxCDD	0.00000001	1-hr	no standard	
HpCDD	0.00000001	1-hr	no standard	
OCDD	0.00000001	1-hr	no standard	
Total CDD	0.00003700	1-hr	no standard	
TCDF	0.00000260	1-hr	no standard	
PcCDF	0.00000001	1-hr	no standard	
HxCDF	0.00000001	1-hr	no standard	
HpCDF	0.00000001	1-hr	no standard	
OCDF	0.00000003	1-hr	no standard	
Total CDF	0.00002600	1-hr	no standard	

The modeled values in the table above are taken at the point of highest impact, just under 300 meters downwind of the facility. All ambient impacts are below the applicable impact standards; where the table states "no standard," this simply means that acceptable ambient levels have not been determined by this program - it does not mean that these compounds are non-hazardous.

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, approval of this permit, with conditions, is recommended.

Michael J. Stansfield, P.E.
Environmental Engineer

31 March 95
Date

Daniel D. Carney
Environmental Engineer

31 March 95
Date

ATTACHMENTS

EMISSIONS CALCULATIONS

600kW Standby Generator

This generator is designed to keep the hot area ventilation system and the incinerator system in operation in the event of a power failure. Emission factors for calculating the emissions from this standby generator are from Section 3.4 of AP-42, *Large Stationary Diesel and All Stationary Dual Fuel Engines*. This section covers those engines larger than 600hp. The Source Classification Code (SCC) used is 20200401 for large bore internal combustion diesel engines. Emissions are estimated to be:

600kW Standby Generator			
Pollutant	Emission Factor (lb/MMBTU)	Hourly Emissions (lbs/hr)	Annual Emission (tons/yr)
PM_{10}	0.0496	0.1	0.4
Sulfur Dioxide	0.51	1	4.3
Nitrogen Oxides	3.1	6	26.2
Carbon Monoxide	0.81	1.6	6.9
Volatile Organic Compounds	0.1	0.2	0.9

Standby Package Boiler

Emissions factors for calculating the emissions from this standby package boiler are from Section 1.3 of AP-42, *Fuel Oil Combustion*. The maximum design heat input rate for this boiler is 6.25 MMBTU/hr. Emissions are estimated to be:

Standby Package Boiler			
Pollutant	Emission Factor (lb/10^3 gallon)	Hourly Emissions (lbs/hr)	Annual Emission (tons/yr)
PM_{10}	2	0.1	0.4
Sulfur Dioxide	7.1	0.3	1.4
Nitrogen Oxides	20	0.9	3.9
Carbon Monoxide	5	0.2	1
Volatile Organic Compounds	0.34	0.02	0.1

Decontamination Incinerator

The incinerator is a Pyrobatch System two chamber design, and will burn Type 0 (solid) and Type 5 (liquid) wastes. It is a batch type incinerator, using a forced, induced draft. The primary chamber volume is 378 cubic feet, and is fitted with a 2.594 MMBTU/hr burner. The secondary chamber volume is 1010 cubic feet, and is fitted with a 25.778 MMBTU/hr burner. The army

estimates that approximately 250,000 pounds per year of Type 0 waste, and 6,225,000 pounds of Type 5 waste will be incinerated annually. A typical daily load to the incinerator, from army records at the Fort McClellan site, will include:

Typical Daily Incinerator Loading			
Description	# of bags	Weight (lbs)	Volume (ft^3)
Wet sludge in plastic lined fiber drums	1	180	3.5
Chemistry Lab Trash	1	25	5
Training Bay Trash	4	100	20
Medical Lab Trash	1	15	5
Laundry Trash	1	15	5
Office & Classroom Trash	4	60	20
Grounds Trash	1	25	5
Carbon Filters in PVC bags	2	448.4	18
Extra PVC bags	5	20	5
Hoods, Boots & Gloves	1	6	1
Overgarments (Hoods, Boots & Gloves)	1	8	1
Overgarments	6	80	30
Gas Mask Filters	1	18	1
Totals	29	1000.4	122.5

A further description of each of the above categories is given below:

Garbage Composition	Details
Wet Sludge	95% water, 2% solids, 3% drumpaper + PVC bag
Chemistry Lab Trash	20% glass, 10% metal, 20% rags, 50% paper + PVC bags
Training Bay Trash	10% glass, 10% metal, 40% rags, 40% paper + PVC bags
Medical Lab Trash	40% plastic, 30% paper, 30% rags + PVC bags
Laundry Trash	50% cloth, 50% paper + PVC bags
Office & Classroom Trash	100% paper + PVC bags
Grounds Trash	30% paper, 30% plastic, 20% glass, 20% metal + PVC bags
Carbon Filters in PVC bags	28% water, 35% metal, 39% carbon + PVC bags
PVC bags	100% PVC
Hoods, Boots & Gloves	100% rubberized material + PVC bags
Hoods, Boots & Gloves from Overgarments	100% rubberized material + PVC bags
Overgarments	100% rubberized material + PVC bags

Gas Mask Filters	inerts 30%, 30% carbon, 20% metal, 20% plastic + PVC bags

The gas mask filters canisters which may be charged to the incinerator do not include the old C2 filter canister, stock number 4240-01-119-2315, which is no longer in production; the Army estimates that its existing stocks of this item will be exhausted by October 1995. This gas mask filter canister has been replaced by the C2A1 filter canister, stock number 4240-01-361-1319. While the C2A1 filter canister is currently in the supply system, it will not be issued until the residual supply of C2 canisters is exhausted from the supply system.

Solid wastes are introduced into the primary chamber at a maximum rate of 125 pounds per hour. Liquid wastes are introduced into the secondary chamber, identified on process flow diagram as a rich fume reactor, at a maximum rate of 3,130 pounds per hour. The emissions from the incinerator are ducted through a venturi scrubber and packed tower scrubber connected in series. Control efficiencies claimed in the application are 94.95% for TSP and lead, 90.96% for PM_{10}, and 84.5% for sulfur dioxide, nitrogen oxides and carbon monoxide. The incinerator is expected to operate 8 hours per day, 250 days year. The incinerator has associated with it an external combustion boiler with a rated heat input of 34.6 MMBTU/hr, and fired with distillate oil at the rate of 247 gallons per hour. Acid gas concentrations of hydrogen chloride (HCl) and sulfur dioxide (SO_2) in the exhaust gas stream are directly related to the chlorine and sulfur content of the waste. Most of the chlorine will be converted to HCl. The packed tower is categorized as a medium-energy scrubber, and relies on impingement to facilitate removal of either particulate matter or acid gases. The venturi scrubber is categorized as a high-energy system, and is used primarily for control of particulate matter. The design outlet concentration for particulate matter is 0.09 grains/ascf. Parameters monitors by instrumentation affixed to the incinerator will include carbon monoxide, primary and secondary chamber temperatures, pH and flow of scrubbing brine, liquid waste feed rate, combustion gas velocity, and exhaust gas CO concentration in ppm.

The emissions factors chosen are from Sections 1.3 and 2.6 of AP-42, *Fuel Oil Combustion* and *Medical Waste Incineration*. Section 2.6 was chosen as being most representative of the types of wastes to be disposed of in the incinerator. While it is recognized that there will be little or no pathological wastes disposed of through the incinerator, the wastes which will be processed will be high in chlorine content, and will contain quantities of wastewater and cleaning materials including masks, gloves, suits, and boots, which are also present in medical wastes. For purposes of estimating emissions from the incinerator, only the weight of solid wastes are considered, since the wastewater is almost exclusively water contaminated with bleach and the nerve agents. While the nerve agents are toxic, they also decompose very rapidly at the temperatures encountered in the incinerator.

CDTF Thermal Treatment Waste Heat Boiler			
Pollutant	Emission Factor ($lb/10^3$ gallon)	Hourly Emissions (lbs/hr)	Annual Emission (tons/yr)
PM_{10}	2	0.05	0.2
Sulfur Dioxide	7.1	0.27	1.2
Nitrogen Oxides	20	0.77	3.4
Carbon Monoxide	5	1.2	5.4
Volatile Organic Compounds	0.34	0.1	0.4

CDTF Incinerator			
Pollutant	Emission Factor (lb/ton)	Hourly Emissions (lbs/hr)	Annual Emission (tons/yr)
PM_{10}	4.67	0.03	0.12
Sulfur Dioxide	2.17	0.02	0.09
Nitrogen Oxides	4.95	0.05	0.21
Carbon Monoxide	3.86	0.24	1.06
Volatile Organic Compounds	0.299	0.02	0.08
Lead	0.073	0.004563	0.019984
Hydrochloric Acid	3.35	0.032453	0.142145
Total PCB	0.0000465	0.000000	0.000002
Antimony	0.0128	0.000800	0.003504
Arsenic	0.000242	0.000015	0.000066
Beryllium	0.00000625	0.000000	0.000002
Cadmium	0.00548	0.000343	0.001500
Chromium	0.000775	0.000048	0.000212
Manganese	0.000567	0.000035	0.000155
Mercury	0.107	0.006688	0.029291
Nickel	0.00059	0.000037	0.000162
Hydrogen Fluoride	0.149	0.001443	0.006322
Chlorine	0.105	0.001017	0.004455
TCDD	0.000001	0.00000006	0.00000027

CDTF Incinerator			
Pollutant	Emission Factor (lb/ton)	Hourly Emissions (lbs/hr)	Annual Emission (tons/yr)
HxCDD	0.000000002	0.0000000001	0.0000000005
HpCDD	0.000000005	0.0000000003	0.0000000014
OCDD	0.000000022	0.0000000014	0.0000000060
Total CDD	0.0000213	0.00000133	0.00000583
TCDF	0.00000721	0.00000045	0.00000197
PcCDF	0.000000003	0.0000000002	0.0000000008
HxCDF	0.000000017	0.0000000011	0.0000000047
HpCDF	0.00000002	0.0000000013	0.0000000055
OCDF	0.000000074	0.0000000046	0.0000000203
Total CDF	0.0000715	0.00000447	0.00001957

1 My question is directed to you, Governor
2 Carnahan. You may have these numbers at your
3 fingertips.
4 As you know, one of the central
5 issues in relocating the chemical defense training
6 facility at Fort Leonard Wood are a lot has been
7 said and written and speculated. You told us that
8 two permits had been granted recently --
9 GOVERNOR CARNAHAN: That's correct.
10 COMMISSIONER ROBLES: -- and one was just
11 recently released.
12 Could you just further clarify,
13 first of all, are those the only three permits
14 required to move that facility and operate that
15 facility at Fort Leonard Wood and, secondly, what
16 kind of permits? Are these construction permits?
17 Operations permits? Are they about water or
18 sewer, so that, for the record, we know exactly
19 and get this permit issue on the table so there's
20 no more speculation about whether the permits will
21 or will not be granted and whether the permits can
22 be accomplished in time to move the facility?
23 GOVERNOR CARNAHAN: I like to be permitted to
24 call the director of our Department of Natural

1 Resources. You may wish to swear him if that's
2 part of your procedure. I think he could be much
3 more precise than I.
4 (Witness sworn.)
5 COMMISSIONER ROBLES: And, sir, would you
6 state your name and address.
7 DIRECTOR SHORR: My name is David Shorr. I'm
8 Director of the Department of Natural Resources.
9 My address is 200 Jefferson Street, Jefferson,
10 Missouri.
11 COMMISSIONER ROBLES: Thank you.
12 DIRECTOR SHORR: To answer your question,
13 Mr. Commissioner, three permits are required by
14 the City of Missouri: A permit for air
15 construction for the CDTF which is the Chemical
16 Decontamination Training Facility; a water permit
17 for the base, and a permit for the smoke school,
18 which is going -- which was issued as a PSD permit
19 application to significantly deteriorate the air
20 around the area of Fort Leonard Wood. So there's
21 three permits required a hazardous waste permit is
22 required for the thirty-fourth thousand time.
23 Okay. Any other questions?
24 CHAIRMAN DIXON: I thank the general for

1 pursuing this.

2 You are all on notice, and

3 incidentally, we do not prejudge what we will do

4 with respect to this conflict between the states

5 and Missouri. That's still a question for us to

6 resolve at some future date, but we put you on

7 notice that the State of Alabama has suggested

8 that we'll not be able to be permitted adequate

9 time.

10 Our counsel is Madelyn Ceden

11 (phonetic). As you know, I'll put all of you on

12 notice, put you all on notice that we would be

13 reluctant to act should it come down to a decision

14 that in your favor if we were of the opinion that

15 had not been adequately permitted. You are aware

16 of that?

17 GOVERNOR CARNAHAN: Yes, we are.

18 CHAIRMAN DIXON: There's another question I

19 believe from Commissioner Wendi Steele. Have we

20 concluded with the distinguished cabinet member?

21 (No verbal response.)

22 Commissioner Kling?

23 COMMISSIONER KLING: You stated -- I just

24 want to understand. You are saying that the

1 permits will be, one, it will be for the
2 construction and, two, for the operation or do we
3 have to get something different?
4 DIRECTOR SHORR: In Missouri, under Missouri
5 Law, a permit to construct under current law is
6 all that's required under the CDTF. That permit
7 was issued yesterday.
8 COMMISSIONER KLING: Will allow after
9 construction that will allow the operation?
10 DIRECTOR SHORR: Correct.
11 COMMISSIONER KLING: I do want to again
12 suggest Madelyn Ceden is now working in the back
13 of the room. She was elsewhere on business for
14 the Commission, but you do know that counsel for
15 the Commission it's very imperative that we have a
16 legal opinion from her? And we do not prejudge
17 this. I'm anxious to make that clear. It's only
18 imperative with respect to a training question in
19 the northern tier and your permit question that
20 the procedural matters be adequately addressed.
21 DIRECTOR SHORR: Chairman Dixon, my job is
22 protecting the environment of the State of
23 Missouri. My job is not to issue permits. If
24 there was a facility that could not do what

1 they're required to do, I have done my job,
2 period.
3 CHAIRMAN DIXON: I hope you haven't taken the
4 opinion I suggested that you didn't. Thank you
5 very much, sir. I don't want to get in trouble
6 here.
7 (Laughter.)
8 Commissioner Cornella?
9 COMMISSIONER CORNELLA: I have a question. I
10 understand there may be some dispute over whether
11 or not some masks constitute hazardous waste.
12 Maybe you could help us there with this.
13 DIRECTOR SHORR: Be glad to.
14 COMMISSIONER CORNELLA: If that's the case,
15 determine that they do, would the waste permit
16 then be required?
17 DIRECTOR SHORR: Based upon the materials that
18 we have received from the Department of Defense,
19 the current mask that is being used, which
20 contains achromic acid component, which would
21 create a chromium discharge from the incinerator
22 would be a hazardous waste.
23 Under the procedures that they have
24 followed under pollution prevention they have

1 discontinued use of that mask filter. The
2 military should be commended for it. All that
3 means shouldn't be a last hazardous waste
4 discharge.
5 CHAIRMAN DIXON: I thank you very much.
6 Mr. Walker, would you be kind enough to yield the
7 question from Commissioner Steele.
8 COMMISSIONER STEELE: Sir, I'm not sure if
9 this will end up being common sense or a legal
10 question at the end of it.
11 When you were talking about the
12 lowest cost to the taxpayers -- I want to pursue
13 that a little bit -- is it possible for a GSA out
14 of the Federal Property Act to access that
15 facility, allow the Department of Defense to take
16 over that facility, as the department is doing
17 with other facilities to other agencies, and, if
18 so, if that is possible, getting rid of less or
19 non-less number, depending upon how you look at
20 that word? Where does that $30 million cost come
21 in to the Army if they should take over that
22 facility?
23 MR. WALKER: There's two possibilities in the
24 Army operating the facility -- three ways of

1 operating the facility: One is GSA to operate it
2 and charge what we call "rent," in this case is
3 being used I guess against us.
4 The second would be for us to
5 delegate the facility to the Department of
6 Defense.
7 We discussed that previously with
8 ATCOM for years and they weren't interested. In
9 fact, they were talking to us about operating
10 price support prior to just getting on the BRAC
11 list. We thought we could operate it more
12 efficiently than they could.
13 The last -- the last issue is to
14 transfer the property in total to the Department
15 of Defense, and the way the procedure works at
16 present is they would have to pay us the value of
17 the property because the cost of the way the
18 Property Act works and the price is somewhere
19 between 30, $40 million.
20 COMMISSIONER STEELE: Again, just sort of a
21 common sense question, and may end up with a legal
22 answer, if the department can access property at
23 other federal agencies below cost or at, in some
24 cases, zero, would it not be logical at the end of

ENVIRONMETRICS
2345 Millpark Drive
Maryland Heights, MO 63043-3529
(314) 427-0550

SCHREIBER, GRANA & YONLEY, INC.
271 WOLFNER DRIVE
ST. LOUIS, MO 63026

ATTN: BRYAN WILLIAMS

INVOICE # 31667
PO # ---

ANALYSIS RESULTS

SAMPLE ID: 953515-002
LAB ID: 9504/352-001
DATE COLLECTED: 04/20/95
DATE RECEIVED: 04/24/95 7:38

TEST PERFORMED	METHOD OF ANALYSIS	REGULATORY LEVEL	RESULTS	ANALYST
TCLP EXTRACTION	SW-846 1311			
METALS ANALYSIS	SW-846 6010		EXTRACTION	
SILVER		5.0	1,080 mg/l	04/27/95 R.D.

APRIL 27, 1995

WAYNE L. COOPER
LABORATORY DIRECTOR

DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION
1700 NORTH MOORE STREET STE 1425
ARLINGTON VA 22209

Fax Cover Sheet

DATE:	May 19, 1995	**TIME:**	5:03 PM
TO:	DAVID SHORR, DTR MISSOURI DNR	**PHONE:** **FAX:**	(314) 751 6627 (314) 751 4422
FROM:	DEIRDRE NURRE ENVIRON ANALYST	**PHONE:** **FAX:**	(703) 696-0504 X 164 (703) 696-0550
RE:	MEETING ON MAY 30		

Number of pages including cover sheet: 2

Message

Three members of the Base Closure Commission will be meeting with you on May 30: Madelyn Creedon, General Counsel; J.J. Gertler, Army Senior Analyst; and Deirdre Nurre, Interagency Environmental Analyst.

We will drive from St. Louis on Tuesday morning and meet you at your office at 9:00 A.M. Our schedule permits us to meet with you until 3:00 p.m.; it may be possible for us to conclude our discussion earlier.

It would be useful for us to begin our meeting with a briefing by Missouri DNR which provides an overview of each of the four permit application submitted by the Army to DNR and DNR's decision on each of these permits. Subsequently, we would like to ask questions of you and your staff. Our questions will be based on the topic areas listed on the attached sheet. If you have additional questions concerning this meeting, please contact J.J. Gertler at (703) 696-0504 X 174.

Thank you for your ongoing assistance with the 1995 BRAC process. We look forward to speaking with you in person.

FT. McCLELLAN/FT. LEONARD WOOD

TOPIC AREAS FOR COMMISSION STAFF QUESTIONS:

1. CDTF Incinerator and Waste Stream Analysis

2. RCRA Permit Application

3. Air Permit to Construct
   - Monitoring of Permit
   - Implications of Program Changes Required by Title V

4. Smoke Permit

5. Public Access to Decisionmaking:
   - Public notice, public comment opportunities for all permits
   - Opportunities for appeal

6. Endangered species

7. State EIS Requirements

8. Press articles

9. Process for Obtaining Future Permit Variances

5.20.95

MEMORANDUM

FROM: Deirdre Nurre

TO: J.J. Gertler
Madelyn Creedon

CC: Ralph Kaiser
Bob Cook

RE: QUESTIONS FOR MEETING WITH MISSOURI DEPARTMENT OF NATURAL RESOURCES REGARDING FT. LEONARD WOOD

I have generated the following series of draft questions to address to David Shorr on Tuesday May 30. These questions are based on our May 18 meeting. Subsequently, we received a lengthy package from Mr. Steinberg representing the Alabama coalition. I did not have the chance to integrate any items from this package into my list of questions. J.J., if you have the opportunity to do so and think it's worthwhile, you could input them into my question document, bearing in mind that we have some of his concerns identified already. [Document is h:\nurre\doc\fwqs2.doc -- that's a different title than I gave you before]. Otherwise, we can ask questions directly from Steinberg's memo. If anyone revises the list of questions between now and May 30, please bring a copy along to St. Louis for me.

If you need to reach me during this coming week, call me at my EPA office (415) 744-2246. I'll be there for part of the week, and I'll be checking voicemail. Thanks.

TOPIC AREAS FOR COMMISSION STAFF QUESTIONS:

1. CDTF Incinerator and Waste Stream Analysis

2. RCRA Permit Application

3. Air Permit to Construct
   - Monitoring of Permit
   - Implications of Program Changes Required by Title V

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   - Public notice, public comment opportunities for all permits
   - Opportunities for appeal

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7. State EIS Requirements

8. Press articles

9. Process for Obtaining Future Permit Variances

TOPIC AREAS:

1. CDTF Incinerator and Waste Stream Analysis

What element of waste is the "blow-down" and what happens to it in the incineration process?

What do we know about the content of the thermal treatment unit ash, and what assurances are provided for its safe disposal?

2. RCRA Permit Application

Did DNR review the RCRA Part B permit application?

If they did not, what was the legal rationale for DNR's not reviewing it? (Writing a waste determination/making an assumption that it was not needed/other reason)?

Was there any formal response given to the Army on its application? If not, why not?

Did DNR conduct an independent waste characterization? Can we get a copy of it?

3. Air Permit to Construct
   - Monitoring of Permit
   - Implications of Program Changes Required by Title V

"Review of Application for Authority to Construct and Operate Section (5) Review", March 28 1995.

Once it is granted, how long can a permit remain in effect before construction occurs? Is there a time frame by which construction must occur?

Were any corrections necessary in the Army's permits? If so, how were they addressed? If any are found in future, how easily can they be addressed?

Once a permit to construct has been issued, are there limits to the circumstances under which Missouri DNR could revoke it or temporarily halt operation? Are we dealing with a decision which could only be challenged based on new information -- ie, mistakes made due to haste in approving application are not grounds to revoke or halt operation?

Will MO DNR track the wastes going into the incinerator? Will MO DNR conduct recordkeeping, notification, and/or inspection practices of what is incinerated?

Do Missouri's future Title V permitting responsibilities have ramifications for issuing this permit to construct?

p.1) Explain how this permit is a de minimis addition to an existing major source.

p.1) "Hazardous air pollutants will be emitted from the incinerator, though in minute amounts. No nerve agents will be emitted from this training facility..."

What is the hazardous air pollutant, and how does it enter either the waste stream going to the incinerator or the emissions leaving the stack? If a hazardous air pollutant is emitted, why isn't a RCRA permit required?

p. 11) Are there any negative complications with incinerating wastes which are "high in chlorine"?

4. Smoke Permit

How are the components of the fog oil accurately characterized? Are they VOCs, particulates, both?

Given that the obscurant used to block out UV contains brass, are these elements considered particulates? What are the human health impacts of using the brass obscurant? What are the environmental impacts of the brass obscurant?

Which part of Missouri or federal law regulates "prevention of significant differences" with regard to the smoke permit?

5. Public Access to Decisionmaking:
   - Public notice, public comment opportunities for all permits
   - Opportunities for appeal

Adequacy of Public Notice: What were the opportunities in each permit issued for the public to receive notice and submit comment? Were these opportunities adequate?

What is the opportunity under Missouri law for the public to enter a citizen suit against the incinerator?

Given past experience with permitting incineration in Missouri, what level of public opposition can be expected? Have citizen groups taken a position against incineration of any kind? What type of suit could be anticipated?

6. Endangered species

How have the endangered species implications been addressed in the permitting process?

What kind of environmental species surveys have been done? What coordination, if any, has been conducted with the Department of the Interior or the appropriate federal steward for these species?

7. State EIS Requirements

Does MO DNR have its own EIS process? If so, how might these requirements add environmental review tasks separate from the federal EIS process?

8. Press articles:

Any truth to TIME article that "tons of hazardous waste would be incinerated"?

9. Process for Obtaining Future Permit Variances

DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION
1700 NORTH MOORE STREET SUITE 1425
ARLINGTON, VA 22209
703-696-0504

FAX COVER SHEET

DATE: 6/14/95

TO: MAZIE

FAX #: 202-224-3001

FROM: Bond Almand

NUMBER OF PAGES (including cover): 4

CONTENTS:

PLEASE HOLD THIS FOR MADELYN CREEDON OF THE DEF BASE CLOSURE COMM. CALL 224-0318 AND ASK FOR DAVE FUCHS OR CHRISTY STILL WHO WILL PICK UP THE DOCUMENT THANK YOU - CALL 703-696-0504 IF YOU HAVE QUESTIONS

IF YOU HAVE TROUBLE RECEIVING THIS FAX PLEASE CALL 703-696-0504.

19 June 1995

Major General (R) Joseph Robles
Commissioner
Base Realignment and Closure Commission
Washington, DC

Dear General Robles:

First, I want to thank you for the extra effort you put forth to visit Anniston, Alabama and allowing us to share with you our concerns over the potential loss of a critical Army, Department of Defense and international NBC defense capability.

It is in this context that I am writing to reinforce, with examples, the conclusion that I have reached that the recommendation to transfer the Chemical School was made with little, or no, consideration given to what the training requirements are and how the permit restrictions and the lack of facility resources at Fort Leonard Wood degrades the training of our soldiers and the value of our national capability.

Today, I received a copy of the State of Missouri, Department of Natural Resources, Permit No. 0695-010 (Copy enclosed.) for the construction of a static and mobile fog oil smoke training facility. The Permit contains 37 special conditions that have to be met. I will not discuss each condition, but with the addition of a more robust clerical staff most of the special conditions can be met.

However I am appalled at several of the restrictions, since they clearly reflect a lack of understanding of the Chemical School's mission, the Army's and Air Force's training requirements, our force modernization packages and the objectives of Force XXI.

For example:

> The current estimated annual fog oil requirements exceed 120,000 gals — the permit authorizes only 65,000 gals annually — a loss of 45% of the training requirement.
>
> The permit imposes a daily limit on fog oil use. Exclusive of Air Force training requirements, the Army students at the Chemical School require 190 smoke training days per year — to meet the training standards the permit limits would be exceeded 154 days per year — a loss of 81% of the training requirement.
>
> The permit restricts the training to the use of the Smoke Generator M3A3 pulse jet system. This generator has been obsolete for 6 years with only the Army Reserve units still training with them. The pulse jet smoke generator concept continues in a modernized version of the M3A3 smoke generator and will continue in the inventory for a few more years as the M3A4. However, the Army and the Air Force are procuring turbine smoke generator systems for Force Package I and Force Package II. To date over $70M has been spent in development of these systems. Procurement actions are underway for both the Army and the Air Force exceeding $160M to modernize the force — under the permit these systems can not be used at Fort Leonard Wood. Not only are they not pulse jet smoke generators, but they dispense brass flakes and carbon fibers essential to obtaining the multispectral obscure capability envisioned in Force XXI — the permit specifically precludes the use of brass flakes and carbon fibers.

In summary, something is seriously wrong with our leadership when such a glaring difference is allowed to exist between our future equipment modernization program and the restrictions on our ability to train with this equipment. The result is a waste of resources and the loss of a badly needed capability. Acceptance of these training conditions and permit restrictions by the Commission would be paramount to requiring the Armored School to only train with M48 tanks and the Artillery School to only train with 105 mm howitzers.

We must train to standard. We must not let our training requirements and the force multiplier effects of our Force XXI modernization initiatives be derailed by inadequate staff analysis as to the true impact the decision to move the Chemical School to Fort Leonard Wood has on the loss of the military value of the School to the Army, the other Services and our National and International interest.

Again, thank you for your time and interest under the most difficult of circumstances. If you have any questions, please call me.

Gerald G. Watson
Major General (R)
U S Army

Encl: Fog Oil Smoke Training Permit

CF:
Chairman Dixon
Commissioner Cox
Commissioner Cornella
Commissioner Davis
Commissioner Kling
Commissioner Montoya
Commissioner Steele

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMO 643 and the Federal Clean Air Act the applicant is authorized to construct the facility described below, in accordance with the laws, rules, and conditions as set forth herein.

Permit Number: 0695-010 Facility I.D. Number: 3860-0004-815

Owner: U. S. Army Engineer Center and Fort Leonard Wood

Owner's Address: Department of Defense

Facility Name: U. S. Army Engineer Center and Fort Leonard Wood

Facility Address: ATTN: ATZT-DPW-EE; Ft. Leonard Wood, MO 65473

Legal Description: Pulaski County. All or parts of T33, 34, 35N, R10, 11, 12W

Application for Authority to Construct was made for

**** Permission to construct a static and mobile fog oil smoke training facility. This review was conducted in accordance with Section (8), Missouri State Rule 10 CSR 10-6.060, "Construction Permits Required." ****

☐ Special Conditions are not applicable to this permit.

☒ Special Conditions do apply to this permit and are listed as attachments starting on page 2.

June 7, 1995
EFFECTIVE DATE

John A. Young
DIRECTOR
DIVISION OF ENVIRONMENTAL QUALITY

PERMIT NUMBER 0695-010

FACILITY I.D. NUMBER 3260-0004-015

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

Emissions Limitations

1. Annual Throughput. The U.S. Army Engineering Center, Fort Leonard Wood, (the "Permittee") shall process no more than 65,000 gallons of SGF-2 fog oil for smoke training during any 12-month period. This total shall include the fog oil used in the mobile (valley) operations and the static (introductory) operations.

Requirement = 123,562 gallon
• Less @ 45% of training requirement — Cannot train to standard

2. Daily Throughput. The Permittee shall process no more than 3700 pounds of SGF-2 fog oil during any 24-hour period. This total shall include the fog oil used in the mobile (valley) operations and the static (introductory) operations. Fog oil shall not be processed at a rate in excess of 3700 pounds per hour.

• Results in 154 days @ 90 day training requirement when limit is exceeded — Cannot train to standard

3. SGF-2 Fog Oil Material Requirements. The Permittee shall only use the fog oil designated SGF-2 (CAS# 64742-52-5) to generate smoke during smoke training. The fog oil shall contain no additives nor any rerefined oils.

In addition, the fog oil shall have the following properties and characteristics:

a. The fog oil shall be severely hydrotreated to remove polycyclic aromatic hydrocarbons (PAHs) and their nitrogen and oxygen analogues, and

b. The fog oil shall contain no carcinogenic or potentially carcinogenic constituents as defined under the Hazard Communication Standard (HCS) 29 CFR 1910.1200, and

c. The fog oil shall contain no more than 0.5% (one-half percent) by weight of any single hazardous air pollutant (HAP) as defined by 10 CSR 10-6.020(2)(C), "Table 3 - Hazardous Air Pollutants." The combination of all HAPs in the fog oil shall comprise no more than 1% (one percent) by weight of the fog oil.

The Permittee is prohibited from using to create smoke for

REPORT NUMBER: 0695-010

FACILITY I.D. NUMBER: 3860-0004-015

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

smoke training any fog oil designated PY8035000 on the Registry of Toxic Effects of Chemical Substances (RTECS) of the National Institute for Occupational Safety and Health (NIOSH).

The Permittee may not introduce any other substance into the fog oil used to generate smoke, e.g., kerosene to reduce viscosity in cold temperatures, graphite or brass to change or enhance obscurant effectiveness, etc.

• Prohibits Training with Multi Spectral Obscurants Projected in Force XX
— Cannot Train with Modernized Smoke Systems

4. *Fog Oil Material Certification.* The Permittee shall maintain fog oil Military Specifications, Material Safety Data Sheets (MSDS), and records of quantitative analytical chemical test data demonstrating compliance with Condition 3.

Said military specifications, test data, MSDSs, and certifications shall be maintained by the Permittee and made available to Missouri Department of Natural Resources (MDNR) personnel on request.

The Permittee shall certify in writing no less frequently than annually that all fog oil used in smoke training complies with Condition 3.

5. *Reporting of Violations.* The Permittee shall report to the Enforcement Section, Air Pollution Control Program (APCP), MDNR, no later than ten days after any fog oil not complying with Condition 3 or not certified in compliance with Condition 4 is used to create smoke for smoke training.

6. *Smoke Generating Equipment.* The Permittee shall use only the pulse jet mechanical smoke generator, Model M3A3 ("emm-three-A-three"). The smoke generators shall only be fueled with unleaded gasoline. The Permittee shall only generate smoke with smoke generators maintained in good working condition and operated in accordance with the manufacturer's specifications.

• M3A3 Obsolete
• M3A4 in use but is being phased out of service.
• Prohibits turbine generated smoke systems in Force Package I-III
• 90 M Development
• 760 M Procurement for Army and Air Force Turbine generators.

7. *Emissions Limitation.* The Permittee shall not emit particulate matter less than 10 microns (PM_{10}) at a rate in

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

excess of 2600 pounds per hour: This rate corresponds to processing fog oil at the maximum rate of 3700 pounds per hour with a particulate conversion factor of 70%.

8. Recordkeeping. The Permittee shall record the amount of fog oil processed by the smoke generators during the previous month and the previous twelve months. During any month in which smoke training occurs, the Permittee shall record daily and hourly consumption of fog oil. The Permittee shall maintain said records and provide them to MDNR personnel on request.

9. Reporting of Violations. The Permittee shall report to the Enforcement Section, APCP, no later than ten days after the end of each month during which the preceding 12-month cumulative total of fog oil processed exceeds 65,000 gallons of fog oil (Condition Number 1).

10. Reporting of Violations. The Permittee shall report to the Enforcement Section, APCP, no later than ten days after an exceedance of the 3700 pound daily limit or the 3700 pound/hour maximum rate limit of fog oil (Condition 2).

Ambient Air Monitoring

11. Quality Assurance Project Plan. The Permittee shall file two copies of a Quality Assurance Project Plan (QAPP) within 90 days of issuance of this permit for review and approval by the Staff Director, APCP. The QAPP shall describe the method and manner for collecting air quality monitoring data for PM_{10} and ozone required by this permit.

12. Pre-Startup Monitoring. Beginning as soon as possible after this permit is issued, the Permittee shall collect at least one year of continuous air quality monitoring data for PM_{10} and ozone in a manner and at locations to be determined by the Permittee with review and approval by the APCP. Collection of monitoring data shall begin no later than eighteen months immediately prior to the beginning of smoke training. Ozone monitoring is only required from April 1

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

through October 31.

13. Reporting. The Permittee shall submit to the APCP no less frequently than quarterly the air quality monitoring data collected pursuant to Condition 12. All air quality monitoring data collected pursuant to Condition 12 shall be submitted to APCP no later than 60 days prior to the commencement of smoke training.

14. Corrective Action. If the air quality monitoring data of Condition 12 does not substantially conform with the assumptions and conclusions of air quality modeling or if the smoke training is shown to cause or contribute to a violation of National Ambient Air Quality Standards (NAAQS), the Director, MDNR, may require the Permittee to take corrective action or may revoke the permit.

15. Post-Startup Monitoring. Beginning with the commencement of smoke training, the Permittee shall collect at least two years of continuous air quality monitoring data for PM_{10} and ozone in a manner and at locations to be determined by the Permittee with review and approval by the APCP. Ozone monitoring is only required from April 1 through October 31.

16. Reporting. The Permittee shall submit to the APCP no less frequently than quarterly the air quality monitoring data collected pursuant to Condition 15.

Meteorological Monitoring

17. Observers. At all times during the operation of the smoke generators, a network of observers shall be stationed at locations from which they can observe the behavior of generated smoke and whether smoke crosses the Fort Leonard Wood property boundary. The observers shall maintain continuous electronic or visual communications with the smoke generator operators.

18. Meteorological Monitoring. For the entire period beginning no less than one hour prior to generating smoke and ending

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

no less than one hour after ceasing generating smoke, the Permittee shall measure and record no less frequently than every sixty seconds meteorological data including ambient air temperature, atmospheric pressure, relative humidity, atmospheric stability, mixing height, and wind speed and direction at each training site at which smoke training is conducted. The monitoring records shall indicate those periods during which smoke is generated. Meteorological monitoring records shall be maintained by the Permittee and made available to the MDNR personnel on request.

19. Limitations on Operations. Smoke training shall only be conducted at the locations and under the meteorological conditions as described in Attachment A.

The Permittee may conduct smoke training operations at more than one location listed in Attachment A during any 24-hour period. However, smoke training operations may not occur at more than one location simultaneously, and the smoke training operations at multiple sites may not exceed the limitations of Condition 2.

20. Meteorologist. Meteorological monitoring and forecasting activities required by this permit shall be coordinated and supervised by a person (the "Meteorologist") with at least a Bachelor of Science degree in meteorology or atmospheric science from an accredited university or college.

21. Forecasting Acceptable Conditions. Smoke training may take place only if the Meteorologist forecasts no earlier than two hours prior to each smoke training exercise that the approved meteorological conditions described in Attachment A will exist throughout the anticipated smoke training exercise.

22. Forecast Certification. Prior to each smoke training exercise, the Meteorologist shall certify in writing the pre-exercise forecast required by Condition 21. Said forecast certification shall be maintained by the Permittee and made available to MDNR personnel on request.

SPECIAL CONDITIONS

The permittee is authorized to construct and operate subject to the following special conditions:

23. *Pre-Exercise Computer Modeling.* Prior to each smoke training exercise, the Permittee shall use the Tactical Smoke computer model, TACSMK, or equivalent, to perform pre-exercise predictions of smoke behavior during anticipated smoke training exercises. Printouts of the TACSMK pre-exercise predictions shall be maintained by the Permittee and made available to MDNR personnel upon request.

24. *Prohibitions.* Generation of smoke shall cease if:

a) Meteorological conditions are not within those approved for smoke training as described in Attachment A, or

b) Smoke behavior differs significantly from the pre-exercise predictions of Condition 23 so as to indicate a reasonable likelihood that visible smoke will drift beyond the Fort Leonard Wood property boundary, or

c) Conditions or smoke behavior are such as to create a reasonable likelihood that visible smoke will cross the Fort Leonard Wood property boundary or that National Ambient Air Quality Standards at the Fort Leonard Wood property boundary will be exceeded, or

d) There is an interruption for 2 minutes in the meteorological monitoring required by Condition 18, or

e) Under other conditions as may be determined by the Director, MDNR.

For the purposes of determining compliance with Condition 24a, meteorological conditions shall be deemed outside the approved conditions when three consecutive measurements recorded at one-minute intervals are outside approved conditions.

Soil and Vegetation Sampling

25. *Soil and Vegetation Sampling Plan (SVSP).* Within 180 days of the issuance of this permit, the Permittee shall submit

MISSOURI COALITION FOR THE ENVIRONMENT
6267 Delmar Boulevard St. Louis, Missouri 63130 (314) 727-0600

June 16, 1995

Board of Directors
Barbara Chicherio
Beatrice B. Clemens
Ken Cohen
Erica M. Cook
Larry Felkner
David L. Garin
Lewis Green
David Holtzman
Bob Klepper
Jillian Richman
Arlene Sandler
William G. Seibert
Ben Senturia
Diane L. Sheehan
Ralph E. Wafer
Lottie Williams
Debra Wilson

R. Roger Pryor
Executive Director

The Honorable Alan Dixon, Chairman
Defense Base Closure & Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, VA 22209

Re: Army Chemical Warfare Training School

Dear Chairman Dixon:

I believe that you are aware that the Army has been granted a variance from Missouri's opacity limitations by the Missouri Air Conservation Commission respecting its proposal to move the large-area obscurant training program from Fort McClellan to Fort Leonard Wood. I believe that you are also aware that the Missouri Coalition for the Environment vigorously opposed that variance in a hearing before the Air Conservation Commission, and has filed in the circuit court of the City of St. Louis a petition for judicial review of that variance. The Coalition's view is that the variance is clearly unlawful.

Today the circuit court denied the Coalition's motion for stay pending the final disposition of the litigation. The State of Missouri may attempt to persuade you that the Court's ruling is a sign that the Coalition has a weak case. Your commission is entitled to know that the opposite is correct. As the enclosed transcript shows, the Court stated that it was denying the stay because the public interest appeared to favor denial of the stay (the Court was deluged with many affidavits, including one from the Governor). But the Court also stated: "I think that the Petitioners have a probability of success."

Sincerely,

R. Roger Pryor

R. Roger Pryor
Executive Director
Missouri Coalition for the Environment

Printed on recycled paper

IN THE CIRCUIT COURT OF THE CITY OF ST. LOUIS

STATE OF MISSOURI

In the matter of:	)	
	)	
MISSOURI COALITION FOR THE ENVIRONMENT,	)	
	)	
Vs.	)	Cause No. 954-01339
	)	
BEARD, et al.,	)	

TRANSCRIPT OF PROCEEDINGS

On the 16th day of June, 1995, the following proceedings were held in the above-entitled cause, before the Honorable Robert H. Dierker, Judge of Division 3 of the Circuit Court of the City of St. Louis, State of Missouri.

FAX Memo
Date: 6/16 Time: 450
To: Barry Steinberg
Location:
FAX #: 703-351-5274
From: Lewis C Green
Location: St. Louis
FAX #: 314-231-4184
Phone #: 314-231-4181
Pages: 4
Stock # 04007

Margaret E. Walsh
Official Court Reporter
22nd Judicial Circuit
St. Louis, Missouri

C E R T I F I C A T E

I, Margaret E. Walsh, do hereby certify that I appeared at the said time and place first hereinbefore set forth, that I took down in shorthand the proceedings had in the within-entitled cause, and that the foregoing 1 pages constitutes a true and correct transcription of that portion requested.

Margaret E. Walsh

Margaret E. Walsh, C.C.R.
Official Court Reporter

THE COURT: I think that the Petitioners have a probability of success, in the sense that they demonstrated a -- the existence of a fair ground and a meritorious claim and a fair ground for subsequent litigation. I think the irreparable harm calculus which inevitably includes an assessment of the public interest, impels most strongly in favor of a denial of the stay, because I think the public interest in reality here is the traditional interest.

MISSOURI CIRCUIT COURT
TWENTY-SECOND JUDICIAL CIRCUIT
(St. Louis City)

Missouri Coalition for the Environment

VS

Beard, et al.

CASE NO. 954-1339 DIVISION 3 June 16, 1995

MEMORANDUM FOR CLERK

Motion of Department of Natural Resources to intervene is GRANTED.

Application of petitioners for stay heard and DENIED.

Motion of "Committee of Fifty," et al., to intervene partially heard; petitioners to file response within thirty days, or such other time as the parties agree.

SO ORDERED:

Robert H. Dierker, Jr.
Circuit Judge

Dated: 6/16, 1995
cc: Counsel of record

IN THE CIRCUIT COURT OF THE CITY OF ST. LOUIS

STATE OF MISSOURI

In the matter of:	)	
	)	
MISSOURI COALITION FOR THE ENVIRONMENT,	)	
	)	
Vs.	)	Cause No. 954-01339
	)	
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Margaret E. Walsh

Margaret E. Walsh, C.C.R.
Official Court Reporter

IN THE CIRCUIT COURT OF THE CITY OF ST. LOUIS
STATE OF MISSOURI

MISSOURI COALITION FOR THE ENVIRONMENT, a corporation, and WENDY PELTON,	)	
Plaintiffs,	)	
vs.	)	No. 954-1339
HARRIET BEARD, Chair, and DAVID CRANE, MICHAEL FORESMAN, WILLIAM CLARK, and ANDREW FARMER members of the Air Conservation Commission of Missouri; AIR CONSERVATION COMMISSION; and U.S. ARMY ENGINEERING CENTER and FORT LEONARD WOOD,	)	Div. 3
Defendants.	)	

AFFIDAVIT OF GOVERNOR MEL CARNAHAN

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Mel Carnahan, Governor of the State of Missouri, being first duly sworn upon his oath, states as follows:

1. If the pending Motion for Stay is granted in the case of the Missouri Coalition For the Environment and Wendy Pelton vs. Harriet Beard, et al., No 954-1339 on June 14, 1995, the State of Missouri could incur major economic hardship.

2. The Defense Base Closure and Realignment Commission (BRAC) is considering the Army's recommendation to move the chemical and military police schools from Fort McClellan, Alabama to Fort Leonard Wood, Missouri. The Commission is in its final days of hearings and fact finding. Before the move will be recommended to the President of the United States, the Commission has made it clear to Missouri that all environmental permits including this variance must be issued by June 22, 1995. Missouri has carefully considered the environmental laws as they apply to the proposed schools. The Missouri Department of Natural Resources has issued the required permits and the Air Conservation Commission has made its considered determination to grant the variance which is the subject matter of this Petition for Judicial Review and Motion to Stay.

3. Missouri's U.S. Senatorial, Congressional and state office holders have joined together in a bipartisan effort to support the move of these schools to Missouri. Alabama interests have conducted activities in Missouri to derail the environmental permits issuances.

4. A Stay of the variance at issue here would allow the Alabama Senator to call into question the status of the variance and its connection to the PSD permit which was issued on June 7, 1995. Missouri would be forced to fight another smoke screen by Alabama interests to stop the move of the chemical and military police schools to Missouri.

5. Fort Leonard Wood is Missouri's largest employer outside the Kansas City and St. Louis metropolitan area. Currently, Fort Leonard Wood has about $100,000,000 payroll and employs 11,800 personnel. Without the consolidation of the chemical and military police schools with the engineering school currently at the Fort, there is a significant possibility that Fort Leonard Wood would be a candidate for closure in the near future.

6. This hearing is a critical event for the citizens of the State of Missouri. I cannot emphasize the monumental impact the issuance of a Stay could have on the citizens of Missouri. To proceed along the normal judicial review pathway will work to protect any real environmental interests or concerns of the petitioners. To grant the Stay will only provide a vehicle for the Alabama interests to use to stop the BRAC recommendations.

I hereby swear that the contents of this Affidavit are true and correct and based on my own personal knowledge.

Further affiant says not.

Mel Carnahan, Governor
State of Missouri

Subscribed and sworn to before me, a Notary Public, in the state and county aforesaid, this 15th day of June, 1995.

Notary Public

(SEAL)

MARILYN PARRISH, NOTARY PUBLIC
STATE OF MISSOURI COUNTY OF COLE
MY COMMISSION EXPIRES MAY 11, 1999

My commission expires:

May 11, 1999

ENVIRONMETRICS
2345 Millpark Drive
Maryland Heights, MO 63043-3529
(314) 427-0550

SCHREIBER, GRANA & YONLEY, INC.
271 WOLFNER DRIVE
ST. LOUIS, MO 63026

ATTN: BRYAN WILLIAMS

INVOICE # 31667
PO # ---

ANALYSIS RESULTS

SAMPLE ID: 953515-002
LAB ID: 9504/352-001
DATE COLLECTED: 04/20/95
DATE RECEIVED: 04/24/95 7:38

TEST PERFORMED	METHOD OF ANALYSIS	REGULATORY LEVEL	RESULTS	ANALYST
TCLP EXTRACTION	SW-846 1311			
METALS ANALYSIS	SW-846 6010		EXTRACTION	
SILVER		5.0	1,080 mg/l	04/27/95 R.D.

APRIL 27, 1995

WAYNE L. COOPER
LABORATORY DIRECTOR

WRITE LTR TO GOV FOR DIXON

FLW

27 MAR 95

PERMITS — granted by State

AIR (a) ⟨COTF + SMOKE⟩ Constr. + op. applied for + granted (antic.) by 22 JUN — nothing else now

WATER (1) Mod to existing permit

HAZARDOUS WASTE (Required?) New gas smoke has no chrome filter; we don't think we need it

All top 3 applied for; bottom not applied for

grant an op permit prior to construction

STATE = Yes

Op. Timeline → before 22 JUN 95; submitted on 1 MAR 95

MG Ballard: "Permit reqmts NOT AN ISSUE."

NEPA issue = Lg. area smoke training

When we cont use it.

(EXCESS) CAPACITY

	est. avail.	
ADMIN.	30%	
RANGES	33%	(some not used)
WATER/SEWER	45% / 50%	
TRAINEE BILLETS	44%	10,300 spaces
PERM. PARTY	41%	
FAM. HOUS.	16%	

currently can't shoot Mark XIX; no MOUT site

Fam. Hous. built in late 50's + 60's; removes 160 this yr., 250 next yr. → continually

VAcuo Jet

2:15 — 3:02
8:00 — 9:01

[560.00]

1st 678.00

Y5Q784

#883
28 MAR

FT. McCLELLAN/FT. LEONARD WOOD
BRAINSTORM SESSION FOR MEETING WITH MO. DNR

I. Format: Briefings from LW on each permit?
Submit questions for discussion in advance? (pro/con)

II. Review complaints of Alabama contingent

III. TOPIC AREAS:

1. Public Access to Decisionmaking

Adequacy of Public Notice: What were the opportunities in each permit issued for the public to receive notice and submit comment? Were these opportunities adequate?

Public notice for NPDES permit
Public notice for NPDES permit hearing
Public notice for preliminary determination, issue permit for obscurant training
(was a hearing associated with this permit?)

What is the opportunity for the public to enter a citizen suit against the incinerator?

What is the likelihood of this occurring?

Is it possible/likely that the McClellan contingent will generate a series of legal battles after the closure decision occurs as a means to keep the base open?

How do we view the threatened Anniston legal battle in light of our decision?

It is true that once a permit to construct has been issued, it can only be challenged based on new information -- ie, mistakes made due to haste in approving application are not grounds to revoke?

2. RCRA Permit Application:

What was the legal rationale for DNR's not reviewing the RCRA permit application? (Waste determination/assumption that it was not needed/other)?

Was there any formal response given to the Army on its application?

3. Aspects of the CDTF itself:

What element of waste is the "blow-down" and what happens to it in the incineration process?

What do we know about the content of the thermal treatment unit ash and how it will be disposed of?

Possible necessary corrections to the Army's permit:

Were any corrections needed in the permits? (If DNR says it was 100% perfect, I'll be a little skeptical.) If so, how were they addressed? ?

Coordination in advance?

4. Title V Permit:

Permit to construct/operate (Title V): We don't have a copy of the application. change in program?

"Hazardous air pollutants will be emitted from the incinerator, although in minute amounts". Please identify pollutant & how it enters the waste stream.

p. 11 what are the implications of incinerating wastes "high in chlorine"?

5. Smoke permit (prevention of significant deterioration):

Endangered species implications: have they been addressed?

What kind of surveys have been done? What coordination, if any, with Interior?

6. EIS: Would Army Corps write an EIS? What would the timeline be? Army

Further any No equivalent requirement

7. Press articles: Any truth to TIME article?

202/ 885 1200

Ft McClellan

14 May 95

B. Steinberg

'83-'86 documents from McCl.

<MAJ Teller, Env. Law, OTJAG — Air Permits>

MO not an NRC Agreement state

16 May 95

NO HEARING from B. Steinberg

- Overwhelming supp. for permits, but why kept public in dark?

- Sierra Club went after fog oil saying its a carcinogenic

- No ~~[illegible]~~ variance allowed on opacity by DNR → by Air Commission only

Fog = 100%
No law = 20%
> 25 May 95 NO AIR PROBS. but did not address

- No says RCRA not needed
FTLW COS says they applied for RCRA

- ADMIN PROCEEDINGS (Petitions) prob. nothing done yet

NO officials will say "NO PROB."

[talk to Sierra Club guy]

Ft. McClellan, AL

3 MAY 95

- Sales pitch to Comm. Cox
  ↳ new reqs. for chem. assistance + MP training; centerpiece of today's mission

AGREE

- Disruption, 2-3 yrs. to recruit @ MD (10% move)
  1973
  5 yrs. to bring AL up (5% move)
  ↳ Master plan just brought on CDTF in 94, 6-7 yr. delay.

but where? Shouldn't we move if cost effective.

- MILCON is one factor of one-time costs. Others are:

COL v. G.O. + school heads

X Y Z ⟹ L.W. X Y Z

force structure NOT OUR CALL.

Simple Training capability deviate from MVA or

PERMITS - need variance; above permitting process

1ST STORY of Level 1 printed in FULL format.

Copyright 1995 The Time Inc. Magazine Company
Time

May 22, 1995

SECTION: THE MILITARY; Pg. 48

LENGTH: 857 words

HEADLINE: THE BATTLE FOR POISON;
IN A PUBLIC RELATIONS DUEL, ALABAMA AND MISSOURI SQUABBLE OVER A NERVE-GAS TRAINING FACILITY

BYLINE: MARK THOMPSON/WASHINGTON, WITH REPORTING BY HILARY HYLTON/AUSTIN

BODY:

There is a war between the states of Alabama and Missouri, and the prize is poison. The trophy, a low 30,000-sq.-ft. brick building, is surrounded by high fencing topped with barbed wire, surrounded by armed guards and laden with alarms, sirens, cameras and a medical station. Up to 100 soldiers at a time would train there, each repeatedly giving blood samples during their stay to ensure that they were not contaminated by the lethal agents within. These trainees, cloaked in protective overgarments and masks, would detect and swab a bleachlike solution over military gear spotted with deadly droplets. Each week 10 tons of toxic agents and neutralizers would be burned in a 2,200 furnace, spewing what the Army says are harmless emissions from a 75-ft. stack. The toxins to be used at the facility are sarin and VX, among the most virulent chemicals known. While the military would make and store less than a quart of the toxins at any one time, that is enough to kill 850,000 people.

The recent recommendation by the Pentagon to move the world's only known school using lethal nerve agents from Fort McClellan in Alabama to Fort Leonard Wood in Missouri has sparked a ferocious public relations battle. As Alabama partisans engage in guerrilla warfare to sabotage the move and keep the facility, Missouri is in such a rush to claim the prize that some of its citizens fear the state is cutting corners and keeping them in the dark.

The squabble began in late February, when the Pentagon told the independent base-closing commission it wants to shutter Fort McClellan's 46,000 acres, nestled in the Appalachian foothills just outside the city of Anniston. Most of its operations, including the military's police and chemical schools, would be sent 350 miles north to Fort Leonard Wood, 63,000 acres of Ozarks wrapped by a national forest and near a few tiny towns.

That prospect dumbfounded Fort McClellan's backers. But they had a strategy. The Calhoun County Chamber of Commerce -- petrified at the impending loss of 10,000 jobs, representing 17% of the region's work force -- hired a Michigan firm to quiz Missourians about their prospective new neighbor. "Missouri said there was no public concern about this, and we decided to take the poll and find out for sure," says chamber official David Sylvester. "We found out that people didn't know it was happening."

At first the 500 Missouri residents polled responded positively to the move until polltakers suggested that an accident there could be more deadly than Times Beach, the Missouri town vacated 12 years ago because of its

dioxin-laced soil. Suddenly, the pollsters found opponents outnumbering supporters nearly 2 to 1. Although labeled "privileged and confidential," copies of the $ 5,000 telephone survey are mysteriously ending up in the hands of reporters and environmentalists in both Alabama and Missouri.

The Democratic legislators from the states -- Representative Glen Browder of Alabama and Representative Ike Skelton of Missouri -- don't see the poll the same way. "Missouri has been giving a sugarcoated version of what's going on and shortcutting the process," Browder says, justifying the survey. He adds, "Our opponents may call it a scare tactic, but we call it an educational effort." Skelton, on the other hand, accuses his neighbors of bamboozlement. "The Alabama folks are like an octopus, trying to emit inky fluid and escape in the confusion."

But some Missourians are leery nonetheless. At a hearing Friday night in Waynesville, a town of 3,400 near the base, they complained about being kept "completely in the dark." Wendy Pelton, 43, who lives in an old farmhouse on 38 acres five miles downwind of Fort Leonard Wood with her husband and two young children, objected that no one has adequately explored the potential dangers. "I want reassurance that my family won't spend the next 15 or 30 years on this farm watching our woods -- and our furry, scaled and feathered friends who live there -- sicken and die," she said. "We're very concerned about the rush," says Kathy Grandfield of the Sierra Club's Ozark chapter. "The people who would be the most directly affected by this facility aren't getting the time to make their views known."

But most dismiss such concerns. Banker Keith Pritchard told the hearing that the state did a "lengthy and rigorous review" to ensure their safety. "If it is safe in Alabama, it will be safe in Missouri," he said. The state's top environmental official agrees. "The Army has done a damn good job of pollution prevention," says David Shorr, director of Missouri's Department of Natural Resources. "If it's so dangerous," Skelton wonders, "why do the Alabama folks want to keep it?" Yet if sabotage by pollster doesn't work, Alabama is ready to use blackmail. If McClellan closes, the state will fight Army plans to build a $ 100 million incinerator to burn 2,500 tons of aging toxins at the nearby Anniston Army Depot. "If the Pentagon wants to take Fort McClellan to Missouri," Browder says, "then they can take their chemical garbage with them."

--With reporting by Hilary Hylton/Austin

GRAPHIC: COLOR PHOTO: U.S. ARMY PHOTOS BY GARY BURRIS (2), TOXIC ZONE: U.S. Army Chemical Corps soldiers train with deadly nerve agents; COLOR PHOTO: U.S. ARMY PHOTOS BY GARY BURRIS (2), THE PRIZE: Fort McClellan's chemicals [Aerial view of Fort McClellan]

LANGUAGE: ENGLISH

LOAD-DATE: May 22, 1995

Fort McClellan

Military Showplace of the South

FAX:

For more information, call the Public Affairs Office at: 205-848-5575

Mark Lyles
JJ
FYI
PR

To: Mr Lyles
BRAC Staff

From: M.B. ABRAMS
April 14, 1995

Cover plus 9 pages

Remarks: FYI
Mike Abrams

Birmingham Post-Herald - Page E1 - Friday - April 14, 1995

Chemical facility

Missourians unaware permit process speeded up

By Thomas Hargrove
Post-Herald Washington Bureau

WASHINGTON — Most Missouri residents are unaware that their governor is speeding up the environmental permit process for the relocation of the Army's chemical weapons training facility, a poll shows.

According to a public-opinion survey sponsored by an Anniston citizens group opposed to the Army's plan to close Fort McClellan, only about one-third of all Missourians know about the proposed relocation of the chemical program to Fort Leonard Wood.

"We felt this was all done very hurriedly, that the permit procedures were not adequately prepared and that the people were not adequately informed," said retired Army Col. Walt Phillips, a leader of the Anniston group. "And now we can prove that with this survey."

Meanwhile, the General Accounting Office yesterday released its review of the Pentagon's proposed list of military base closings. The GAO, the accounting and investigating arm of Congress, generally gave high marks to the Army's proposals.

But the investigators also said the federal Base Closure and Realignment Commission must address questions about the timing of the Army's request for environmental permits. The commission in 1993 ordered the Army to obtain all necessary permits if it wanted to close Fort McClellan in 1995.

"However, the Army did not officially begin this (permit) process until it was certain that Fort McClellan would be recommended for closure," the GAO report said.

"According to the secretary of the Army, obtaining the required permits before Fort McClellan was recommended for closure would have been premature and also would have created unnecessary apprehension among personnel at the base."

The report called the Army's request an "open issue" that the commission must settle when it begins voting on the Pentagon list on June 22.

The Army first asked Missouri Gov. Mel Carnahan for the necessary environmental permits to relocate the chemical decontamination facility to central Missouri in mid-February. The Missouri Department of Natural Resources issued the first two permits for construction of the facility on Tuesday, a move that angered some leaders of environmental groups.

The Anniston citizens group hired the polling firm of Market Strategies Inc. to conduct a scientific poll of 500 Missourians by telephone from March 29 through April 3.

"The major finding was that Missourians do not have enough information about this, and that, maybe, the state was trying to get it approved too quickly," Phillips said. "I think there will be opposition eventually. It is always very emotional whenever you are talking about nerve agents."

The poll found that 65 percent of the respondents have not read, seen or heard anything about the efforts to relocate the chemical weapons decontamination program to Fort Leonard Wood in central Missouri.

The survey found that 39 percent of those suveyed approved of the plan, 34 percent disapproved and 27 percent were undecided.

The survey did not inform residents of the economic value of the program — the annual payroll at Fort McClellan is $138 million. But interviewers asked whether Missourians were concerned that "residue from the hazardous waste incinerator at Fort Leonard Wood would be disposed of in local landfills" and that "nerve gas would be manufactured and stored at Fort Leonard Wood."

After these questions, the survey then asked residents "Do you think having the chemical defense training facility will or will not pose a threat to public health?" Sixty percent said they believed there would be a threat.

Three-quarters of the respondents in the poll said they believed Carnahan was "moving too fast without taking the necessary time to study the possible risk of relocating the nerve gas unit."

How to train for chemical warfare

Associated Press

The centerpiece of Fort McClellan's chemical school, which could be relocated to Missouri's Fort Leonard Wood, is the Chemical Defense Training Facility, a $14 million building-within-a-building. An elaborate system filters air and an incinerator burns all clothing and personal items exposed to lethal agents.

The one- to three-day courses begin with classroom instruction on chemical weapons, detection and decontamination. Then classes of 10 put on gas masks, charcoal-lined camouflage suits and rubber gloves and boots. Without chemicals present, they go through the steps of detecting nerve agents on jeeps, weapons and on a tank.

Later the trainees are exposed to two kinds of binary agents that kill by paralyzing the nervous system: GB, a vapor also know as sarin or German B, and VX, an oily liquid so lethal a single drop on the skin is fatal half the time.

Instructors use hypodermic needles to put drops of the nerve agents on jeeps, rifles and the armored vehicle. Students use special devices and test paper to detect and identify the chemicals. Afterward, they use a special solution and brushes to neutralize them.

The Anniston Star - The Front Page
Thursday - April 13, 1995

Sierra Club angry over Missouri permits

☆*Commission to hear GAO report/9A*

From Staff and Wire Reports

WASHINGTON — Environmentalists are seething over preparations for the transfer of an Army chemical weapons facility from Fort McClellan to Fort Leonard Wood in Missouri.

The Missouri Department of Natural Resources has granted a permit for construction of such a facility at the military base. Members of the Sierra Club said Wednesday they fear the process is moving too quickly for safety issues to be considered, and they objected to the permit being granted without public hearings.

"I'm outraged that this permit was issued without a public comment, period," said Kathy Grandfield, chairwoman of the Sierra Club's Missouri Toxic Committee. "All this defies logic."

David A. Shorr, director of the state environmental department, said public hearings were not necessary because only a small amount of chemical weapons would be involved.

Shorr said he was surprised by the complaints. "We have not, to date, seen any coalescing of opposition to this project," he said.

Ms. Grandfield acknowledged that no group has formally announced opposition, but added: "We have some serious questions about the relocation of this facility to Missouri."

Earlier this month, Ken Midkiff, the Sierra Club's Missouri program director, said he didn't view the nerve

Permits

■ From Page 1A

agents and gasses used at the Chemical Defense Training Facility as a major concern for the residents around Fort Leonard Wood. He said his group was more concerned about the fog oil the Army uses to train soldiers in screening techniques.

Midkiff said he was worried that the smoke would leave an oily film over everything in the area, causing problems for the wildlife in the Mark Twain National Forest that surrounds the Missouri military installation.

Despite that concern, the Sierra Club has yet to file a objection to moving the chemical school from McClellan to Leonard Wood.

Fort McClellan, home of the only active chemical weapons training center in the United States, was on the Army's list of proposed base closings released Feb. 28. Part of the budget-cutting plan was to move the training program to Fort Leonard Wood in south-central Missouri.

"This is going to be a classic case of environmental injustice," said Bill Redding, the midwestern representative at the Sierra Club's headquarters in Madison, Wis. "Most of the people living next to that base are poor. And if the Army starts out with chemical weapons training, the fear is that this will escalate somehow."

Ms. Grandfield said the Sierra Club had asked for an extended period of public hearings on the proposal to move the training center.

"Apparently, our request was not granted," she said.

Star Military Writer Eric Larson contributed to this Associated Press report.

The Anniston Star - Page 9A
Thursday - April 13, 1995

Base closure commission to hear fed report

WASHINGTON — The base closure commission will take a break from regional community meetings and base visits Monday to hear a government analysis on the Defense Department's base-closure selection process.

The General Accounting Office analysis is required by the Defense Base Closure and Realignment Act of 1990. The office must report its recommendations to Congress and the base closure commission by April 15.

The analysis is expected to be general in nature, according to a spokesman for the Defense Base Closure and Realignment Commission. Past GAO reports have focused on the Pentagon's methods in determining which bases to close.

The Pentagon must use specific criteria when determining base closures, including military value, the return on the investment made to close a base and economic impacts on the community and military. The GAO report studies the criteria to make sure the selection process was fairly conducted.

The commission, which held a regional hearing in Birmingham earlier this month, will meet May 10 in Washington to decide whether to add any military operations to the list it received from the Pentagon in March.

The commission will meet in late June to make final decisions on the list, which it must send to President Clinton by July 1. Clinton then has two weeks to accept or reject the full list, but cannot make changes. — States News Service

The Anniston Star - **Page 4A** - ***Letters to the Editor***
Thursday - April 13, 1995

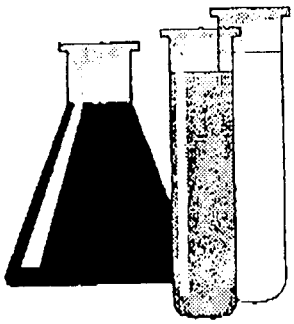
Decontamination when?

SO, LET me get this straight. There are people in Washington, D.C. that hate Alabama so intensely that they are willing to recommend closure of Fort McClellan for the third time in less than six years.

No, wait. They don't hate Alabama. They simply want to downsize in the face of shrinking military budgeting.

What is being done now to ensure that Fort McClellan will be cleaned up and decontaminated prior to returning it for other use? Are there any citizens of Hanford, Washington or Rocky Flats, Colorado that are happy with government clean-up of their contaminated towns?

Am I to believe that these same people will find enough money to clean up Fort McClellan just to prove that they really don't hate us? Not very likely.



It seems to me that if the cost of clean-up is subtracted from the projected savings these people predict from closing Fort McClellan, the cost of decontamination will be much more than the predicted savings. That is, if they intend to clean up after the Fort is closed.

And for my friends in Missouri: Ask your government about decontamination and clean-up of waste sites now. This important clean-up history will be a useful predictor of what can be expected of your government when it comes time to close Fort Leonard Wood.

No wonder we're broke. Now, I'm beginning to understand.

Mickey Twigg
Wellington

Chemical reaction

IN MY opinion the citizens of Anniston and surrounding communities should adamantly oppose the proposed construction of a chemical nerve agent incinerator plant at the U.S. Army Anniston Ordnance Depot.

In 1966 I attended the U.S. Army Chemical Corps live agent course at Fort McClellan. I am currently suffering from a serious blood disease. Alabama's politicians have allowed our state to become a national dumping ground for hazardous chemical waste materials.

Curtis A. Vandegrift
Huntsville

Birmingham Post-Herald - The Front Page
Thursday - April 13, 1995

Sierra: Permit pace is too fast

By Thomas Hargrove
Post-Herald Washington Bureau

WASHINGTON — Missouri environmentalists have been complaining that the plans to move the Army's chemical weapons defense training program there from Alabama are unfolding too quickly to allow study of safety issues.

Members of the Sierra Club reacted with anger yesterday when they learned that the Missouri Department of Natural Resources has already granted a permit for construction of a chemical decontamination training facility at Fort Leonard Wood.

They objected that the action — necessary to meet the Army's June 22 deadline for all permits necessary to close Anniston's Fort McClellan — was taken without public hearings.

"I'm outraged that this permit was issued without a public comment, period. I thought the siting of any incinerators for hazardous materials requires public comment. All this defies logic," said Kathy Grandfield, chairwoman of the Missouri Toxics Committee for the environmental group.

But the director of the state environmental department, David A. Shorr, said such hearings were not necessary for a construction permit after he decided the amount of chemical weapons involved are so small that the Army does not need a chemical waste disposal permit.

Shorr also said state officials have not received significant opposition to relocating the program and its annual payroll worth $138 million. "We have not, to date, seen any coalescing of opposition to this project," he said when announcing the permits Tuesday.

The environmentalists agreed that no major group has formally objected to the plan, yet.

"This whole thing took us by surprise," Ms. Grandfield said.

Permit

From page A1

"We have been gathering information now for only the last few weeks. But we have some serious questions about the relocation of this facility to Missouri."

The Army originally had not planned the close all of Fort McClellan when preparing its list of military bases to be slashed in budget realignments. But Pentagon officials changed their recommendation in the final days before issuing their Feb. 28 recommendations after learning the only way to save money at the Anniston facility was to close it completely.

The Army first asked for Missouri Gov. Mel Carnahan's help in obtaining necessary environmental permits in mid-February, allowing only four months for a process that can take two years. Carnahan promised to put the process "on a fast track."

"We can see how they are rushed with that June 22 deadline," Ms. Grandfield said. "But the regulatory process must be followed, even by the governor's office. We can't set aside that process for special cases."

The Ozark chapter of the Sierra Club recommended that the Army increase the amount of storm water discharge monitoring conducted at Fort Leonard Wood because of an oil-based spray used to simulate battlefield conditions during part of the training.

The state agreed with the recommendation, and placed directions for increased monitoring in a second permit issued this week for the relocation plan.

But environmentalists complained the basic issue of whether it is safe to incinerate clothing and other materials contaminated with chemical weapons has not been settled.

"This is going to be a classic case of environmental injustice," said Bill Redding, the midwestern representative at the Sierra Club's headquarters in Madison, Wis.

"Most of the people living next to that base are poor. And if the Army starts out with chemical weapons training, the fear is that this will escalate somehow."

Neither the Sierra Club nor any other environmental group has taken legal action to slow Missouri's pace in granting permits for the program. "But we want to know a lot more information," Ms. Grandfield said.

"We also asked for an extension of time on the comment period in all of this. Apparently, our request was not granted," she said.

Birmingham Post-Herald - Page B1
Thursday - April 13, 1995

Experts questioned

ANNISTON — Following the nerve gas attack in the Tokyo subway system, the Port Authority of New York and New Jersey have consulted Army chemical weapons experts at Fort McClellan to work up a preparedness plan. Four Port Authority officials got a tour of the fort's chemical defense facilities and met with chemical school personnel on Monday. Salvatore Samperi, deputy director of the authority's public safety department, wants a Fort McClellan team to tour New York's mass transit system, which transports 200,000 people daily between New Jersey and the midtown and Wall Street sections of Manhattan. Ten commuters died and more than 5,000 were injured in a nerve gas attack in the Tokyo subway system last month.

— *Associated Press*

Birmingham Post-Herald - The Front Page
Thursday - April 13, 1995

Clinton visit makes history

Carter the last to see base

By Stephanie Desmon
Post-Herald Reporter

FORT BENNING, Ga. — Ali Landers, a Roanoke High School student, stood on her toes and craned her neck as Air Force One slowly approached Building 2403.

"I can't believe this," the 17-year-old shrieked. "I saw him on the news this morning, and to think I'm going to see him (in person) today, that's so exciting."

Before long, President Clinton poked his head out of the plane door, waving to the crowd gathered at the Lawson Army Air Field hangar at Fort Benning, as a brass band played the theme from "Rocky." "This is so neat," said Ali, practically jumping up and down.

Clinton made a short, campaign-like stop at the base late yesterday morning on his way to a ceremony in nearby Warm Springs, commemorating the 50th anniversary of President Franklin Delano Roosevelt's death.

Clinton's visit to Fort Benning — just a few miles from the Alabama-Georgia line — could be the closest the commander in chief has come to Alabama since taking office; and the closest he'll come in the foreseeable future.

Visit

From page A1

The last time Clinton came to Birmingham was when he was Arkansas governor and presidential candidate during the May 1992 primary season. Alabama is considered to be in the Republican camp for the 1996 election.

A number of Alabamians crossed the border to be on hand for yesterday's festivities. Many work on the base and live in nearby Phenix City. More than 1,700 people gathered; men and women clad in camouflage appeared to outnumber civilians 2-to-1.

Republicans probably outnumbered Democrats — though no official poll was conducted — but partisan politics seemed to stand still for the moment.

This was the president, and that was enough for most people.

"This is the first time I will have had an opportunity to see the president," said Jeanette Amadeo, a base copy/printing manager who lives in Phenix City. "I wanted to show my respect to him. It's a historic moment for me."

The last time a president made a visit to Fort Benning was 1977, when Georgia's own Jimmy Carter was the chief executive.

"I am glad to be back in Georgia," Clinton said after introductions by the base's Maj. Gen. James Hendrix, Rep. Sanford Bishop, D-Ga., and Sen. Sam Nunn, D-Ga. "If I had known there hadn't been a president here since 1977, I would have come to Fort Benning earlier."

'I think he's got a lot of faith in our military. I know a lot of bases have been closed already. It's nice to know we still have a lot of support.'

— Sloan Walker, Roanoke student

Clinton's brief remarks focused, understandably, on the military. Despite cutbacks at the Pentagon, Clinton assured cheering soldiers that the United States is committed to maintaining its role as the "strongest country in the world."

He thanked the servicemen for their roles as peacekeepers in Rwanda, Somalia and Iraq. He told of his recent trip to Haiti, where the streets of Port-au-Prince were lined with Haitians carrying signs reading, "Thank you, Americans."

Of course, he quoted from the man of the day — FDR — who in his last speech, which went undelivered, wrote that the age of war has taught "that great power can lead to great repsonsiblity."

"All of you can make a difference," Clinton said. "Never forget your mission is improving and enhancing and protecting our security," not only at home, but around the world.

After Clinton spoke, he made his way through the throng, shaking dozens of hands along the way, posing for photographs, even sneaking in an autograph or two.

Sloan Walker, a Roanoke classmate of Ali's, was heartened by Clinton's words of encouragement for the military, despite Pentagon plans to close Anniston's Fort McClellan.

"I think he's got a lot of faith in our military," said Sloan, 17. "I know a lot of bases have been closed already. It's nice to know we still have a lot of support."

Out on the runway, Clinton stepped into a waiting helicopter, waving one last time to those who had turned an empty plane hangar into the site of an all-American pep rally.

And Georgia schoolteacher Mary Cook said she was as thrilled as the schoolgirl who met the boy of her dreams when she got to press the flesh with Clinton.

"I shook the president's hand," she screamed. "This is history, you know History."

State grants Ft. Wood permits needed for coveted Army chemical, MP schools

FORT LEONARD WOOD, Mo. (AP) – The state has approved three environmental permits that could help Fort Leonard Wood's chances of landing the Army's coveted chemical and military police schools.

The Pentagon has proposed closing Fort McClellan, Ala., and moving the two schools to the Missouri post. Those moves could bring 2,000 new military and civilian jobs, 15,000 soldiers for annual training and $100 million in new construction.

Fort Leonard Wood's failure to secure the required permits has hindered previous attempts by the Defense Department to move the two schools here.

The permits issued Tuesday by the Missouri Department of Natural Resources cover water discharges from the base, construction of a chemical defense training center and incinerator, and the use of smoke training.

A 30-day public comment period for the smoke training permit begins April 12. No public comment period was required for the other two permits, according to DNR Director David Schorr.

Gov. Mel Carnahan had directed the agency to make Fort Leonard Wood's application for permits a top priority.

"We appreciate the expeditious manner in which the state of Missouri handled our permit applications," said Maj. Gen. Joe N. Ballard, the post's commander. "We are confident we can support the Department of the Army recommended move of the Military Police and Chemical schools to Fort Leonard Wood."

The chemical defense school is the military's only facility where soldiers train with real chemical agents.

The Base Realignment and Closure Commission will be notified of the approved permits. The panel is to make its recommendations to President Clinton and Congress by July 1.

NEWS & TRIBUNE
JEFFERSON CITY, MO
C. 23,284
DATE: 12 APR 95

FLW Gets Permits For CDTF, MP School

By The Daily Guide Staff

Three permits from the Missouri Department of Natural Resources necessary for Fort Leonard Wood to obtain the Chemical Defense Training Facility and Military Police School were issued Tuesday, said a spokesman for the post.

The permits issued cover water discharges from the entire installation, allow for the construction of a chemical defense training facility here, to include an incinerator used to destroy waste associated with the facility, and allow smoke training planned for the post.

A 30-day public comment period for the smoke training permit begins today, which is required by state law.

Maj. Gen. Joe N. Ballard, commander of the U.S. Army Engineer Center and Fort Leonard Wood, said he was pleased with the state announcement.

"We appreciate the expeditious manner in which the state of Missouri handled our permit applications," Ballard said. "We are confident we can support the Department of the Army recommended move of the Military Police and Chemical Schools to Fort Leonard Wood.

"We know that we will safeguard the environment in accordance with the state and federal regulations in conjunction with the proposed move," Ballard said. "Fort Leonard Wood is on schedule to meet the criteria specified by Department of Defense and the Base Realignment and Closure Commission."

The permits are a critical part of the BRAC recommendation from the DOD that stipulated that the move of the two schools to Fort Leonard Wood was dependent, in part, on the ability of the Army to secure the required permits from Missouri. The BRAC Commission has indicated that without the approval of the required permits, the movement of the schools would not be considered.

The permits will now be forwarded to the Base Realignment and Closure Commission for their deliberations.

The first permit specifically allows construction of an incinerator that will destroy wastes associated with the CDTF including protective suits, protective gear and the site waste water. No hazardous waste or other permits are required for this new mission assignment.

The second permit regarding water discharge, was required with or without operation of the proposed training facilities, and was modified to take into account any effects the new missions might have on the storm water discharges.

At the request of the Ozark Chapter of the Sierra Club, the permit also requires more frequent monitoring overall, and additional monitoring for zinc and lead, which are sometimes present in trace amounts in petroleum products.

Daily Guide
Waynesville/St.Robert,
MO C: 4,576 Date:
12 APR 95

DNR issues permits for Fort

The Missouri Department of Natural Resources (DNR) has issued two permits and released a third for public comment related to the U.S. Army's proposal for new mission assignments at Fort Leonard Wood.

One permit issued Tuesday permits construction of a chemical decontamination training facility. The training facility includes an incinerator, which will be used to destroy wastes associated with the facility, including protective suits, protective gear and the site's waste water. No hazardous waste or other permits are required for this new mission assignment.

A second permit covers water discharges from the entire installation. This permit, required with or without operation of the proposed training facilities, was modified to take into account any effects the new mission assignments might have on the storm water discharges.

At the request of the Ozark Chapter of the Sierra Club, the permit also requires more frequent monitoring overall, and additional monitoring for zinc and lead, which are sometimes present in trace amounts in petroleum products.

DNR also, in a third permit action, released a preliminary permit for obscurant training operations planned for the base. A thirty day comment period began Wednesday, April 12, for comments on this permit action.

The new mission assignments were announced by the Department of Defense as part of activities related to base closures.

PILOT
DIXON, MO
C. 2,350
DATE: 13 APR 95

The Anniston Star - The Front Page - Thursday - June 8, 1995

Last permit granted to allow move

From Staff and Wire Reports

With two weeks to spare, the Army has obtained the last environmental permit it needs to move its chemical school from Fort McClellan to Fort Leonard Wood, Mo.

The decision by the Missouri Department of Natural Resources to grant a permit to use an oil-based fog in smoke training was the first in a pair of victories by Missouri officials Wednesday in the fight over the future of Fort McClellan. They also dodged an attempt by Sen. Howell Heflin, D-Ala., to place another permit obstacle in the way of the Army's plan to close McClellan, enraging Heflin in the process.

Members of the Base Closure and Realignment Commission had given the Army until June 22 — when the commission begins deciding the fate of the bases — to secure all environmental permits needed to move the chemical school from McClellan to Fort Leonard Wood. The Army received a permit to build a live-agent training facility in April.

"We planned before the list came out that they would probably get the permits," said Jacksonville businessman Gerald Powell, chairman of the Calhoun County Chamber of Commerce's Military Affairs Task Force. Though he is "a little discouraged," he said, "it's not going to change our current strategy to save the fort."

"It has not been a permit issue. Military value has been the issue," Powell said.

The decision to issue the permit Wednesday came despite opposition from some Missouri environmental groups, who claim the oil-based vapor could slip off the southern Missouri base and harm plants and wildlife in the surrounding Mark Twain National Forest.

But DNR Director David Shorr said after reviewing and approving the permit that "from a waste standpoint, it's small potatoes."

"When you compare it to our major chemical manufacturers in Hannibal, St. Louis and Kansas City — boy, this is nothing," Shorr said.

The Missouri Coalition for the Environment said it plans to appeal.

"We're going to fight this thing to the end," said Roger Pryor, executive director of the group. "If the commission wants to recommend this program and go forward, they can. But they do so at the risk of it being thrown out in court."

Most Missouri officials consider the new mission a major economic prize: An extra 15,000 soldiers would be assigned to Fort Leonard Wood each year for 13-week training courses.

The Army also would shift 1,800 permanent Army jobs, 400 civilian jobs and nearly $150 million in annual salaries and construction contracts from Alabama to Missouri.

So while the permit process moved ahead in Missouri, the state's senators were beating back a different challenge in Washington.

Late Tuesday night, Heflin attached an amendment to an anti-terrorism bill that would have effectively required federal permits for any new chemical training at Fort Leonard Wood.

Those permits could take many months to obtain, which might have jeopardized chances of the school's coming to Missouri. The amendment would have exempted existing training sites, such as the one at Fort McClellan.

The provision was removed Wednesday after Sen. Christopher Bond, R-Mo., discovered its intent. Bond, who had offered no objection to the amendment when it passed the Senate, asked Senate GOP leaders to pull the amendment from the legislation before final passage.

That was accomplished by unanimous agreement of the Senate, although Heflin's press secretary, Tom McMahon, said Heflin never was informed by Senate Democratic leaders that his amendment was being rescinded. He would have objected had he known.

Sen. Richard Shelby, R-Ala., went to the floor to object to the move to rescind Heflin's amendment, but decided not to after Senate leaders told him Heflin was not going to object, according to Laura Cox, Shelby's press secretary.

McMahon said Heflin was "mad as hell" that he was not told of the move and was not given a chance to force a Senate vote on the issue.

McMahon said the amendment was a "legitimate piece of legislation offered to outlaw the possession and production of nerve gas. It was legitimately adopted by the Senate and it was only after the media contacted officials in Missouri that the amendment was rescinded.

"And we're still left with the situation that nerve gas is unregulated in this country," he said. "The real story is that it's still not a crime to possess and produce nerve gas in this country at a time that it's becoming an increasing terrorist threat."

Heflin will try to attach the amendment to other pieces of legislation, but McMahon was not hopeful it would be allowed to stay.

"No doubt it's going to be an uphill battle now. Missouri is watching us closely," McMahon said.

Star Military Writer Eric Larson contributed to this Associated Press report.

Madelyn

MAY-15-1995 09:22 FROM PUMA REGION 7 TO 8,9596020 P.01

TO: Madelin -
FR: Dwight
RE: Leonard wood
cc: JJ

Ecologists Oppose Incinerator At Fort Leonard Wood

By Terry Ganey
Post-Dispatch Jefferson City Bureau Chief

JEFFERSON CITY — Environmental groups have challenged U.S. Army plans to operate a chemical decontamination facility and smoke screen training program at Fort Leonard Wood.

The critics contend the operations would endanger people and wildlife living near the fort.

Lewis Green, a lawyer in St. Louis, and Roger Pryor, the head of the Coalition for the Environment, said the state Department of Natural Resources had been too quick to issue permits.

On Thursday, they filed appeals challenging the permits now before the state Air Conservation Commission. Because the commission lacked a quorum, it took no action.

"These permits are being processed with the most extraordinary haste," Green told the commissioners. He said the Army's application was "totally defective."

"They are not giving the Department of Natural Resources' staff all of the information it needs to make a decision," said Green, a former member of the commission.

Shorr emphasized that the Natural Resources Department had thoroughly reviewed the Army's plans and found them safe.

Natural Resources Department Director David Shorr said the challenges were expected. The permit approval process was on a "fast track," he said. Shorr emphasized that the department thoroughly had reviewed the Army's plans and found them safe.

"We haven't compromised our review standards for this matter and we never will," Shorr said. "The permits are protective of the public health and protective of the environment."

Both Army operations are part of the U.S. Army Chemical School being transferred from Fort McClellan, Alabama.

The Army plans to operate an incinerator at Fort Leonard Wood to destroy nerve agents, mustard gas and other toxic materials used in training exercises on the post. Earlier this month, the state approved a construction permit for the facility.

The department also approved a waiver from rules limiting smoke. That will allow the Army to use oil-burning generators that produce smoke screens during training exercises.

The appeals challenge both decisions, saying the Army's plans endanger the health of people and wildlife. The incinerator also could release toxic fumes into the atmosphere, the documents say.

Green argued that no studies had been done on the effect of smoke on endangered wildlife in the Ozarks, such as the Indiana and Grey bats and the Bald Eagle.

Shorr replied that the Department of Natural Resources has been studying the Alabama's operations since 1993. "We haven't just started this thing," Shorr said. "People should give us a little credit that we are smart enough to know what's coming at us."

News-Leader

Friday, April 28, 1995

Environmentalists seek to delay OK of incinerator

The Associated Press

JEFFERSON CITY — An environmentalist group filed petitions with the state Thursday seeking to slow down the process of approving a plan to relocate the Army's only chemical defense training base to Fort Leonard Wood.

The petitions filed with the Department of Natural Resources allege that the Army has "not accurately and truthfully described" the operations of an incinerator that would burn chemically decontaminated clothing and other materials.

The Coalition for the Environment is appealing a state permit issued April 17, giving the Army the go-ahead to build and operate the incinerator. Environmentalists want the permit overturned until a public hearing is held.

The petitions also seek to delay state approval of a waiver allowing the Army to spray a white oil-based fog into the air as part of its training for soldiers.

Approval of both permits is vital to move the Army's chemical defense training base from Fort McClellan, Ala., to Fort Leonard Wood in southern Missouri, military officials said.

The federal Base Closure and Realignment Commission plans to make its final recommendations to President Clinton by July 1.

If the commission doesn't have the state permits approved by June 22, "they cannot consider the recommended move," said Fort Leonard Wood spokesman Brad Rose.

During a meeting Thursday with state environmental officials, Army officials stressed the need for quick action on their requests.

"This is essential for the defense of the country and it does need to be done," said Scott Murrell, the Army's environmental chief at Fort Leonard Wood.

The base relocation would bring an additional 4,200 soldiers yearly to Fort Leonard Wood, plus 1,800 permanent jobs and 400 civilian jobs, Rose said. It also could pump up to $150 million in salaries and construction contracts into the state economy, he said.

But environmentalists and some nearby residents fear the new mission could spew tons of contaminants.

Among the chemicals used in Army training is Sarin, the colorless vapor that recently killed 10 people and injured hundreds more on a Tokyo train.

But Army officials said any fears are unwarranted and caused by misleading information.

Neither the thick fog, the potentially fatal chemicals nor the incinerator pose any danger to nearby residents, Murrell said.

He said Sarin and other nerve gases only are produced in small quantities and are kept inside at all times. Furthermore, polluted materials are decontaminated before being incinerated, Murrell said.

As for the oil-fog sprayed from canisters on jeeps: "I've observed it, I've walked through it, and it has no effect at all," Murrell said.

Nonetheless, the Army needs an exemption from state environmental laws to spray the thick substance. A waiver hearing before the Missouri Air Conservation Commission was canceled Thursday because four of its seven members were absent.

Commissioners and DNR employees plan to hear public comments about the oil-fog training on May 12 in Waynesville, near Fort Leonard Wood. A hearing about the state waiver is set for May 25 in Kansas City.

In response to the petitions filed Thursday, an appeal hearing also must be held on the incinerator permit. No hearing date has been set.

The petitions allege that the Army underestimated the incinerator's potential sulfur emissions, failed to identify some waste products to be burned and overlooked the oil-fog's potential effect on endangered species, such as the bald eagle and Indiana bat.

"We're not trying to stop the darn thing. We're trying to get information out to the public," environmental attorney Lewis Green said.

Air Conservation Commission chairman Harriet Beard said the panel will "take the concerns under advisement" and try to reach some decision by June.

POST-TRIBUNE, Jefferson City, Missouri, Friday, April 28, 1995

Environmentalists fight plan to move chemical training to Fort Wood

The Associated Press

Rebecca Gibbs worries that a thick, white oil-based fog might some day float through the air and into her back yard from nearby Fort Leonard Wood.

"What I hear is that it coats things when it settles to the earth – the grass, the trees, the streams, the bugs, my kids," Ms. Gibbs said. "I have no idea what the potential effects could be."

So Ms. Gibbs contacted an environmental attorney to try to delay a plan to move the Army's only chemical defense training base from Fort McClellan, Ala., to Fort Leonard Wood in southern Missouri.

On Thursday, Gibbs and an environmental group filed petitions with the Department of Natural Resources alleging that the Army failed to assess the "potential threat to health" posed by the fog used in its training.

Army officials said those concerns have no validity.

As for the oil-fog sprayed from jeep-bound canisters: "I've observed it, I've walked through it, and it has no effect at all," said Fort Leonard Wood environmental chief Scott Murrell.

The Coalition for the Environment also is appealing a state permit issued April 17, giving the Army the go-ahead to build and operate an incinerator that would burn chemically decontaminated materials. Environmentalists want the permit overturned until a public hearing is held.

Approval of both permits is vital to proceed with moving the Army's chemical school to Missouri. The federal Base Closure and Realignment Commission plans to make its final recommendations to President Clinton by July 1.

If the commission doesn't have the state permits approved by June 22, "they cannot consider the recommended move," said Fort Leonard Wood spokesman Brad Rose.

During a meeting Thursday with state environmental officials, Army officials stressed the need for quick action on their requests.

"This is essential for the defense of the country and it does need to be done," Murrell said.

St. Louis environmental lawyer Lewis Green presses his case to the Air Conservation Commission. AP

The base relocation would bring an additional 4,200 soldiers yearly to Fort Leonard Wood, plus 1,800 permanent jobs and 400 civilian jobs, Rose said. It also could pump up to $150 million in salaries and construction contracts into the state economy, he said.

But environmentalists and nearby residents fear the new mission could spew tons of contaminants.

Among the chemicals used in Army training is Sarin, the colorless vapor that recently killed 10 people and injured hundreds more on a Tokyo train.

Army officials said concerns about a similar disaster in Missouri are unwarranted.

Murrell said Sarin and other nerve gases only are produced in small quantities and are kept inside at all times. Furthermore, polluted materials are decontaminated before being incinerated, he said.

The petitions filed Thursday allege that the Army underestimated the incinerator's potential sulfur emissions, failed to identify some waste products to be burned and overlooked the oil-fog's potential effect on endangered species, such as the bald eagle and Indiana bat.

1 of 2

☆Ft. Wood

From page one

"This is serious business. We're talking about nerve gases, biological agents and chemicals," environmental attorney Lewis Green said in a session with three members of the Missouri Air Conservation Commission. A formal hearing before the commission was canceled Thursday because four of its seven members were absent.

"We're not trying to stop the darn thing. We're trying to get information out to the public," Green said.

Commission chairman Harriet Beard said the panel will "take the concerns under advisement" and try to reach some decision by June.

Officials at the Department of Natural Resources, which grants the permits, said they already had done a thorough job of evaluating the permit applications.

"Some of the stuff they brought up we've already talked about with our staff. It's not an issue," said Roger Randolph, director of DNR's air pollution control program.

Commissioners and DNR employees plan to hear public comments about the oil-fog training on May 12 in Waynesville, near Fort Leonard Wood. A hearing about the state waiver is set for May 25 in Kansas City.

In response to the petitions, an appeal hearing also must be held on the incinerator permit. No hearing date has been set.

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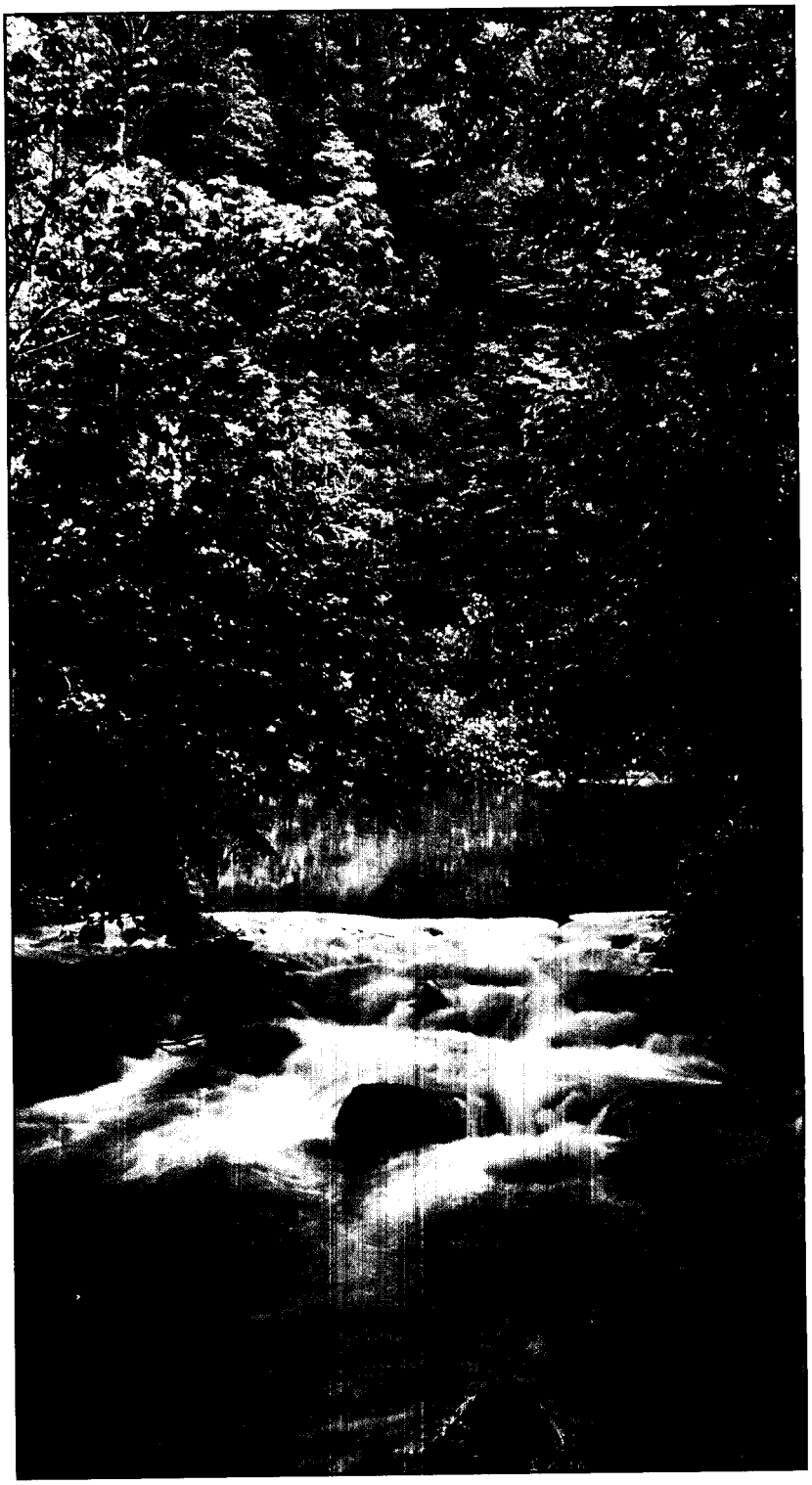
MISSOURI DEPARTMENT OF NATURAL RESOURCES

Division of Environmental Quality



A Guide to Services

Air Pollution Control Program

The Air Pollution Control Program has some 5 million "customers." Anyone in Missouri who breathes has a stake in air quality.

Problems with air quality may result from vehicle emissions or emissions from specific industrial facilities. Open burning, rock crushing, and fumes from small businesses such as dry cleaners are other sources of air pollution. The Air Pollution Control Program serves the public by addressing air quality problems in the following ways:

Planning:

This section develops state rules to control air pollution. It also works with the U.S. Environmental Protection Agency on plans to reduce air pollution in areas that violate federal air quality standards, and on other federal rule actions to control air pollution in Missouri. The section works with all interested parties, both public and private, to develop and coordinate pollution-preventive actions for a healthy living environment. A specialized group coordinates the computerized inspection of automobile emissions in the St. Louis area. The planning section also assists in educating young people about the problems caused by air pollution.

Enforcement:

The enforcement section responds to complaints about air quality and helps businesses comply with various federal, state, and local rules. They conduct routine site inspections and oversee the testing of smoke stacks, asbestos removal, and other sources of air pollution through regional offices (see page 11). When a source violates an air quality requirement, the enforcement staff works with the facility to correct the problem and may take additional action, including the assessment of penalties, necessary to obtain compliance with the requirement.

Technical Support:

This section researches the sources and effects of air pollution. They oversee an air monitoring network, which provides air quality data from more than 40 locations around the state. This data is analyzed and submitted to the national data base on air quality. In addition, the technical support section maintains an inventory of sources that emit air pollution.

Permits:

Staff in the permitting section review the permit applications of new and modified emission sources to ensure that facilities minimize the release of air contaminants into the air.

Larry Beck: Building A Business

Larry Beck, owner of Beck Materials in central Missouri, is the classic American entrepreneur. Over the past 25 years, he has built a small rock excavation business into a major operation that supplies high-quality crushed stone used in producing concrete and asphalt.

Beck feels his journey from running a small business to operating a bigger company has been challenging and interesting. Today the number of company employees have increased from three to more than 40. He has seen his business grow into four active quarries and stone crushing plants. In the middle of all this change, Beck has adhered to a guiding philosophy. "I like making things better," he says.

This statement is backed up by deeds. The company's large quarry inside the city limits of Jefferson City is being excavated so that it will be a desirable commercial property in another 15 or 20 years. Similarly, Beck plans to restore and improve other areas owned by the company as they are quarried. "That's what makes my job interesting, challenging and rewarding. That makes it worth everything," he says.

Of course, he is also quick to point out that doing things right takes revenue. From that standpoint, Beck is worried about the impact of environmental regulations. "This year we're going to spend over $200,000 on mandated regulatory compliance changes." Adds Beck, "Costs are much greater today, but the selling price of our materials is not much more than 20 years ago."

Beck's company deals effectively with compliance issues. His company is well-known for addressing environmental and public safety concerns in a conscientious manner. He served on the 1991 Land Reclamation Task Force that helped to develop the current state regulations used by the Land Reclamation Program to regulate industrial mineral open pits and in-stream sand and gravel operations — again Beck's actions reflect his interest in making things better.

In the end, Beck hopes that small businesses will not be strangled through regulations that waste resources. He believes that cooperation between industry and government agencies is the key. "There's always hope," he says, "I'm an optimist."

Hazardous Waste Program

Over 880 million pounds of hazardous waste are generated in Missouri each year. This amounts to more than 150 pounds of waste for each Missourian.

Many large firms produce wastes that are hazardous — meaning they are flammable, corrosive, reactive, or toxic. Small businesses such as dry cleaners, auto body shops and craft shops may also produce hazardous wastes.

Households in Missouri often generate wastes (not included in the total above) in the form of leftover paint thinner, old pesticides, dried out adhesives, drain cleaners and other products.

The Hazardous Waste Program works to keep water, soil and air from being polluted by hazardous wastes so people are not exposed to hazardous chemicals.

Superfund:

The Superfund and Federal Facilities Sections handle the cleanup of sites where hazardous wastes have been disposed. Hazardous wastes were often buried or poured on the ground. This has led to water pollution. Streams, groundwater and soil near hazardous waste sites are often contaminated. This makes cleanup extensive and expensive.

Although 62 sites have been cleaned up in the past 10 years, more than 160 Missouri properties are presently in the Superfund cleanup process.

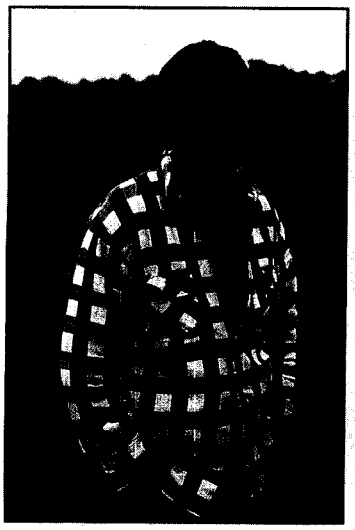
RCRA:

Other sections of the Hazardous Waste Program handle the requirements of federal and state laws that govern the treatment, storage, and disposal of hazardous wastes. These laws require generators of hazardous waste to register and to use a comprehensive tracking system.

Facilities that treat, store or dispose of hazardous wastes are required to obtain permits. They must also handle the waste according to certain procedures to prevent fires, explosions, leaks or other releases of hazardous waste to the environment.

Hazardous Waste Program staff inspect facilities that handle hazardous wastes to help ensure they are operated properly. The program also licenses hazardous waste transporters that meet state requirements. There are now 378 companies licensed to transport hazardous waste in Missouri. These companies operate 6,050 vehicles.

Program staff promote reducing the amount of hazardous waste generated since this helps prevent pollution. Staff also work with communities to plan the management of hazardous household wastes.



Don Graham: Seeing A Cleanup

"We know about iron poisoning," says Don Graham.

"You run out in front of a locomotive and that's just too much iron! It's hard on your system," continues Graham.

"But there are things we don't know about. That's why we're glad you folks are here testing our drinking water," concludes Graham.

Don, his brothers Lawrence and T.W., and their families own and live on farms adjoining a hazardous waste site five miles north of Sikeston.

Don and Lawrence walk on the site with employees of the Missouri Department of Natural Resources. They discuss the Quality Plating Superfund Site, an inactive five-acre site where electroplating wastes were dumped. These wastes are a byproduct of metal plating parts by electrolysis.

"We don't worry about drinking our well water. That is, if you and the Health Department people keep testing it and telling us it's safe!"

The Missouri Department of Health is presently testing nearby wells. It gauges whether electroplating wastes are reaching private wells. So far the news is good. No private wells have shown unsafe amounts of lead, zinc, cadmium, chromium, arsenic or other plating wastes.

Site cleanup work continues. This work decreases the further spread of contamination by removing the source. In September 1992, site neighbors saw 54 trailer truckloads of hazardous waste leave. Each contained 20 cubic yards of contaminated soil, metals and sludges found buried on the site. This waste went to a licensed hazardous waste containment cell in Peoria, Illinois.

The Quality Plating Superfund Site is one of 160 sites the Hazardous Waste Program's Superfund Section is working on to protect Missourians and their environment.

Don Graham is glad they are!

Public Drinking Water Program

The Public Drinking Water Program helps ensure that the water Missourians drink from public supplies meets current health standards.

The program helps prevent health risks by monitoring more than 80 chemical and radiological contaminants that could cause long-term or chronic health effects. Certain bacteria found in water that cause acute sickness also are monitored.

The Public Drinking Water Program provides the following services to ensure the best drinking water possible:

Financial Assistance:

The program can assist small communities in obtaining the financing needed for treatment systems.

Permits:

Engineers review engineering plans and reports for the construction or renovation of public drinking water systems. Their review helps guarantee that essential sanitary standards can be met before the state permits the project to begin. Water systems are evaluated for vulnerability to chemical or biological contaminants.

Operator Training:

Basic training, certification programs and in-plant instruction are coordinated for public water supply treatment operators so they can properly operate and maintain a waterworks facility.

Monitoring:

Drinking water facilities routinely submit water samples for analysis to either the state laboratory or a certified private laboratory. These test results are reported to the program to provide early detection of potential health problems.

Technical Assistance:

Staff review inspection reports and analytical data supplied by treatment systems to identify chronic water quality problems so assistance can be offered.

The program also provides technical assistance by overseeing installation of backflow prevention assemblies. These devices are installed to prevent contaminated water from flowing back into a clean water supply. The state has a certification and training program for backflow prevention assembly installers.

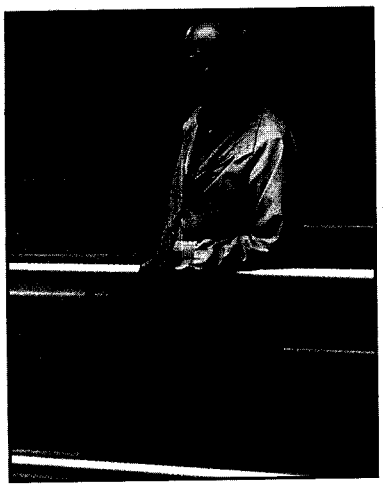
In the event of an emergency such as a hazardous chemical spill, the program notifies and advises public water supplies that could be affected.

Field Services:

Staff inspect public water systems' treatment, storage and distribution facilities to ensure they are built according to approved plans, and to ensure the system is operated and maintained properly.

Enforcement:

When water quality standards are not met, the water system is required to publish a notice informing the community affected by the problem. When significant violations occur, staff negotiate time-bound compliance agreements with the public water supplier. If the negotiations fail or if the agreements are broken, the case is referred to the Attorney General's Office for enforcement.



Cecil Fretwell: Ensuring Drinking Water

Right now, 25,000 people drink cleaner water because of Cecil Fretwell. And drinking water is assured for the future because of Fretwell's 10-year successful effort to regionalize the public drinking water supply in his corner of northeastern Missouri.

Fretwell has been chairman of the Clarence Cannon Wholesale Water Commission, which operates a drinking water treatment plant. Drawing water from Mark Twain Lake, the plant has the ability to supply drinking water to a seven-county area of the state.

His effort started 10 years ago when he purchased a bit of land for retirement in Missouri. However, he found that water quantity and quality in the area were uncertain. At that time, water was drawn from the Salt River, which received a great deal of runoff from nearby agricultural lands. The area also had experienced drought for several years. "I just wanted some water," he said to explain his becoming the leader in what became a visionary project.

Fretwell began working with the Department of Natural Resources to find another water source. He spearheaded a bond issue in 1989 to obtain funds for the project. The department's Public Drinking Water Program supplied over $1 million in financial assistance to help start construction.

Although the bond issue passed with a 95 percent favorable vote, Fretwell found its promotion challenging. He was charged with selling the idea of regionalizing water supplies in an area where each municipality had its own water supply.

Regionalization offered many advantages, according to Fretwell — a constant water supply, stable water costs, maintenance and repair in a central plant, and easier adoption of new standards and regulations.

Water Pollution Control Program

The Water Pollution Control Program protects Missouri's precious water resources, which are some of the most plentiful and varied in the nation.

However, water may be contaminated by specific discharge points, general sources and sources beneath the ground. Thus the following services of the Water Pollution Control Program are needed.

Water Quality Standards:

All waters of the state have been divided into a designated use category. These categories are aquatic life, livestock and wildlife watering, drinking water, irrigation, cool water fishing, cold water fishing, industrial water supply, boating, human health fish consumption, and whole body contact. Each use requires an appropriate level of water quality. Standards are set to protect these waters of the state for designated uses. These limits are reviewed and published on a three-year cycle under state and federal clean water laws.

Underground Storage Tanks:

Regulations control the construction, installation, operation and closure of underground storage tanks.

Permits:

Under authority of federal and state clean water laws, permits are issued to wastewater and storm water discharges, injection of water underground, and disposal of liquid or solid residue from domestic or industrial operations by land application. These permits limit the concentrations of pollutants, set conditions of discharges, and establish monitoring report requirements.

In many cases, before the state can issue a discharge permit, the applicant is required to evaluate alternatives to a discharge. Clean water is further assured by reviewing discharge data, inspecting equipment on-site, and monitoring reports to ensure that all permit conditions are met.

Pretreatment:

The toxicity, volume and other adverse aspects of industrial wastewater discharges are reduced through "pre-treatment" of wastewater before it is discharged to municipal sewage systems.

Non-point Source Management:

Non-point source pollutants such as sediment, pesticides or fertilizer can enter a waterbody from anywhere along the waterway. This program provides funds and technical assistance for locally administered projects to control this type of water pollution.

Enforcement:

Enforcement actions consist of a range of efforts, including technical assistance, administrative orders requiring a compliance action, compliance schedules written into permits, administrative penalities and referral for litigation.

Judy Koester: Preventing Water Pollution

Judy Koester, owner of a restaurant in Marshfield, Missouri, faced enforcement actions because of an illegal discharge into a stream. "My reaction?" said Judy Koester, "A nervous breakdown."

Koester had constructed a lagoon system, a series of three small ponds, to take care of the wastewater from her restaurant, Tiny's Smoke House Restaurant. When full, this lagoon system overflowed into the west fork of the Niangua river, and water quality tests of her discharge showed permit violations.

She tried to fix the problem by changing to all biodegradable detergents and making sure plates were scraped before washing, but water quality tests on the nearby stream still came back bad.

Koester then explored an engineering solution. An estimate from an excavating company to upgrade her lagoons came back at $60,000 to $70,000. "I hate the thought of anything running into our streams," said Koester. "I drink that water, too. We wanted to benefit the environment. But I don't want to go out of business, either."

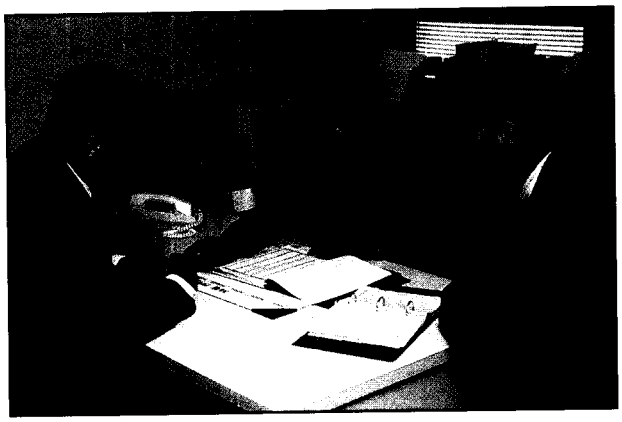
Koester approached the department with "Tell me what to do," and the Water Pollution Control Program sent out a staff person to provide technical assistance.

Staff found that the key was to install a different piping system. Putting one pipe in a different place kept the waste in the third lagoon for a longer period of time, and that allowed for better treatment. It also rerouted the waste onto a nearby field where it can provide nutrients for the pasture. The result was that no discharge went into the stream.

"What he devised was low-cost and efficient, and we haven't had problems since", said Koester. "Now we just mow the area once a month."

Thanks to Koester's persistence and technical expertise provided by the department, Missouri has a cleaner stream, and folks in Marshfield can still eat barbecue at Tiny's.

Regional Offices



Regional office staff trained in environmental issues work with local residents to solve local concerns.

The rich diversity of Missouri's people is almost as broad as its varied landscape. Farmers, business owners, bankers, teachers ... nearly everyone anywhere in the state has different perspectives and needs related to protecting Missouri's environment. To help local residents address local environmental concerns, the Missouri Department of Natural Resources' Division of Environmental Quality has six regional offices, all staffed with technicians and other professionals who work daily with local natural resource issues, problems and emergencies.

Department of Natural Resources' regional offices have been a part of the department since it was reorganized in 1974. Staff in the regional offices are trained in air pollution, water pollution, public drinking water, solid waste and hazardous waste issues.

Regional office staff seek to improve communications between citizens, policy makers and environmental professionals. Staff can explain how local issues impact the environment and often translate Missouri's environmental laws and regulations into plain English for local officials and residents. Specifically, regional offices provide the following services:

• **Public outreach at the local level.** Staff with different areas of expertise allow immediate access to many department services at the local level. To improve communications with local officials, industry and citizens, the Kansas City Regional Office implemented a "one-stop shop" pilot program to better serve northwest Missouri. The Kansas City Regional Office houses a geologist, a historic preservationist, an energy officer and a public information officer in addition to its technical staff.

• **Assistance for individuals and businesses located in the region.** Staff assist area residents and businesses in understanding and implementing Missouri's environmental laws and regulations. For example, the Solid Waste Management Unit of the Jefferson City Regional Office provides information on places accepting waste for reuse, reprocessing or proper disposal.

• **Inspections to make sure facilities are following Missouri environmental laws and regulations.** Staff generally perform unannounced inspections at facilities. To improve the efficiency of inspections, the department has encouraged cross training of its staff. Currently in place in the St. Louis Regional Office, this training might allow one person to conduct air and hazardous waste inspections that in the past required two or three people.

• **Investigation of citizens' concerns about potential violations of environmental protection laws and regulations.** Regional offices receive calls and letters from citizens who are concerned about specific environmental incidents near their homes or businesses. The department's Southwest Regional Office received 632 complaints and conducted 453 investigations during a six-month period in 1992.

• **A local perspective on regional issues in developing long-term solutions to environmental problems.** A 1981 drought caused serious water supply problems; the department's Northeast Regional Office worked with Cecil Fretwell, the Clarence Cannon Wholesale Water Commission, the department's Division of Geology and Land Survey, and the Public Drinking Water Program to propose that the water systems study the water supply potential of Mark Twain Lake. Today, the commission provides treated drinking water from the lake (see story on page 7.)

• **Protection for Missouri's water quality.** Regional offices track facilities that discharge treated wastewater to the environment. The Southeast Regional Office monitors over 400 facilities to ensure that permit conditions and limits protect the water quality of the streams, rivers and lakes in southeast Missouri.

To access the services available through the Department of Natural Resources' regional offices, call, write or stop by the office in your part of the state. (See map on back cover.)

For questions related to the environment in your part of the state, contact the appropriate office listed below:

Jefferson City Regional Office
1511 Christy Dr.
P.O. Box 176
Jefferson City, MO 65102-0176
(314) 751-2729

Southeast Regional Office
948 Lester St.
P.O. Box 1420
Poplar Bluff, MO 63901-1420
(314) 840-9750

St. Louis Regional Office
10805 Sunset Office Dr.
St. Louis, MO 63127-1017
(314) 822-0101

Northeast Regional Office
1409 Prospect Dr.
Macon, MO 63552-1930
(816) 385-2129

Kansas City Regional Office
3800 S Elizabeth Ave., Suite G
Independence, MO 64057-2652
(816) 795-8655

Southwest Regional Office
318 Park Central East, Suite 500
Springfield, MO 65806-2218
(417) 895-6950