



**DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349**

NGB-ARS-IHSE (40-5f)

November 18, 2005

MEMORANDUM FOR: Adjutant General AR ARNG, ATTN: MAJ [REDACTED] State
Occupational Health Office, Camp Robinson North Little Rock, AR 72118-2200.

SUBJECT: Transmittal of the Survey Reports for Augusta Armory, Bebe Armory, Sercey Armory and Herber Armory in AR.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.
- b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.
- f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, 10 December 1998, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2003, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.
- k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.

NGB-ARS-IHSE (40-5f)

November 18, 2005

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1. Industrial Hygiene Survey Report, OSHEA II, Industrial Hygiene Consulting, Fayetteville, NC.
2. General.
 - a. At the request of MAJ **Non-Responsive**, AR ARNG Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling at the Combined Support Maintenance Shop, Camp Robinson, North Little Rock, Arkansas, 22 May -2 June 2000.
 - b. The surveys were conducted by OSHEA II, Industrial Hygiene Consulting, P.O. Box 35669 Fayetteville, N.C. 28303
3. Findings. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed (See ENCL 1). The afford mentioned report has been designed, by this office, to extract personal data from the report which is enclosed. Additionally three Hearing Conservation Program Notification Letters were generated based on the noise dosimetry performed.
4. Recommendations.
 - a. Follow all recommendations made in paragraph 6 of the enclosed report. Request industrial hygiene (IH) services where needed to complete the recommendations.
 - b. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY2005. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2006 IHIP.
 - c. Have all HHIM data entered into the HHIM computer module.
 - d. Use the report to help in correcting all deficiencies noted.
 - e. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.
 - f. Contact the State Occupational Health Nurse, MAJ **Non-Responsive** for any medical Surveillance that may be needed.
 - k. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

November 18, 2005

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5. The present report addressed to the local facility commanders was divided in such a way that personal data can be detached and kept by the OHM or blocked when forwarding these reports to other entities within the appropriate offices of AR ARNG. If additional information is needed please contact Mr. **Non-Responsive**

Non-Responsive Regional Industrial Hygienist, NGB-AVN-SI, COMM. (404) 559-4174 OR 1 (800) 326-0262.

Non-Responsive

Regional Industrial Hygienist

CF: NGB-AVN-SH

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

ENCL.

as

**Arkansas Army National Guard
Augusta Armory**



MEMORANDUM FOR: Illinois Army National Guard: ATTN: MSG **Non-Responsive**
Armory Supervisor, Detachment 1 Co. B 2/153rd Infantry, Augusta, Arkansas 72012

SUBJECT: Baseline Industrial Hygiene Health Hazard Information Module (HHIM)
Survey of Detachment 1 Company B 2/153rd Infantry, 500 Hwy 64
Route 2 Box 378 Augusta, Arkansas 72006
October 21, 2005

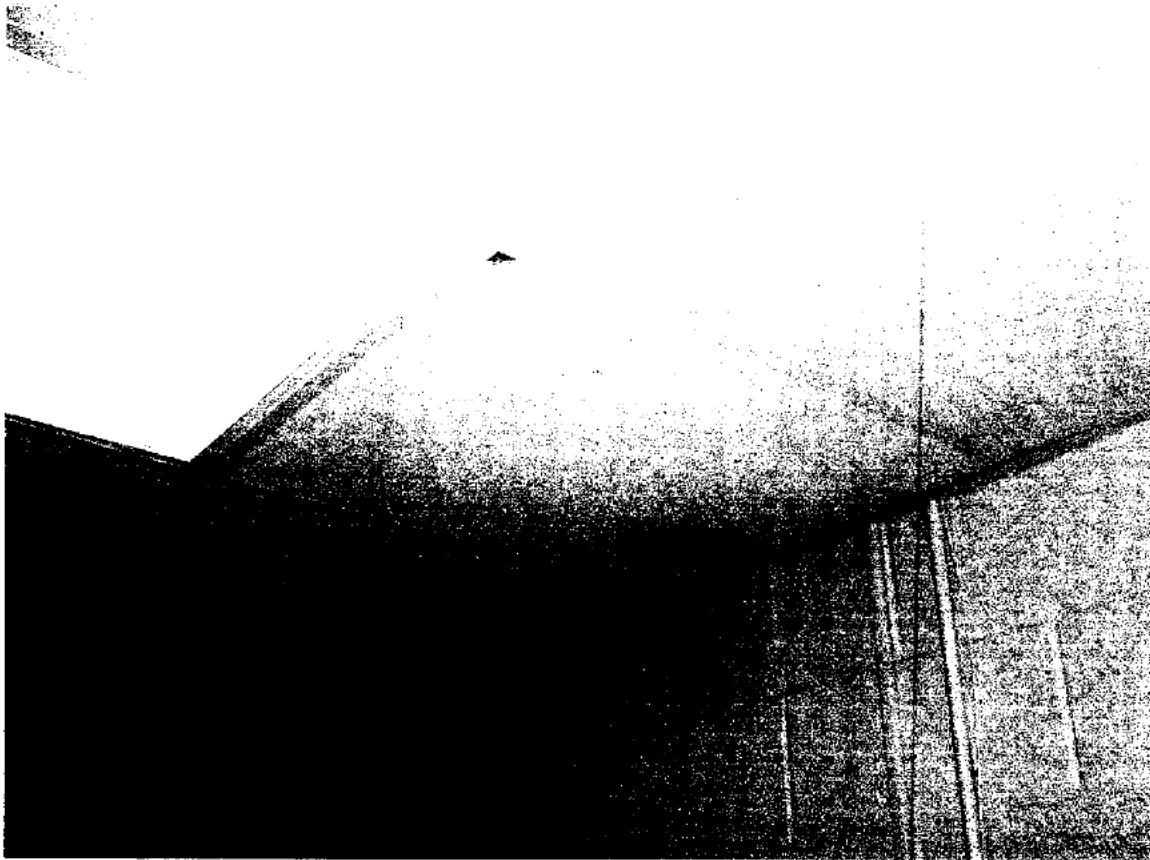
1. REFERENCES

- a. Title 29 Code of Federal Regulations (CFR) part 1910, Occupational Safety and Health Administration (OSHA).
- b. Army Regulation 385-10, The Army Safety Program, 29 February 2000.
- c. Army Regulation 11-34, The Army Respiratory Protection Program, 15 February 1990
- d. DA PAM 40-503, The Army Industrial Hygiene Program, 30 October 2000
- e. Industrial Ventilation, 25th Edition, The American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- f. National Guard Regulation 385-10, Army National Guard Safety and Occupational Health Program 20 December 1989
- g. IES Lighting Handbook, Application Volume 2000, Illumination and Engineering Society of North America.
- h. DA PAM 40-501, Hearing Conservation Program, 10 December 1998
- i. Technical Bulletin (TB MED) 503, The Army Industrial Hygiene Program, 1 February 1985,
- j. Army Regulation (AR) 40-5, Preventive Medicine, 22 July 2005

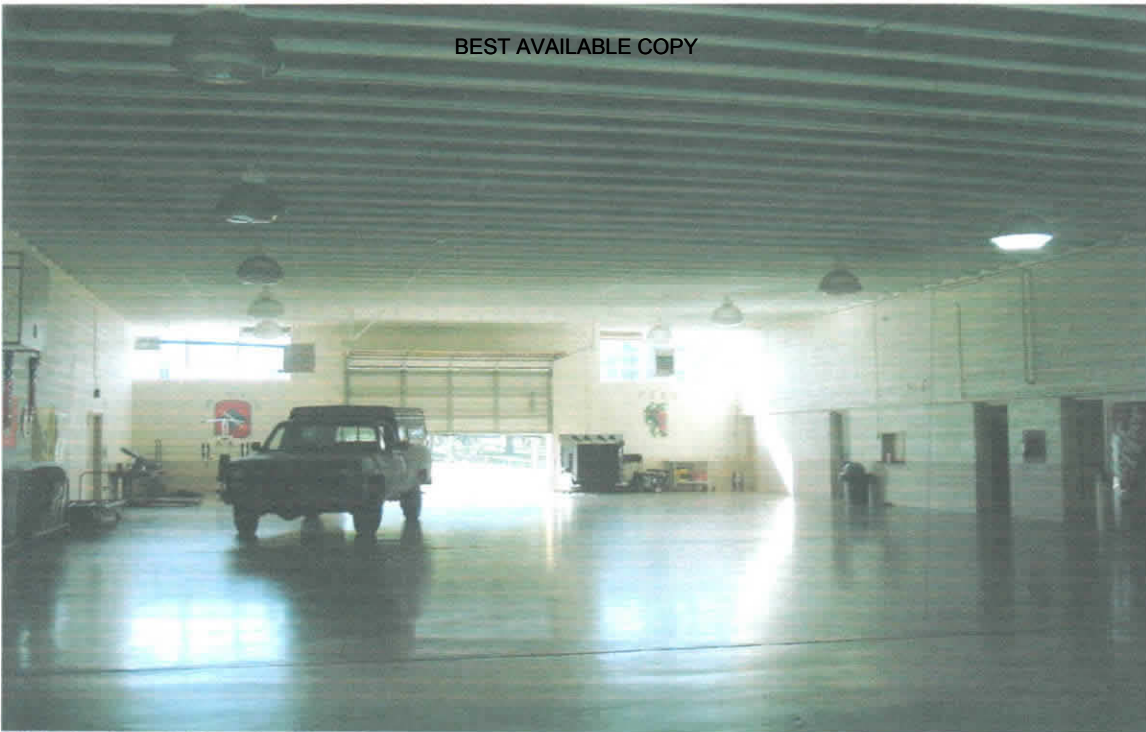
2. GENERAL: At the request of Mr. **Non-Responsive** National Guard Bureau South, Regional Industrial Hygienist, Atlanta, Georgia, a Health Hazard Information Module Baseline Survey was performed at Detachment 1 Co. B. 2/153rd Infantry, Augusta Arkansas. The purpose of this survey was to evaluate health hazards, existing controls in the work site to perform a baseline survey in accordance with references 1a through 1j and collect bulk samples.

3. FINDINGS:

Armory Site Description: The armory is occupied by Detachment 1 Company B 2/153rd Infantry. One full time individual performs daily administrative duties six to eight hours a day. The armory was constructed around the 1950's and contains several offices/ four administrative areas, one kitchen, supply rooms, and a weapons room/vault. There was one office with a water circle in the ceiling. The office is used only on drill weekends. MSGT **Non-Responsive** was stated that it was a new leak that had occurred right before this survey. No tile was found friable on the floors or in the ceilings. The armory has never contained an indoor firing range. Illumination levels were recorded in all administrative areas, classrooms, training rooms and supply areas throughout the Armory. In some areas bulbs were found blown, missing or fuse problems existed.



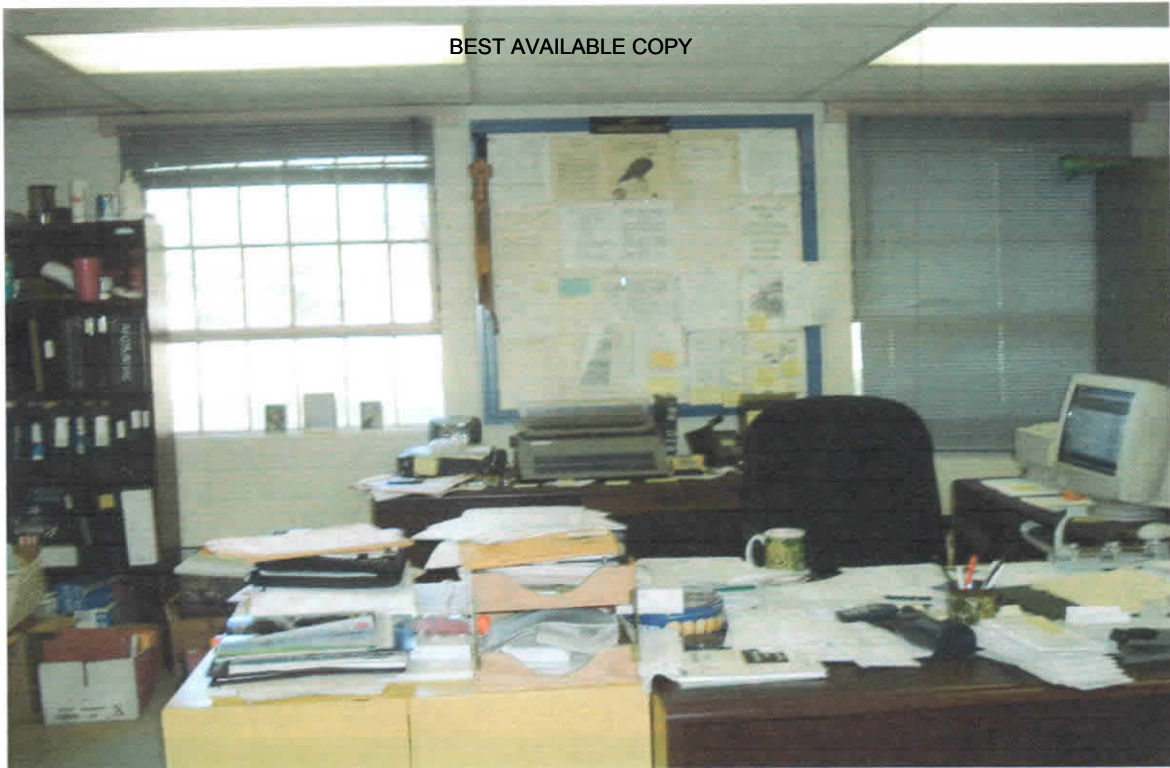
Illumination levels in this office ranged from 65.1 to 63.7 foot candles.



This is the drill hall. The floor is concrete and the ceiling as well. There is one bay door on the west side of the armory. Illumination levels were 44.4 to 59.0 foot candles.

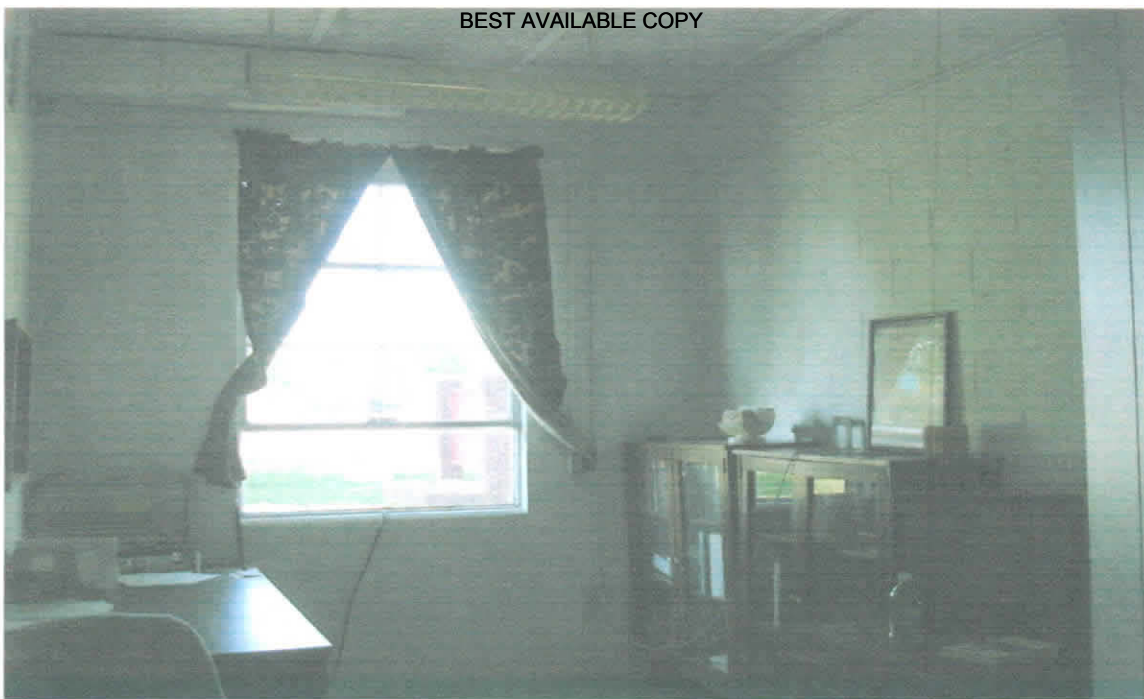
This class/training room illumination levels ranged from 55.1 to 63.5 foot candles.





The supervisor's office is above and one of the administrative areas below. Lighting measurements in the supervisor's office was 57.2 to 58.3 foot candles.





This is the kitchen. The seating area illumination levels were 48.9 to 54.2 foot candles.



This is the food prep area. No food is prepared by personnel. Lighting in the prep area was 55.6 to 57.1 foot candles.



a. **Hearing Conservation Program:** All employees are enrolled in the Hearing Conservation Program and receive annual audiograms.

b. **HAZCOM:** HAZCOM training had been performed prior to this survey. MSDS were available for their inventory.

c. **Administrative Areas:** Personnel perform administrative duties that consist of reading, handling and generating paper work. Employees use computers and answer phones also.

d. Wipe sampling was performed in the drill hall area, kitchen and vault. All sample results detected no presence of lead.

e. **Military Vehicle Area:** Military vehicles are used to run errands or transport supplies on drill weekends. Armory's personnel perform no maintenance operations or vehicle repairs. Vehicles are presently at Fort Carson. They have not been returned since the unit's deployment.

f. A noise level survey was not performed, because the vehicles were not on site. Noise hazard caution signs are posted on vehicles and hearing protection is available and easily assessable for personnel and visitors.

g. **Arms Room/Weapons Vault:** There were no weapons stored in the armory's vault. It is reported that no weapons cleaning is performed inside of the weapons storage vault.

h. **Solvent Bath:** During drill training the solvent bath is used. The fluid in the solvent bath tank is warmed and weapons are cleaned on the drill hall floor. Full time Personnel place their weapon in the cleaning solution for a few minutes, remove it and finish the cleaning process. It is stated that it is a two part process. The cleaning process takes less than thirty minutes.

4. **Technical Assistance:**

For further assistance concerning this survey, you may contact Mr. [Non-Responsive]

[Non-Responsive] NGB Regional Industrial Hygienist at 1-800-326-0262.

[Non-Responsive]

Industrial Hygienist

CF: State Safety and Occupational Health Office
ATTN: LTC [Non-Responsive]
Camp Robinson, Arkansas

CF: State Safety and Occupational Health Office
ATTN: Major [Non-Responsive]
Camp Robinson, Arkansas

RECOMMENDATIONS

- a. Hearing Conservation Program. Continue with annual audiometric testing for relevant personnel in accordance with reference 1h.
- b. Hazardous communication or HAZCOM refresher training. Continue with annual HACOM training. Dated and signed records should be maintained of all HAZCOM training administered.
- c. Fluorescent bulbs need to be replaced immediately after they have become blown to give the maximum amount of light in classroom, offices, and training areas in accordance with reference 1h. A work order should be submitted to the appropriate office requesting repair/ replacement of fuses in non-functioning light fixtures.
- d. Weapons are never to be cleaned inside the weapon's storage vault or any other enclosed area without adequate ventilation in accordance with references 1a and 1c. Personal Protective equipment, such as goggles, should be worn to protect eyes from splash hazards and gloves should be worn to prevent solvent absorption through the skin.
- e. Based on the limited, short duration, nature, of contact cleaners, and solvents used at this armory, there is no need for a Respiratory Protection Program, neither is there a need to perform atmospheric monitoring during weapons cleaning if windows and doors are open to circulate air during weapons cleaning.

Enclosure No. 1

INSTRUMENTATION: The following survey instrumentation was utilized to obtain noise, illumination or ventilation measurements. All equipment was used according to manufacturer/ manual recommendations. All equipment was calibrated prior to and after use.

Nomenclature	Serial No.
Extech Light Meter	L595339
Extech Sound Level Meter	6134582
Extech Sound Calibrator	5431625
Extech Thermo Anemometer	9184009
Metrosonic Dosimeters	5427-5436

Enclosure No. 2

Hazardous Material inventory

Scouring powder

Razor green

General purpose Detergent

Windex glass cleaner

Enclosure No. 3

OSHEA II Industrial Hygiene Consulting
IH Survey, Arkansas Amory
October 2005

Full time Personnel

MSG **Non-Responsive**

Enclosure No. 4



**DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
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NGB-ARS-IHSE (40-5f)

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Non-Responsive

Regional Industrial Hygienist

CF: NGB-AVN-SH

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

ENCL.

as

**Arkansas Army National Guard
Beebe Armory**



OSHEA II IH CONSULTING PO BOX 35669 FAYETTEVILLE, NC 28303

MEMORANDUM FOR: Illinois Army National Guard: ATTN: SSG [REDACTED] Non-Responsive
Armory Supervisor, Detachment 1 HHC 39th Brigade, Beebe, Arkansas 72012

SUBJECT: Baseline Industrial Hygiene Health Hazard Information Module (HHIM)
Survey of Detachment 1 HHC 39th Brigade, 1513 West Center Street,
Beebe, Arkansas 72012-2109
October 21, 2005

1. REFERENCES

- a. Title 29 Code of Federal Regulations (CFR) part 1910, Occupational Safety and Health Administration (OSHA).
- b. Army Regulation 385-10, The Army Safety Program, 29 February 2000.
- c. Army Regulation 11-34, The Army Respiratory Protection Program, 15 February 1990
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- j. Army Regulation (AR) 40-5, Preventive Medicine, 22 July 2005

Oseha II Industrial Hygiene Consulting
IH Survey Arkansas Amory
October 2005

2. **GENERAL:** At the request of Mr. **Non-Responsive** National Guard Bureau South, Regional Industrial Hygienist, Atlanta, Georgia, a Health Hazard Information Module Baseline Survey was performed at Detachment 1 HHC 39th Brigade, Beebe Arkansas. The purpose of this survey was to evaluate health hazards, existing controls in the work site to perform a baseline survey in accordance with references 1a through 1j and collect bulk samples.

Illumination levels were recorded in all administrative areas, classrooms, training rooms and supply areas throughout the Armory. In some areas bulbs were found blown or missing

3. FINDINGS:

Armory Site Description: The armory is occupied by Detachment 1 HHC 39th Brigade. There is one full time individual who perform administrative duties. The armory was constructed around 1950's and contains several offices/ four administrative areas, one combined kitchen/mess hall, supply rooms, and a weapons room/vault. The armory was well kept but there was no evidence of leaking in any of the ceiling. No tile was found friable on the floors or in the ceilings.

The armory has never contained an indoor firing range.



The drill hall floor and ceiling of the armory is concrete.



This is the supervisor's office. Lighting in this office was 50.9 to 76.7 Foot Candles.



This is the administrative, copy, fax and file storage area. Illumination levels in this area were 61.3 to 83.3 Foot candles.



The office above is used only on drill weekends and below is the training Classroom. Lighting ranged from 62.4 to 65.9 Foot candles.



The kitchen is not utilized to prepare food. Food is catered at this time and has been since deployment began. Wipe sampling was performed in the kitchen. Lighting ranged from 58.1 to 71.3 Foot candles.



Vehicles are usually stored in the fenced. There were only two vehicles on site. It was stated that they are waiting for the vehicles to be returned from Fort Carson.

a. Hearing Conservation Program: All employees are enrolled in the Hearing Conservation Program and receive annual audiograms.

b. HAZCOM: HAZCOM training had been performed prior to this survey. MSDS were available for their inventory.

c. Administrative Areas: Personnel perform administrative duties that consist of reading, handling and generating paper work. Employees use computers and answer phones also.

d. Wipe sampling was performed in the drill hall area, kitchen and vault. All twenty samples taken from the drill hall, kitchen and weapon vault were none detected.

e. Military Vehicle Area: Military vehicles are used to run errands or transport supplies on drill weekends. Armory's personnel perform no maintenance operations or vehicle repairs. Vehicles are presently at Fort Carson. They have not been returned since the unit's deployment.

f. A noise level survey was not performed, because the vehicles were not on site. Noise hazard caution signs are posted on vehicles and hearing protection is available and easily assessable for personnel and visitors.

g. Arms Room/Weapons Vault: There in the armory's vault. It is reported that no weapons cleaning is performed inside of the weapons storage vault. It was also stated that weapons are cleaned before being placed in the arm's vault.

h. Solvent Bath: During drill training the solvent bath is used. The fluid in the solvent bath tank is warmed and weapons are cleaned on the drill hall floor. Full time Personnel place their weapon in the cleaning solution for a few minutes, remove it and finish the cleaning process. It is stated that it is a two- part process. The cleaning process takes less than thirty minutes.

4. Technical Assistance:

For further assistance concerning this survey, you may contact Mr. **Non-Responsive**
NGB Regional Industrial Hygienist at 1-800-326-0262.

Non-Responsive

Industrial Hygienist

CF: State Safety and Occupational Health Office
ATTN: LTC **Non-Responsive**
Camp Robinson, Arkansas

CF: State Safety and Occupational Health Office
ATTN: Major **Non-Responsive**
Camp Robinson, Arkansas

RECOMMENDATIONS

- a. Hearing Conservation Program. Continue with annual audiometric testing for relevant personnel in accordance with reference 1h.
- b. Hazardous communication or HAZCOM refresher training. Continue with annual HACOM training. Dated and signed records should be maintained of all HAZCOM training administered.
- c. Fluorescent bulbs need to be replaced immediately after they have become blown to give the maximum amount of light in classroom, offices, and training areas in accordance with reference 1h. A work order should be submitted to the appropriate office requesting repair/ replacement of fuses in non-functioning light fixtures.
- d. Weapons are never to be cleaned inside the weapon's storage vault or any other enclosed area without adequate ventilation in accordance with references 1a and 1c. Personal Protective equipment, such as goggles, should be worn to protect eyes from splash hazards and gloves should be worn to prevent solvent absorption through the skin.
- e. Based on the limited, short duration, nature, of contact cleaners, and solvents used at this armory, there is no need for a Respiratory Protection Program, neither is there a need to perform atmospheric monitoring during weapons cleaning if windows and doors are open to circulate air during weapons cleaning.

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Extech Thermo Anemometer	9184009
Metrosonic Dosimeters	5427-5436

Enclosure No. 2

Hazardous Material inventory

BEST AVAILABLE COPY

Scouring powder

Razor green

General purpose Detergent

Windex glass cleaner

Full time Personnel

SSG Non-Responsive
SFC [REDACTED]

Enclosure No. 4

HHIMS

INDUSTRIAL HYGIENE SURVEY FORM

BEST AVAILABLE COPY

ARLOC_05000

INSTALLATION_ARARNG

BLDG_____

ROOM_____

LOCATION	OPERATION	SURVEY DATE	EVALUATOR	MACOM
MN	ADO	YR 05/10/17	Non-Responsive	NG

SUPERVISOR	ORGANIZATION	RAC
SSG Non-Responsive	1513 West Center St. Beebe, Arkansas 72012	3

PH NO.	COMMERICAL/DSN	FREQUENCY	# CIV	# MIL	# CONTRACT	# LOC
501-882-5417	x /	7-8 hours/ day	1 /			/

LAB HOODS	VAPOR/DEGREASERS	PAINTBOOTH	SANDBLASTING BOOTH	OPEN SURFACE
0	0	0	0	0
NO VENTILATION UNITS				

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED

PPE

REQUIRED UTILIZED

GLOVES

R U

ACID

/ /

COLD SURFACE

/ /

HOT SURFACE

/ /

NBC AGENTS

/ /

OIL

/ /

SOLVENTS

/ /

SURGICAL GLOVES

/ /

OTHER

/ /

RESPIRATOR

R U

AIRLINE

/ /

ABRASIVE BLASTING HOOD

/ /

DISPOSABLE

/ /

FULL FACE AIR PURIFYING

/ /

1/2 FACE AIR PURIFYING

/ /

POWERED AIR PURIFYING

/ /

3/4 FACE AIR PURIFYING

/ /

SCBA

/ /

EYES/FACE

R U

CHEM/SPLASH

/ /

FULL FACE SHIELD

/ /

CHEM/SAF IMPACT

x / x

SAFETY IMPACT

/ /

WELDING HELMET

/ /

WELDING GOGGLES

/ /

LASER EYE PROTECT

/ /

OTHER

/ /

EARS/ HEARING

R U

CANAL CAPS

/ /

>85-108 STDY EPLG

x / x

" "HLMT/PLG

/ /

" " MUFF ONLY

/ /

108-118 MUFF/PLG

/ /

118 OR> MUFF/PLG

/ /

W/ TIME LIMIT

/ /

OTHER

/ /

BODY

R U

APRONS

/ /

COLD WEATHER CL

/ /

COVERALLS

/ /

FULL BODY SUIT

/ /

HEAT REFLECTIVE

/ /

VEST/SUIT

/ /

SAFETY BELT/ HARNESS

/ /

SPECIAL PURPOSE CLO

/ /

OTHER_BDU

x / x

HEAD AND FEET

R U

COLD WEATHER BT&HAT

/ /

HARD HAT

/ /

IMPERMEABLE BOOTS

/ /

SAFETY SHOE CONDUCT

/ /

SAFETY NON CONDUCT

x / x

OTHER

/ /

	CAS CODE	PAC	EPC	HAZARD DESCRIPTION
PONOISECO	P0noisecco	2	0	Noise, continuous
POFOOTHAZ	P0stress	3	0	Mental / physical stress
POFLYPROJ	P0lifting	3	D	Heavy lifting
POEYHAZA	P0eyehaza	2	A	Eye Hazards
POFLAMMHAZ				
POLIFTING				
POSHARPOBJE				
POELSHOCK				
COLUBEOL				

DESCRIBED OPERATION

Administrative duties are performed six to eight hours a day which consists of answering phones, using computers, generating paper work and running errands for supplies.

PERSONNEL - SSG Bergan Male Civ

DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349

NGB-AVN-SI

March 5, 2003

MEMORANDUM FOR: The Adjutant General of Arkansas, ATTN : COL
Non-Responsive Safety & Occupational Health Manager,
Camp Robinson North Little Rock, AR 72118-2200.

SUBJECT: Transmittal of Boonville Indoor Firing Range,
Fayetteville Indoor Firing Range, Paris Indoor Firing Range
and Rogers Indoor Firing Range wipe sample results.

1. References.

- a. 385-10, Army Safety Program
- b. National Guard Regulation, AR 385-15, Policy,
Responsibilities, and Procedures for
Inspection/Evaluation and use of ARNG Indoor Firing
Ranges, Draft March 2000
- c. Army National Guard Guidelines for Housekeeping,
Rehabilitation and Conversion of Indoor Firing Ranges,
Draft NGB Pam 385-15
- d. OSHA Standards 29 CFR (Code of Federal Regulations),
1910.1025, Lead Standard
- e. OSHA Standards 29 CFR (Code of Federal Regulations),
1926.62, Construction Standard

2. General. The sample results from samples taken at the
Boonville Indoor Firing Range, Fayetteville Indoor Firing
Range, Paris Indoor Firing Range and Rogers Indoor Firing
Range, AR by SFC Joe Teed are enclosed.

3. Findings.

a. A review of the sampling results show at least one
sample in each range with high concentrations of lead dust
present at the time of the survey. The high levels of the
wipe sampling require further decontamination of the firing
range and equipment in the Boonville Indoor Firing Range,

range and equipment in the Boonville Indoor Firing Range, Fayetteville Indoor Firing Range, Paris Indoor Firing Range and Rogers Indoor Firing Range.

4. Recommendations.

- a. Continue decontamination process until clearance sample meet the required standard.
- b. Closely follow all recommendations in Ref. 1. b. when decontaminating ranges. After decontamination perform a complete re-sampling following the same protocol.
- c. Provide scheduled cleaning and maintenance to those firing ranges new, old or retrofitted to preclude the accumulation of lead dust.
- d. Follow the provisions of reference 1.e above for any construction or re-modeling project for any firing range to be renovated for other use.

4. If additional information is needed about the industrial hygiene survey or lead wipe sample results, please contact Mr. **Non-Responsive** Regional Industrial Hygienist, NGB-AVN-SI, 1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

ENCL.
as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.



February 10, 2003

Non-Responsive

National Guard Bureau Region-South IH
510 Plaza Drive
Suite 1530
Atlanta, GA 30349
TEL: (404) 559-4174
FAX (404) 559-4175

RE: Booneville Armory AR

Order No.: 0302111

Dear Non-Responsive

Analytical Environmental Servs, Inc. received 25 samples on 2/5/03 1:00:00 PM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative. AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water, effective 07/01/02-06/30/03.
- AIHA Certification number 505 for analysis of Air, Paint Chips, Soil and Dust Wipes, effective until 03/01/03.

These results relate only to the items tested. This report may only be reproduced in full and with written permission from the laboratory.

Attached report contains 9 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Non-Responsive

Project Manager

030211

BULK SAMPLE DATA

For use of this form see USAEHA IG 141; the proponent is HSB-10.

Return Address (complete address including Zip Code)

National Guard
ATTN: ARNG - HS AIR FULLER
P.O. Box 17845

Point of Contact (name/AUTOVON)

SFC Non-Responsive

4625095 / 501-212-5095

Sampled Instrumentation 3035-0965

Project Number

ARLOC

Booneville Armory AR

Samples Collected By

SFC Non-Responsive

Date Collected

23 Jan 03

Date Shipped

27 Jan 03

Description of Operation

LEAD SAMPLING OF INDOOR FIRING RANGE

Location (BLOG/AREA)

Closed IFR

Associated Complaints (be specific)

Associated Air Samples

If yes, list sample numbers

☐ Yes☐ No

Label Information

Trace Name

Lot

Manufacturer

Address

MSDS Attached

☐ Yes☐ No

Analysis Desired

LEAD

Lab Use Only	Sample No.	Constituents	Results	Remarks
001	1	Top left Wall		
002	2	Middle left Wall		
003	3	Bottom Left Wall		
004	4	Top Left Bullet Stop End		
005	5	Middle Bullet Stop End		
006	6	Bottom Right Bullet Stop End		
007	7	Top Right Wall		

Comments to Lab:

Lab Use Only

Analyst (signature)

Reviewed by (signature)

Date Received

Date Reported

Procedures performed

Comments:

BULK SAMPLE DATA

For use of this form see USARPA TO 141; the proponent is USAB-LG.

Return Address (complete address including Zip Code)

National Guard
ATTN: ARNG-HQ AIR FULLER
B.O. Box 12945Point of Contact (name/AUTOVON)
SFC Non-Responsive

DSN 962-5095 / 501-212-5095

Sampled Installation 3035-0965

Project Number

ARLOC

Boonville Army AR

Samples Collected By

Non-Responsive

Date Collected

23 Jan 03

Date Shipped

27 Jan 03

Description of Operation

LEAD SAMPLING OF FIRING RANGE

Location (Bldg/Area)

Closed IFR

Associated Complaints (be specific)

Associated Air Samples

If yes, list sample numbers

☐ Yes ☐ No

Label Information

Trade Name

DSN

Manufacturer

Address

MSDS Attached

☐ Yes ☐ No

Analysis Desired

LEAD

Lab Use Only	Sample No.	Constituents	Results	Remarks
008	8	Middle Right Wall		
009	9	Bottom Right Wall		
010	10	Bottom Rear Wall		
011	11	Middle rear Wall		
012	12	Top Rear Wall		
013	13	Floor Right Bullet Stop		
014	14	Floor Center		

Comments to Lab:

Lab Use Only

Analyst (initials)

Reviewed By (initials)

Date Received

Date Reported

Procedures Performed

Comments:

BULK SAMPLE DATAFor use of this form see: **USAFER TO 141**; the proponent is **HSB-LO**.

Return Address (complete address including Zip Code)

National Guard
ATTN: ARNG - HS AIR FILLER
P.O. Box 17365

Point of Contact (Name/AUTOVON)

SFC **Non-Responsive**

DSN 962-5095 / SCI-212-5095

Sampler Instrumentation 9035-0005

Project Number

ARLOC

Booneville Army AR

Samples Collected By

Non-Responsive

Date Collected

23 Jan 03

Date Shipped

27 Jan 03

Description of Operation

LEAD SAMPLING OF FIRING RANGE

Location (BLOC/AREA)

Closed IFR

Associated Complaints (be specific)

Associated Air Samples

If yes, list sample numbers

☐ Yes☐ No**Label Information**

Trace Name

ASH

Manufacturer

Address

SDS Attached

☐ Yes☐ No

Analysis Desired

LEAD

Lab Use Only	Sample No.	Constituents	Results	Remarks
015	15	Floor Left Rear Wall		
016	16	Ceiling Left Bullet Stop		
017	17	Ceiling Center		
018	18	Ceiling Right Rear Wall		
019	19	Observation Room Front Wall		
020	20	Observation Room Rear Wall		
021	21	Inside Observation Room Deck		

Comments to Lab:

Lab Use Only

Analyst (Signature)

Reviewed by (Signature)

Date Received

Date Reported

Procedures Performed

Comments:

BULK SAMPLE DATA

For use of this form see USAERA IG 141; the proponent is USHB-10.

Return Address (complete address including Zip Code) National Guard ATTN: WING-16 (AIR FULLER) B.O. Box 10055		Point of Contact (Name/AUTOVON) SPC Non-Responsive DSU 962-5095 / SU 212-5095		
Sampled Instrument (DS-3035-0005)	Project Number	ARLOC		
Bourneville Amory AR				
Samples Collected By Non-Responsive	Date Collected 23 Jan 03	Date Shipped 27 Jan 03		
Description of Operation LEAD SAMPLING OF FIRING RANGE		Location (BSCG/AREA) Closed IFR		
Associated Complaints (be specific)				
Associated Air Samples <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, list sample numbers				
Label Information				
Trade Name	NSN	Manufacturer		
Address		MSDS Attached <input type="checkbox"/> Yes <input type="checkbox"/> No		
Analysis Desired LEAD				
Lab Use Only	Sample No.	Constituents	Results	Remarks
012	22	Observation Ram Vests		
013	23	Blank 1		
014	24	Blank 2		
015	25	Blank 3		
	26			
	27			
	28			
Comments to Lab:				
Lab Use Only				
Analyst (Signature)	Reviewed By (Signature)	Date Received	Date Reported	
Procedures Performed		Comments:		

AERB Form 0-1, 1 Oct 84

Replaces AERB Form 0, 1 Oct 80 when it applies.

ATTN: PT GEN

Diagram illustrating the layout of a room, divided into four quadrants by a horizontal and vertical line. The quadrants are labeled as follows:

- Top-Left Quadrant:**
 - Top (4)
 - Bottom (6)
- Top-Right Quadrant:**
 - BULLET STOP (5)
 - Bottom (6)
- Bottom-Left Quadrant:**
 - LEFT WALL (2)
 - Top (1)
 - Bottom (3)
- Bottom-Right Quadrant:**
 - RIGHT WALL (7)
 - Top (7)
 - Bottom (9)

The central area is labeled with the following locations:

- Lt. Floor (15)
- Lt. Ceil. (16)
- Rt. Floor (13)
- Rt. Ceil. (18)

The rear wall is labeled REAR WALL (11) and the top of the rear wall is labeled Top (12).




Diagram illustrating the components of a person's head and torso, labeled as follows:

- WALLS
- CEILING
- FLOOR

Received: AMISET GEN
2/15/13 1200

Analytical Environmental Services, Inc.

Sample Receipt Checklist

Client GANGBDate and Time 2/15/03 13:00Work Order Number 0302111Received by Non-ResponsiveChecklist completed by Non-ResponsiveDate 2/15/03Reviewed by Non-Responsive 2/15/03

Initials

Date

Carrier name: FedEx ☐ UPS ☐ Courier ☐ Client ☐ US Mail ☒ Other ☐

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Was TAT marked on the COC? Yes ☐ No ☒

Proceed with Standard TAT as per project history? Yes ☒ No ☐ Not Applicable ☐

Container/Temp Blank temperature in compliance? Yes ☒ No ☐

Cooler #1 Ambient Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler #5 ☐ Cooler #6 ☐

Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐

Water - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒

Adjusted? ☐ Checked by ☐

Any No and/or NA (not applicable) response must be detailed in the comments section below:

Client contacted ☐ Date contacted: ☐ Person contacted ☐Contacted by: ☐ Regarding ☐

Comments:

Corrective Action

Analytical Environmental Servs, Inc.

Date: 2/10/03

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: National Guard Bureau Region-South IH
Project: Booneville Armory AR
Project No: Booneville Arm
PO No:

Lab Order: 0302111
Date Received: 2/5/03 1:00:00 P
Matrix: Wipe
Analyst: MM

Laboratory ID	Client Sample ID	Results	Units	MDL	DF	Date Collected	Date Analyzed
0302111-001A	BOONEVILLE-1	BRL	µg, Total	2.83	1	1/23/03	2/10/03
0302111-002A	BOONEVILLE-2	60.0	µg, Total	2.83	1	1/23/03	2/10/03
0302111-003A	BOONEVILLE-3	848	µg, Total	2.83	1	1/23/03	2/10/03
0302111-004A	BOONEVILLE-4	731000	µg, Total	1110	391	1/23/03	2/10/03
0302111-005A	BOONEVILLE-5	70400	µg, Total	283	100	1/23/03	2/10/03
0302111-006A	BOONEVILLE-6	745000	µg, Total	1120	395	1/23/03	2/10/03
0302111-007A	BOONEVILLE-7	3330	µg, Total	7.92	2.8	1/23/03	2/10/03
0302111-008A	BOONEVILLE-8	628	µg, Total	2.83	1	1/23/03	2/10/03
0302111-009A	BOONEVILLE-9	139	µg, Total	2.83	1	1/23/03	2/10/03
0302111-010A	BOONEVILLE-10	290	µg, Total	2.83	1	1/23/03	2/10/03
0302111-011A	BOONEVILLE-11	74.0	µg, Total	2.83	1	1/23/03	2/10/03
0302111-012A	BOONEVILLE-12	104	µg, Total	2.83	1	1/23/03	2/10/03
0302111-013A	BOONEVILLE-13	9910	µg, Total	27.2	9.62	1/23/03	2/10/03
0302111-014A	BOONEVILLE-14	3250	µg, Total	7.75	2.74	1/23/03	2/10/03
0302111-015A	BOONEVILLE-15	459	µg, Total	2.83	1	1/23/03	2/10/03
0302111-016A	BOONEVILLE-16	869	µg, Total	2.83	1	1/23/03	2/10/03
0302111-017A	BOONEVILLE-17	48.0	µg, Total	2.83	1	1/23/03	2/10/03
0302111-018A	BOONEVILLE-18	68.0	µg, Total	2.83	1	1/23/03	2/10/03
0302111-019A	BOONEVILLE-19	252	µg, Total	2.83	1	1/23/03	2/10/03
0302111-020A	BOONEVILLE-20	196	µg, Total	2.83	1	1/23/03	2/10/03
0302111-021A	BOONEVILLE-21	30.0	µg, Total	2.83	1	1/23/03	2/10/03
0302111-022A	BOONEVILLE-22	87.0	µg, Total	2.83	1	1/23/03	2/10/03
0302111-023A	BOONEVILLE-23	BRL	µg, Total	2.83	1	1/23/03	2/10/03
0302111-024A	BOONEVILLE-24	BRL	µg, Total	2.83	1	1/23/03	2/10/03
0302111-025A	BOONEVILLE-25	BRL	µg, Total	2.83	1	1/23/03	2/10/03

Qualifiers: MDL - Method Detection Limit
 ND - Not Detected at the Reporting Limit

DF - Dilution Factor

DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349

NGB-AVN-SI

March 28, 2003

MEMORANDUM FOR: The Adjutant General of Arkansas, ATTN : COL
Non-Responsive Safety & Occupational Health Manager,
Camp Robinson North Little Rock, AR 72118-2200.

SUBJECT: Arkadelphia, AR, Fayetteville, AR, Camden, AR and
Paris, AR Indoor Firing Range wipe sample results.

1. References.

- a. 385-10, Army Safety Program
- b. National Guard Regulation, AR 385-15, Policy, Responsibilities, and Procedures for Inspection/Evaluation and use of ARNG Indoor Firing Ranges, Draft March 2000
- c. Army National Guard Guidelines for Housekeeping, Rehabilitation and Conversion of Indoor Firing Ranges, Draft NGB Pam 385-15
- d. OSHA Standards 29 CFR (Code of Federal Regulations), 1910.1025, Lead Standard
- e. OSHA Standards 29 CFR (Code of Federal Regulations), 1926.62, Construction Standard

2. General. The sample results from samples taken at the Indoor Firing Ranges in Arkadelphia, AR, and Camden, AR by SFC Joe Teed are enclosed.

3. Findings. A review of the sampling results show high concentrations of lead dust present at the time of the survey. The high levels of the wipe sampling require further decontamination of the firing range and equipment in

Arkadelphia, AR, and Camden, AR. See the attached enclosures for the swipe sample results.

4. Recommendations.

a. Use the sample results as a guide when determining which ranges and what items stored in the ranges must be cleaned.

b. Closely follow all recommendations in Ref. 1. b. when decontaminating ranges. After decontamination perform a complete re-sampling following the same protocol.

c. Provide scheduled cleaning and maintenance to those firing ranges new, old or retrofitted to preclude the accumulation encountered in the present study.

d. Follow the provisions of reference 1.e above for any construction or re-modeling project for Building 225 in Fort Allen, or any firing range to be renovated for other use..

5. If additional information is needed about the industrial hygiene survey or lead wipe sample results, please contact Mr. Etienne F. Rodriguez, Regional Industrial Hygienist, NGB-AVN-SI, 1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

ENCL.
as



AES

March 12, 2003

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

Non-Responsive

National Guard Bureau Region-South IH
510 Plaza Drive
Suite 1530
Atlanta, GA 30349

TEL: (404) 559-4174

FAX (404) 559-4175

RE: Camden Armory

Dear **Non-Responsive**

Order No.: 0303170

Analytical Environmental Servs, Inc. received 28 samples on 3/6/2003 1:30:00 PM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative. AES' certifications are as follows:

-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water, effective 07/01/02-06/30/03.

-AIHA Certification number 505 for analysis of Air, Paint Chips, Soil and Dust Wipes, effective until 03/01/03.

These results relate only to the items tested. This report may only be reproduced in full and contains 8 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Non-Responsive

Project Manager

0303170

BULK SAMPLE DATA

For use of this form see USAFRA TF 141; the proponent is HSB-10.

Return Address (complete address including Zip Code) National Guard ATTN: ARNG - HS (AR FULLER) P.O. Box 0065		Point of Contact (AUTOYON) JFC Non-Responsive DSN 962-5095 / SOI 212-5095		
Sampled Instrumentation 3033-0963 CAMDEN ARMORY, AR	Project Number ARLOS			
Samples Collected By JFC Non-Responsive	Date Collected 11 Feb 03	Date Shipped 12 Feb 03		
Description of Operation LEAD SAMPLING OF INDOOR FIRING RANGE		Location (BLDG/AREA) Closed IFR		
Associated Complaints (be specific)				
Associated Air Samples <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, list sample numbers				
Label Information				
Trade Name	NSN	Manufacturer		
Address		MSDS Attached <input type="checkbox"/> Yes <input type="checkbox"/> No		
Analysis Desired LEAD				
Lab Use Only	Sample No.	Constituents	Results	Remarks
	1	Top Left Wall		
	2	Middle left Wall		
	3	Bottom Left Wall		
	4	Top Left Bullet Stop End		
	5	Middle Bullet Stop End		
	6	Bottom Right Bullet Stop End		
	7	Top Right Wall		
Comments to Lab: Samples 1-15 and blanks 26-27 are from one batch of wipes. Samples 16-25 and blank 28 are from a different box.				
Lab Use Only				
Analyst (Signature)	Reviewed by (Signature)	Date Received 3/6/03	Date Reported	
Procedures Performed	Comments: Non-Responsive			

SFAA Form 8-A 1 Oct 94

0303170

BULK SAMPLE DATA*For use of this form see USARPA TO 141; the proponent is HHS-10.*

Return Address (complete address including Zip Code) National Guard ATTN: ARNG-HS AIR FULLER P.O. Box 17855		Point of Contact (name/AUTOVON)		
Sampled Instrumentation 3025-0865	Project Number	ARLOC [] [] [] [] [] [] [] [] [] []		
Samples Collected By	Date Collected	Date Shipped		
Description of Operation LEAD SAMPLING OF FIRING RANGE		Location (BLOC/AREA)		
Associated Complaints (be specific)				
Associated Air Samples <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, list sample numbers				
Label Information				
Trade Name	GEN	Manufacturer		
Address	MSDS Attached <input type="checkbox"/> Yes <input type="checkbox"/> No			
Analysis Desired LEAD				
Lab Use Only	Sample No.	Constituents	Results	Remarks
	8	Middle Right Wall		
	9	Bottom Right Wall		
	10	Bottom Rear Wall		
	11	Middle rear Wall		
	12	Top Rear Wall		
	13	Floor Right Bullet Stop		
	14	Floor Center		
Comments to Lab:				
Lab Use Only				
Analyst (initials)	Reviewed By (initials)	Date received	Date Reported	
Procedures performed	Comments:	3/6/03		

Non-Responsive

1:30p

0303170

BULK SAMPLE DATA

For use of this form see: USARMC TG 141; the proponent is HSHR-LO.

Return Address (complete address including Zip Code)

National Guard
ATTN: AGNG - HSHR, FULLER
B.O. Box 17355

Point of Contact (name/AUTOVON)

Sampled Instrumentation 303K-5965

Project Number

ARLOC

Samples Collected By

Date Collected

Date Shipped

Description of Operation

LEAD SAMPLING OF FIRING RANGE

Location (BLDG/AREA)

Associated Complaints (be specific)

Associated Air Samples

If yes, list sample numbers

☐ Yes☐ No

Label Information

Trace Name

NSN

Manufacturer

Address

MSDS Attached

☐ Yes☐ No

Analysis Desired

LEAD

Lab Use Only	Sample No.	Constituents	Results	Remarks
	15	Floor Left Rear Wall		
	16	Ceiling Left Bullet Stop		
	17	Ceiling Center		
	18	Ceiling Right Rear Wall		
	19	Observation Room W. Wall		
	20	Observation Room E. Wall		
	21	Storage Room W. Wall		

Comments to Lab:

Lab Use Only

Analyst/Inspector

Reviewed by

Date received

Date Reported

Procedures Performed

Comments:

Non-Responsive

1:37p

0303170

BULK SAMPLE DATA

For use of this form see USAFRA TO 141; the proponent is HSEB-CD.

Return Address (complete address including Zip Code)

Point of Contact (name/AUTOTON)

National Guard
ATTN: ARNG-HS AMR, RILEY
D.O. 8/17/95

Sampled Instrument: 3035-0955

Project Number

ARLOC

Samples Collected By

Date Collected

Date Shipped

Description of Operation

LEAD SAMPLING OF FIRING RANGE

Location (BAGS/AREA)

Associated Complaints (as specified)

Associated Air Samples

if yes, list sample numbers

☐ Yes ☐ No

Label Information

Trade Name

NSN

Manufacturer

Address

MSDS Attached

☐ Yes ☐ No

Analysis Desired

LEAD

Lab Use Only	Sample No.	Constituents	Results	Remarks
	22	Storage room E Wall		
	23	Storage Room Shelving		
	24	Equipment box		
	25	Computer monitor		
	26	Blank 1		
	27	Blank 2		
	28	Blank 3		

Comments to Lab: there were Christmas decorations on the shelf for Sample 23 (bright metal particles)

Lab Use Only

Analyst/Inspector

Reviewed by (signature)

Date Received

Date Reported

Procedures Performed

Comments:

Non-Responsive

Analytical Environmental Services, Inc.

Sample Receipt Checklist

Client GANGB
 Work Order Number 0303170
 Checklist completed by Non-Responsive Date 3/6/03
 Date and Time 3/6/03 1:30
 Received by Non-Responsive
 Reviewed by Non-Responsive Date 3/6/03

Carrier name: FedEx ☐ UPS ☐ Courier ☐ Client ☐ US Mail ☒ Other ☐

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐
 Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒
 Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
 Chain of custody present? Yes ☒ No ☐
 Chain of custody signed when relinquished and received? Yes ☐ No ☒
 Chain of custody agrees with sample labels? Yes ☒ No ☐
 Samples in proper container/bottle? Yes ☒ No ☐
 Sample containers intact? Yes ☒ No ☐
 Sufficient sample volume for indicated test? Yes ☒ No ☐
 All samples received within holding time? Yes ☒ No ☐
 Was TAT marked on the COC? Yes ☐ No ☒
 Proceed with Standard TAT as per project history? Yes ☒ No ☐ Not Applicable ☐
 Container/Temp Blank temperature in compliance? Yes ☒ No ☐
 Cooler #1 Ambient Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler #5 ☐ Cooler #6 ☐
 Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐
 Water - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒
 Adjusted? ☐ Checked by ☐

Any No and/or NA (not applicable) response must be detailed in the comments section below:

Client contacted ☐ Date contacted: ☐ Person contacted ☐
 Contacted by: ☐ Regarding ☐

Comments: Chain of custody not signed when relinquished

Corrective Action

Analytical Environmental Servs, Inc.

Date: 3/12/2003

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: National Guard Bureau Region-South IH
Project: Camden Armory
Project No: Camden Armory
PO No:

Lab Order: 0303170
Date Received: 3/6/2003 1:30:00
Matrix: Wipe
Analyst: MM

Laboratory ID	Client Sample ID	Results	Units	MDL	DF	Date Collected	Date Analyzed
0303170-001A	1	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-002A	2	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-003A	3	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-004A	4	1210	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-005A	5	2030	µg, Total	5.74	2.03	2/11/2003	3/10/2003
0303170-006A	6	504	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-007A	7	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-008A	8	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-009A	9	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-010A	10	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-011A	11	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-012A	12	249	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-013A	13	43.0	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-014A	14	64.0	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-015A	15	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-016A	16	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-017A	17	52.0	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-018A	18	56.0	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-019A	19	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-020A	20	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-021A	21	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-022A	22	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-023A	23	21.0	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-024A	24	140	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-025A	25	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-026A	26	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-027A	27	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003
0303170-028A	28	BRL	µg, Total	2.83	1	2/11/2003	3/10/2003

Qualifiers: MDL - Method Detection Limit
 ND - Not Detected at the Reporting Limit

DF - Dilution Factor



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**DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349**

ARNG-CSG

November 10, 2015

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG: ATTN: SSG **Non-Responsive** AR
Army National Guard Armory, 300 Exchange Avenue, Conway, AR 72032.

Thru: LTC **Non-Responsive** AR ARNG Deputy State Surgeon, BLDG 15309 BOX 09, Camp
Robinson, NLR, AR 72199-9600.

SUBJECT: Industrial Hygiene Survey of AR ARNG Conway Armory, Conway , Arkansas.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program.
- b. Army Regulation (AR) 40-5, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program.
- f. DA PAM 40-503, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2011, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. USAEHA TG-141, January 2007, Guidelines for Air Sampling and Bulk sample Collection.
- k. Title 29, Code of Federal Regulations (CFR), 2011 rev., part 1910, Occupational Safety and Health Standards.

2. General. At the request of the AR ARNG Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling at the AR ARNG Conway Armory, Conway , Arkansas.

3. Findings. The information that follows is based on the findings of the survey performed. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are

November 10, 2015

SUBJECT: Industrial Hygiene Survey of AR ARNG Conway Armory, Conway, Arkansas.

enclosed (See ENCL 1). Operations of very short duration were not sampled due to the requirements of the sampling method. If the operation changes or if the length of the operation is increased, contact this office to schedule sampling if it is deemed needed.

4. Recommendations. Follow the recommendations made in the enclosed report, requesting industrial hygiene (IH) services where needed to complete the recommendations.
 - a. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Action Plan (IHAP) for FY2016. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2017 IHAP.
 - b. Have all HHIM data entered into the HHIM computer module.
 - c. Use the report to help in correcting all deficiencies noted.
 - d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.
 - e. Contact the State Occupational Health Office for any medical Surveillance that may be needed.
 - f. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
5. The present report addressed to the local facility commanders was divided in such a way that personal data can be detached and kept by the OHM or blocked when forwarding these reports to other entities within the appropriate offices of AR ARNG. If additional information is needed please contact Mr. **Non-Responsive** Regional Industrial Hygienist, (404) 559-4174 OR 1 (800) 326-0262.

Non-Responsive

Regional Industrial Hygienist

CF:

1st LT **Non-Responsive** State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl
as

FINAL REPORT
FOR
BASELINE INDUSTRIAL HYGIENE SURVEY

ARKANSAS ARMY NATIONAL GUARD

CONWAY ARMORY

CONWAY, AR

DATE:

FEBRUARY 24, 2015

PREPARED BY

Non-Responsive

**583 GINGER CAKE RD
FAYETTEVILLE, GA 30214
(770) 461-2684**

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2.0 INSTRUMENTATION

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Weapons Vault Racks, Drill Hall
Supply Room

Attachment 3 Weapons Vaults Sampling Areas

Attachment 4 Photographs of the Facility

Attachment 5 Schematic Drawing of Facility with Converted IFR, Drill
Hall and Supply Room Sampling Areas

1.0 INTRODUCTION

At the request of the National Guard Bureau South Region Industrial Hygiene Office, **Non-Responsive** performed a Baseline Industrial Hygiene Survey at the AR ARNG Conway Armory. The purpose of the survey was to perform a baseline survey to evaluate health hazards, controls present in the work site, collect lead swipe samples from renovated/inactive or closed Indoor Firing Ranges, Weapons Vault racks, A/C-Heating System, illumination survey and to make recommendations regarding health hazards associated with the work at the Conway Armory.

The facility was built in 1982. The old Indoor Firing Range was "cleaned" and remodeled in the mid-2000s and converted to classroom and gym. Water leaks at the front lobby were repaired last year. New A/C-Heating units were installed last year to replace broken ones. The facility houses the HHC 39th BSTB. The armory is used by the above mentioned troops for of their monthly weekend drills.

The HHC 39th BSTB with about 130 troops had fourteen full time AGR personnel at the time of the survey. The AGR employees are assigned to perform administrative duties, Monday-Friday 7:00am-3:30pm. The facility houses administrative areas, a drill Hall, classroom, supply room, a weapons vault, a kitchen, and a deactivated Indoor Firing Range which was converted to classroom and gym. The kitchen was used to cook for the troops on weekend drills at the time of the survey. New A/C-Heating systems were installed to as replacement for older ones. Personnel reported that there is a broken toilet in the men's latrine. It was also reported that there is poor lighting in the drill hall and that a request has been made to replace the present lights there. Also that the lighting outside of the building was not working the day of the survey. The only lights working outside were two at the motor pool area. Personnel working at office 100B said that there is a space with air leak at the bottom of window. He placed a towel at the opening to prevent air from blowing into the room. The problem has been reported. A schematic drawing of the facility can be found in Attachment 5.

The facility was visually examined and personnel consulted to assess potential hazards present. Health Hazard Information Modules were completed. Illumination survey was performed throughout the facility. There is generalized poor lighting throughout the facility.

2.0 INSTRUMENTATION/CALIBRATION

The following instrumentation was used to obtain light measurements. The instrument used has been calibrated and was operated according to the manufacturer's recommendations:

- EXTECH Light Meter
- GHOST WIPES, Lead wipes

3.0 FINDINGS

Illumination

Illumination levels were recorded in administration offices, classroom, the conference room, the kitchen and the Drill Hall. Light measurements were below IES guidelines at the Drill Hall. Lights are very high. The other areas tested were within IES guidelines. Both, Rooms 100B and 105 had a fixture out. There were two fixtures out in the kitchen. Consideration should be given to provide supplemental lighting at the location that was below the recommended standard and to replace the bulbs that were out. See Light Readings Table at the end of this section.

Administration

Personnel perform administrative duties that consist of reading, handling and generating paper work. Computer use comprises a large portion of the working day, five to seven hours per day. This continuous use of computers can in the long run lead to eyestrain and hand/wrist soreness. No health problems reported by personnel at the time of the survey.

Motor Pool

The motor pool is located in a fenced area at the rear of the building. It is a large area with many vehicles. PMCS maintenance is performed at the motor pool on weekend drills. Major and other repairs for the vehicles are performed at Camp Robinson.

Drill Hall

The Drill Hall is located towards the center of the building. It is used primarily for formation, classes, training on weekend drills. The unit uses the drill hall to eat. Weapons are cleaned about twice a year on tables in the drill hall. The tables are cleaned afterwards. There are two air exhaust ventilators located in the drill hall. They were working on the day of the survey. The Drill Hall is rented only to non-profit organizations such as the girl scouts that uses the facility to distribute cookies, annual poker tournament to benefit the children's miracle network and to the boys scouts for meetings. Food is brought to the facility during the poker tournament where it is served from the kitchen. All lead samples were taken using a 10 inch by 10 inch template. The US Environmental Protection Agency (EPA), under a new standard issued in 2000, considers lead dust as a hazard if levels are greater than 40 micrograms of lead in dust per square foot on floors. The National Guard Bureau recommends a limit of 200 micrograms per square foot for surface contamination. Three wipe samples were taken from the floor of the Drill Hall. None of the samples were above the EPA or NGB clearance levels. See Table 1 for results.

Table 1

Sample Number	Sample Location	Results	
8	Drill Hall, floor, front of wall, 11'10" to the left (towards roll-up door) of the entrance to the supply room.	BRL	BRL
9	Drill Hall, Floor where two grooves meet, 21'9" from the 2 nd locker next to the roll-door, towards the center of the room	BRL	BRL
10	Drill Hall, floor in front of the 12 th locker from the entrance to the Orderly room/BN Conference	BRL	BRL
14	Blank	BRL	BRL

Deactivated Indoor Firing Range

There is a deactivated Indoor Firing Range (IFR) at the facility. Personnel reported that the old Indoor Firing Range was "cleaned" and remodeled in the mid-2000s and converted to classroom and gym. All lead samples were taken from the classroom using a 10 inch by 10 inch template. The US environmental Protection Agency (EPA), under a new standard issued in 2000, considers lead dust as a hazard if levels are greater than 40 micrograms of lead in dust per square foot on floors. The National Guard Bureau recommends a limit of 200 micrograms per square foot for surface contamination. Three wipe samples were taken from the converted IFR. None of the three samples were above the EPA or NG clearance levels. See table 2 for results.

Table 2

Sample Number	Sample Location	Results	
11	Floor front wall, 8'9" from the wall that divides the classroom from the gym	BRL	BRL
12	Floor at wall that divides the classroom from the gym, 7' from the front wall	27ug	38ug/ft2

13	Floor in front of rear wall, 18'6" from left wall	BRL	BRL
14	Blank	BRL	BRL

Weapons Vault

The Conway Armory has a weapon storage vault. One located in the Supply Room. Weapons are cleaned in the drill hall about two times a year. They are cleaned on tables. Personnel reported that the tables are clean afterwards. Weapons are distributed directly from the supply room using part of the large counter. The dehumidifier in the weapons vault was working the day of the survey. It empties through a drain pipe that goes to the floor. All lead samples were taken using a 10 inch by 10 inch template. The US environmental Protection Agency (EPA), under a new standard issued in 2000, considers lead dust as a hazard if levels are greater than 40 micrograms of lead in dust per square foot on floors. The National Guard Bureau recommends a limit of 200 micrograms per square foot for surface contamination. Five wipe samples were taken from the weapons vault, one from the counter and one from the floor in front of the counter where the weapons are distributed in the supply room. Four of the samples from the vault were above the EPA clearance level of 40ug/ft² and two above the NGB clearance level of 200ug/ft². See table 3 for results.

Table 3

Sample Number	Sample Location	Results	
1	Left wall ,first rack from front to rear, floor in front & rack bottom	89ug	127ug/ft ²
2	Right wall ,3 rd rack from front to rear, floor in front & rack bottom	176ug	251ug/ft ²
3	Rear wall, 3 rd rack from the left wall, floor in front & rack bottom	168ug	240ug/ft ²
4	Middle of room, free standing racks, rear side, 2 nd from right wall, floor in front & rack bottom	30ug	43ug/ft ²
5	Middle of room, free standing racks, front side, 2 nd from right wall ,floor & rack bottom	BRL	BRL

6	Supply room counter(Closest to WV), where weapons are distributed	BRL	BRL
7	Supply room, floor in front of counter, where weapons are distributed	26ug	37ug/ft2
14	Blank	BRL	BRL

A/C Heating System

Central A/C-Heating units are used to cool and heat all the administration offices, the BN conference room, the gym and the classroom. New units were installed in 2014 to replace older ones. Personnel reported that the units cool and heats well. Maintenance personnel from FMO are in charge of regularly changing the filters. The A/C-Heating outlets were clean the day of the survey.

Material Safety Data Sheets

There was an MSDS book located in the utility room (208C) on top of one of two flammables cabinets. There were many loose pages inside. Household chemicals and CLP were stored inside. A Hazardous Materials Inventory List was located at the door of this cabinet. There is a Hazmat/Shed metal building, divided in three compartments at the motor pool area to the left of the unit storage building. One of them contains fuel cans and spray paint cans. Also an oxygen tank was stored there too. Personnel was advised to remove this tank from there. Another one contains household chemicals. An MSDS book was present with many loose pages. The third to the right serves as storage for the lawn mower, weed eater and chain saw.

Light Readings

Light measurements were taken in various locations throughout the facility. The results were compared to guidelines recommended by the Illuminating Engineering Society (IES). The results of the survey are shown in Table 4

Table 4

Location	Light Reading (footcandles)	IES Recommendation (footcandles)
Orderly Room (R 207)	50-62 (Avg. 55)	50-100

Room 207A	52-68 (Avg. 58)	50-100
Room 207B	52-66 (Avg. 58)	50-100
Room 100	54-76 (Avg. 66)	50-100
Room 100A	64-94 (Avg. 77)	50-100
Room 100B	28-105 (Avg. 70)	50-100
Room 100C	60-78 (Avg. 68)	50-100
Room 101	30-73 (Avg. 57)	50-100
Room 102	55-72 (Avg. 61)	50-100
S-1 Office (Room 103A/B)	59-74 (Avg. 66)	50-100
S-4 Office (Room 105)	25-79 (Avg. 59)	50-100
Room 104	53-64 (Avg. 58)	50-100
Supply Room Storage Area (Room 200)	39-62 (Avg. 53)	20
Supply Room Office (Room 200B)	89-109 (Avg. 96)	50-100
Kitchen (Room 203)	31-39 (Avg. 36)	20-50
Classroom (Room 205)	57-65 (Avg. 62)	50-100
BN Conference (Room 208)	52-96 (Avg. 72)	50-100
Room 204	51-55 (Avg. 52)	50-100
R 208B	51-59 (Avg. 52)	50-100
Drill Hall	6-56 (Avg. 27)	30

Light measurements were below IES guidelines at the Drill Hall. Lights are very high. The other areas tested were within IES guidelines. Both, Rooms 100B and 105 had a fixture out. There were two fixtures out in the kitchen. Consideration should be given to provide supplemental lighting at the location that was below the recommended standard and to replace the bulbs that were out. ANSI RP7-1991.

4. REFERENCES

- Guide to Occupational Exposure 2000, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.

- American National Standards Institute (ANSI), /Illuminating Engineering Society (IES), Industrial Lighting 1991.
- National Institute for Occupational Safety and Health (NIOSH), (76-130) Technical Information, Lead Exposure and Design Considerations for Indoor Firing Ranges GPO, 1975.
- Title 29, Code of Federal Regulations (CFR). 1999, revision, Part 1910. Occupational Safety and Health Standards
- AR 40-5, Preventative Medicine, 15 October 1990.
- AR 385-10, The Army Safety Program, 23 May 1988.
- National Safety Council, Fundamentals of Industrial Hygiene, 4th edition, 1996.
- AR 385-16, National Guard Pamphlet, Safety Guidelines for Converting Indoor Firing Ranges to Other uses.
- TB MED 503, The Army Industrial Hygiene Program, February 1985.
- Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- Title 29 CFR, Part 1910.1200, The Hazard Communication Standard.

Non-Responsive

RECOMMENDATIONS

- Consideration should be given to provide supplemental lighting at location, the Drill Hall that was below the recommended standard. Lights are very high, close to the roof and not powerful enough to make the room brighter. Replaced burn out light bulbs/fixtures (See Light Readings Measurement section).
- Recommend that when using computers for extended periods of time, personnel should take occasional breaks and change position to minimize the possibility of eyes and/or hands/wrist injury.
- Continue to ensure that weapon maintenance and cleaning is done in a well-ventilated area. Continue to practice good personal hygiene by washing hands after handling and cleaning weapons and ammunition. Ensure that the weapons racks are well cleaned before placing them back in the vault.
- A request should be made to the appropriate state agency to evaluate and possibly correct the poor lighting around the outside of the building and to consider the possibility of changing the lighting in the drill hall to provide better illumination if it has not been done yet.
- A request should be made to the appropriate state agency for the replacement of the broken toilet in the men's latrine if it has not been done yet.
- A request should be made to the appropriate state agency to seal the air leak underneath the windows of room 100B (OPS NCO) if it has not been done yet.
- Recommend the removal of oxygen tank from the SA 03 hazmat shed if it has not been done yet.
- MSDS book should be updated periodically and organized to eliminate products not present anymore, to add new products as they are received.
- Ensure that personnel and troops have knowledge of the location of the MSDS book. And is enrolled hazardous materials safety training.

HEALTH HAZARD INFORMATION MODULE

SECTION 1.

DEMOGRAPHIC DATA

BEST AVAILABLE COPY

a. ARLUC: _____ b. INSTALLATION Conway AR Armory c. BLDG/RM NUMBER 11HC Reading NCO Office
 d. LOCATION/CODE Reading NCO e. OPERATION/CODE Pay roll, Environmental f. DESCRIPTION _____
Safety NCO
 g. MACOM/CODE NCS h. SUBMACOM/CODE _____ i. SUPERVISOR MAF
 j. TELEPHONE/AUTOVON NUMBER 501 212, 7910 k. RAC 3 l. FREQUENCY (Hrs Per Day) _____
 m. NO CIV(S) 1 n. NO MIL 14 o. NO CONTRACTOR(S) _____ p. NO LOC(S) _____ q. NO OTHER _____

SECTION 2.

IH STAFFING DATA

a. LAB HOODS _____ b. VAPOR DEGREASERS _____ c. MAINTENANCE BAYS _____ d. SPRAY BOOT-S _____
 e. OPEN SURFACE TANKS _____ f. VENTILATION UNITS _____

SECTION 3.

SURVEY DATA

Non-Responsive

a. SURVEY DATE 2/24/15 b. EVALUATOR (INITIAL) _____

c. CONTROLS PRESENT	d. EVALUATION	e. UNIT CODE	f. CONTROLS REQUIRED	g. STATUS
<u>Lighting</u>	<u>52-76 Aug 58</u>	<u>RC</u>	<u>58-100</u>	<u>Adgt</u>

h. PERSONAL PROTECTIVE EQUIPMENT (R=REQUIRED; A=AVAILABLE)

1. RESPIRATOR

MANUFACTURER

NIOSH TC NO

P. 2

DISPOSABLE

* FACE AIR PURIFYING

* FACE AIR PURIFYING

FULL FACE AIR PURIFYING

POWERED AIR PURIFYING

AIRLINE

SELF-CONTAINED

ABRASIVE BLASTING HOOD

2. GLOVES	R/A	3. EYES/FACE	R/A	4. HEARING	R/A	5. BODY	R/A	6. HEAD/FOOT	P. 2
ACID	/	CHEMICAL/SPLASH	/	MUFFS	/	APRONS	/	HARD HATS	1
OIL	/	SAFETY/IMPACT	/	EARPLUGS	/	COVERALLS	/	IMPERMEABLE BOOTS	1
SOLVENTS	/	CHEMICAL/SAFETY	/	CANAL CAPS	/	FULL BODY SUIT	/	SAFETY CONDUCT SHOES -	1
HOT SURFACES	/	FULL FACE SHIELD	/	HELMETS	/	SAFETY BELT/HARNES	/	SAFETY/NONCONDUCTIVE	1
COLD SURFACES	/	WELDING HELMET	/			HEAT REFLECT VEST/SUIT	/	SHOES	1
NBC AGENTS	/								1

SECTION 4.

HAZARD INVENTORY DATA

a. CAS CODE	b. HAZARD DESCRIPTION	c. PAC or EPC	d. MEDICAL SURVEILLANCE RECOMMENDED (YES or NO)
<u>PODDT</u>	<u>computer work for long periods of time - Hand/Kep Str</u>	<u>3</u>	<u>NO</u>

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SSG

at Camp Robinson bgn

- ① Have been in N.G. since 2002 - at Camp K
- ② Before in 40 moving Here since 2010
- ③ Computer work about 7 hrs/day
- ④ No health problems as of day of survey

• PRIVACY ACT STATEMENT

Title 5 U.S. Code, Section 301; Executive Order 9397 authorizes the use of your Social Security Number as a identification number. The purpose of this information is to identify and monitor data relating each DA civilian employee exposed to a hazardous workplace or operation. The use of this information is to provide histories of exposures for any given worker.

Disclosure of your Social Security Number is not mandatory; however, nondisclosure may result in untimely provision of proper medical monitoring.

Signature _____

HEALTH HAZARD INFORMATION MODULE

SECTION 1.

DEMOGRAPHIC DATA

BEST AVAILABLE COPY

a. ARLUC / b. INSTALLATION Conway AR Army c. BLDG/RM NUMBER Office 100B
 d. LOCATION/CODE 10PS NCO e. OPERATION/CODE f. DESCRIPTION
 g. MACOM/CODE NG h. SUBMACOM/CODE i. SUPERVISOR
 j. TELEPHONE/AUTOVON NUMBER 501 212, 7910 k. RAC 3 l. FREQUENCY (Hrs Per Day)
 m. NO CIV(S) 1 n. NO MIL 14 o. NO CONTRACTOR(S) p. NO LOC(S) q. NO OTH^r

SECTION 2.

IH STAFFING DATA

a. LAB HOODS b. VAPOR DEGREASERS c. MAINTENANCE BAYS d. SPRAY BOOT-S
 e. OPEN SURFACE TANKS f. VENTILATION UNITS

SECTION 3.

SURVEY DATA

Non-Responsive

a. SURVEY DATE 2/24/15 b. EVALUATOR (INITIAL)

c. CONTROLS PRESENT	d. EVALUATION	e. UNIT CODE	f. CONTROLS REQUIRED	g. STATUS
Lighting	28-105; Avg. 70	FC	50-100	Agst

h. PERSONAL PROTECTIVE EQUIPMENT (R=REQUIRED; A=AVAILABLE)

1. RESPIRATOR

MANUFACTURER

NIOSH TC NO

P. 2

DISPOSABLE

* FACE AIR PURIFYING

* FACE AIR PURIFYING

FULL FACE AIR PURIFYING

POWERED AIR PURIFYING

AIRLINE

SELF-CONTAINED

ABRASIVE BLASTING HOOD

2. GLOVES	R/A	3. EYES/FACE	R/A	4. HEARING	R/A	5. BODY	R/A	6. HEAD/FOOT	P. 2
ACID	/	CHEMICAL/SPLASH	/	MUFFS	/	APRONS	/	HARD HATS	1
OIL	/	SAFETY/IMPACT	/	EARPLUGS	/	COVERALLS	/	IMPERMEABLE BOOTS	1
SOLVENTS	/	CHEMICAL/SAFETY	/	CANAL CAPS	/	FULL BODY SUIT	/	SAFETY CONDUCT SHOES	1
HOT SURFACES	/	FULL FACE SHIELD	/	HELMETS	/	SAFETY BELT/HARNES	/	SAFETY/NONCONDUCTIVE SHOES	1
COLD SURFACES	/	WELDING HELMET	/			HEAT REFLECT VEST/SUIT	/		
NBC AGENTS	/								

SECTION 4.

HAZARD INVENTORY DATA

a. CAS CODE

d. HAZARD DESCRIPTION

e. PAC or EPC

g. MEDICAL SURVEILLANCE RECOMMENDATION (YES or NO)

P8V D1

Hand/Eye Strain - Computer Use for long periods of time

2

N8

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IPK

IPK

COMMENTS (Add blank sheet of paper if necessary)

1. About 20+ yrs in field
2. Here since 2009.
- ③ Computer work about 7 hrs/day
- ④ No health problems as of day of survey

Title 5 U.S. Code, Section 301; Executive Order 9397 authorizes the use of your Social Security Number as a identification number. The purpose of this information is to identify and monitor data relating each DA civilian employee exposed to a hazardous workplace or operation. The use of this information is to provide histories of exposure for any given worker.

Disclosure of your Social Security Number is not mandatory; however, nondisclosure may result in untimely provision of proper medical monitoring.

2

HEALTH HAZARD INFORMATION MODULE

SECTION 1.

DEMOGRAPHIC DATA

BEST AVAILABLE COPY

R 200

a. ARLUC / b. INSTALLATION CONWAY AR Army c. BLDG/RM NUMBER
 d. LOCATION/CODE Supply FCO e. OPERATION/CODE f. DESCRIPTION

g. MACOM/CODE NG h. SUBMACOM/CODE i. SUPERVISOR **Non-Responsive**
 j. TELEPHONE/AUTOVON NUMBER 501 212 7910 k. RAC 3 l. FREQUENCY (Hrs Per Day)
 m. NO CIV(S) 1 n. NO MIL 10 o. NO CONTRACTOR(S) p. NO LOC(S) q. NO OTHES

SECTION 2.

IH STAFFING DATA

a. LAB HOODS b. VAPOR DEGREASERS c. MAINTENANCE BAYS d. SPRAY BOOT-S
 e. OPEN SURFACE TANKS f. VENTILATION UNITS

SECTION 3.

SURVEY DATA

a. SURVEY DATE 2/24/15 b. EVALUATOR (INITIALS) **Non-Responsive**

c. CONTROLS PRESENT	d. EVALUATION	e. UNIT CODE	f. CONTROLS REQUIRED	g. STATUS
Light - 8'0" or	89-109; Aug. 96	FC	50-100	Asst
11 - Storage area	39-62; Aug. 53	FC	20	Asst

h. PERSONAL PROTECTIVE EQUIPMENT (R=REQUIRED; A=AVAILABLE)

1. RESPIRATOR

MANUFACTURER

NIOSH TC NO

P. 2

DISPOSABLE

* FACE AIR PURIFYING

* FACE AIR PURIFYING

FULL FACE AIR PURIFYING

POWERED AIR PURIFYING

AIRLINE

SELF-CONTAINED

ABRASIVE BLASTING HOOD

2. GLOVES	R/A	3. EYES/FACE	R/A	4. HEARING	R/A	5. BODY	R/A	6. HEAD/FOOT	P. 2
ACID	/	CHEMICAL/SPLASH	/	MUFFS	/	APRONS	/	HARD HATS	C
OIL	/	SAFETY/IMPACT	/	EARPLUGS	/	COVERALLS	/	IMPERMEABLE BOOTS	A
SOLVENTS	/	CHEMICAL/SAFETY	/	CANAL CAPS	/	FULL BODY SUIT	/	SAFETY CONDUCT SHOES	A
HOT SURFACES	/	FULL FACE SHIELD	/	HELMETS	/	SAFETY BELT/HARNES	/	SAFETY/CONDUCTIVE SHOES	A
COLD SURFACES	/	WELDING HELMET	/			HEAT REFLECT VEST/SUIT	/		C
NBC AGENTS	/								

SECTION 4.

HAZARD INVENTORY DATA

a. CAS CODE	b. HAZARD DESCRIPTION	c. PAC of EPC	d. MEDICAL SURVEILLANCE RECOMMENDATION (YES or NO)
POVD	Hand/Eye strain - computer use for long periods of time	3	NO
POLIFTING	Heavy Lifting	3	NO
FOOTHZ	Falling Objects	3	NO

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SGT

ack

- ① Here for 8yrs.
- ② Computer work about 6 hrs/day
- ③ No health problems as of day of survey

► **PL**

17c

index

Analytical Environmental Services, Inc

Date: 6-Mar-15

Lab Order: 1502N20
 Client: **Non-Responsive**
 Project: Conway, AR Armory
 Matrix: Wipe
 Date Received: 2/27/2015 12:02:00 PM

LEAD ON WIPES (N7082)
N7082

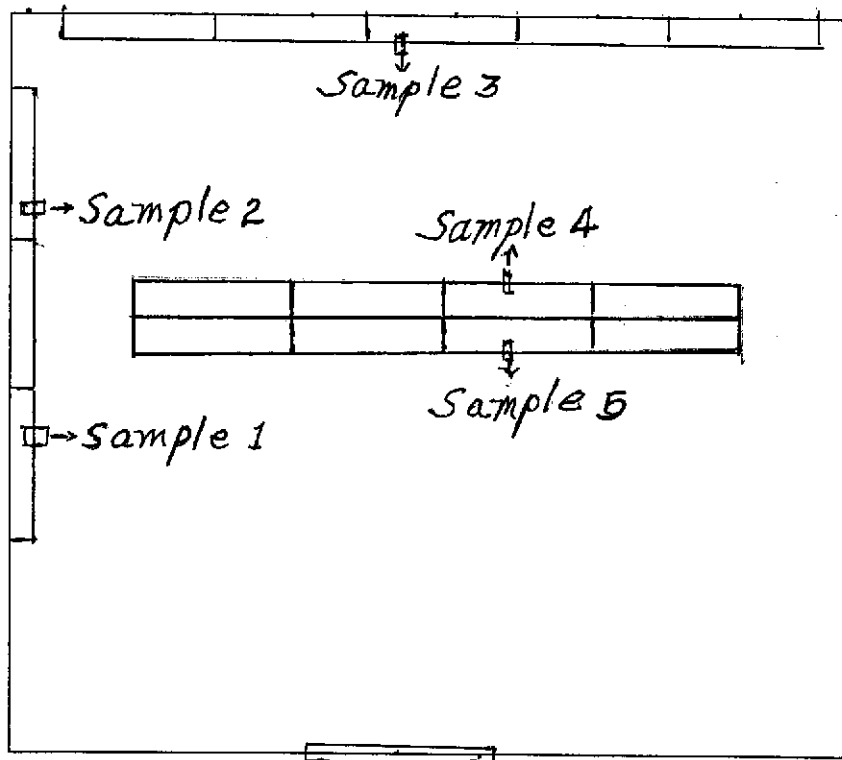
Laboratory ID	Client Sample ID	Result	Units	Reporting Limit	DF	Qual	Date Collected	Date Analyzed	Analyst
1502N20-001A	L WALL 1ST FROM FRONT W	89	ug, Total	20	1		02/24/2015	03/04/2015	JG
1502N20-002A	W L WALL- 3RD FROM FRON	176	ug, Total	20	1		02/24/2015	03/04/2015	JG
1502N20-003A	V- REARWALL 3RD FROM LEI	168	ug, Total	20	1		02/24/2015	03/04/2015	JG
1502N20-004A	MIDDLE- REAR 2ND FROM R	30	ug, Total	20	1		02/24/2015	03/04/2015	JG
1502N20-005A	BLE- FRONT SIDE- 2ND FROM	BRL	ug, Total	20	1		02/24/2015	03/04/2015	JG
1502N20-006A	LY ROOM- COUNTER- DUT V	BRL	ug, Total	20	1		02/24/2015	03/04/2015	JG
1502N20-007A	OOM- FLOOR IN FRONT OF C	26	ug, Total	20	1		02/24/2015	03/04/2015	JG
1502N20-008A	O R OF ENTRANCE SUPPLY R	BRL	ug, Total	20	1		02/24/2015	03/04/2015	JG
1502N20-009A	INT/COUNTER- CLOSER TO R	BRL	ug, Total	20	1		02/24/2015	03/04/2015	JG
1502N20-010A	ALL FLOOR- FLOOR BELOW I	BRL	ug, Total	20	1		02/24/2015	03/04/2015	JG
1502N20-011A	RTED/ FR- CLASSROOM- FRO	BRL	ug, Total	20	1		02/24/2015	03/04/2015	JG
1502N20-012A	ERTED/ FR- CLASSROOM- R	27	ug, Total	20	1		02/24/2015	03/04/2015	JG
1502N20-013A	RTED/ FR- CLASSROOM- REA	BRL	ug, Total	20	1		02/24/2015	03/04/2015	JG
1502N20-014A	BLANK	BRL	ug, Total	20	1		02/24/2015	03/04/2015	JG

Qualifiers: BRL - Not Detected at the Reporting Limit

DF - Dilution Factor

B - Analyte detected in the associated Method Blank

Results are blank corrected where applicable



Weapons Vault Sampling Areas

Conway, AR Armory



Conway, AR Armory



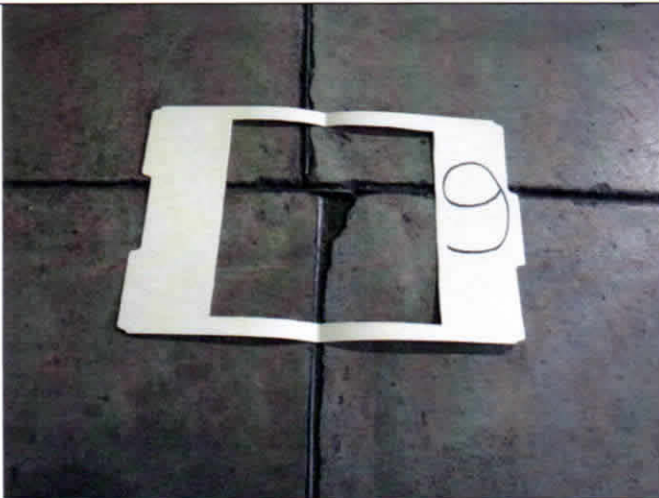
Drill Hall, Front View



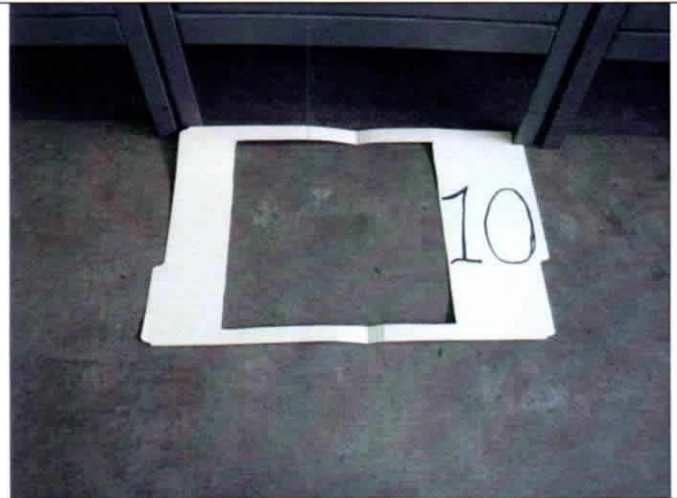
Drill Hall, Rear view



Sampling, Drill Hall



Sampling, Drill Hall



Sampling, Drill Hall



Towel Covering Air Leak At Bottom Of Window, OPS
NCO Office (100B)



One Of Two Fixtures Out, OPS NCO Office
(100B)



Kitchen



Male Latrine, Closed, Out Of Order



Converted IFR (Classroom Section), Rear View



Converted IFR (Classroom Section), Front View



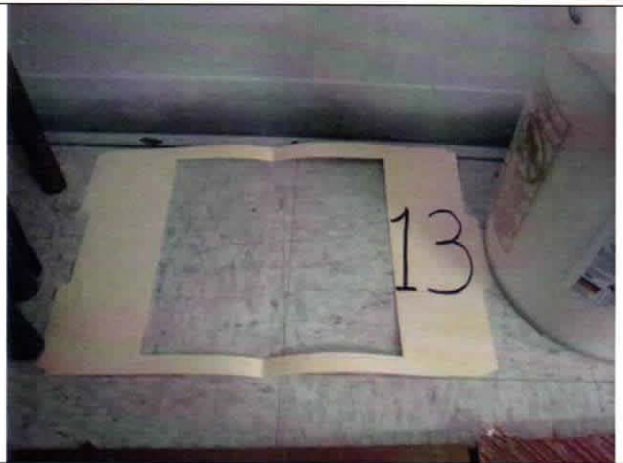
Converted IFR (Gym Section)



Sample, Converted IFR, Classroom



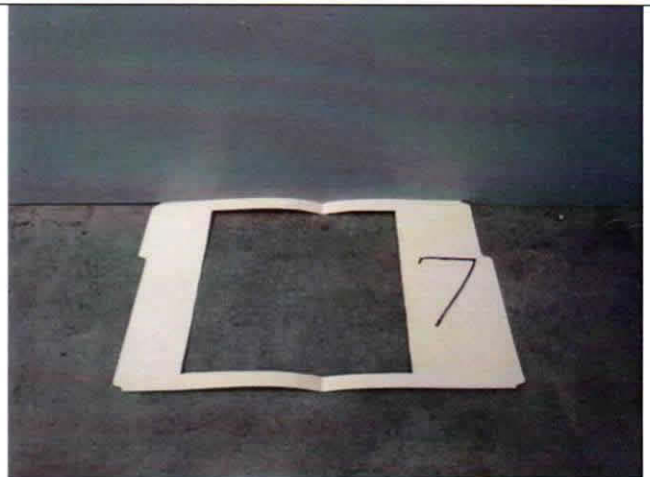
Sample, Converted IFR, Classroom



Sample, Converted IFR, Classroom



Sample, Supply Room, Top Of counter



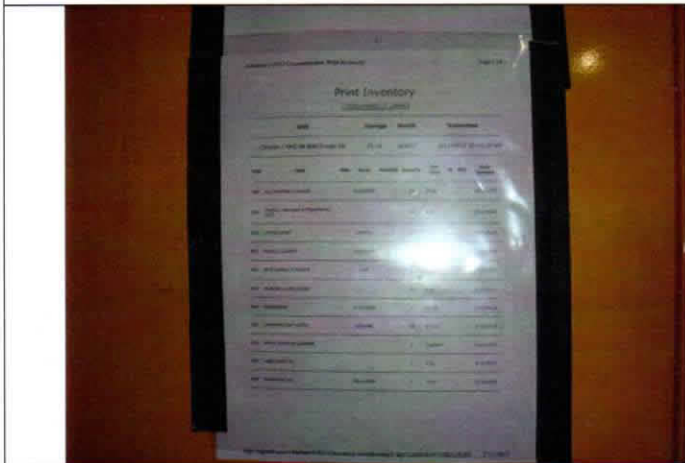
Sample, Supply Room, Floor In Front Of counter



Flammables Cabinets(One Empty), In Utility Room



MSDS Book On Top Of Flammables Cabinet



Hazardous Material Inventory List(HMIL), At Door Of Flammables Cabinet



Contents, Flammables Cabinet



Hazmat Building



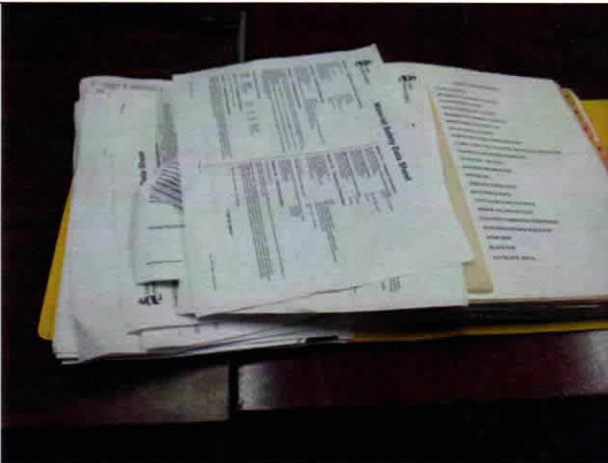
Hazmat Building, Contents Of Left Compartment



Hazmat Building, Contents Of Left Compartment



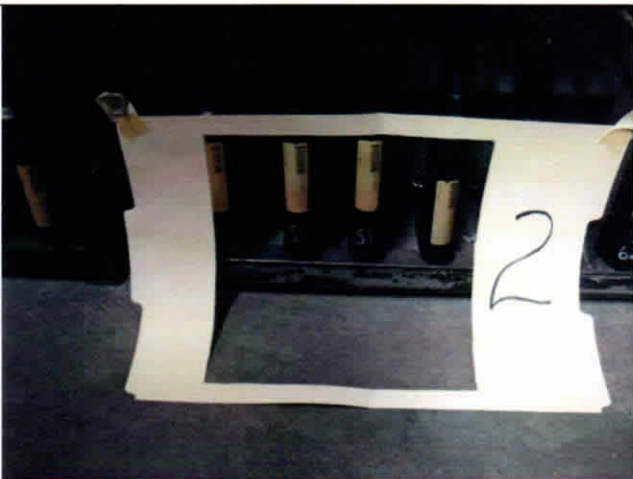
Hazmat Building, Contents Of Middle Compartment



Hazmat Building, Loose MSDS Sheets In Middle Compartment



Sample, Weapons Vault



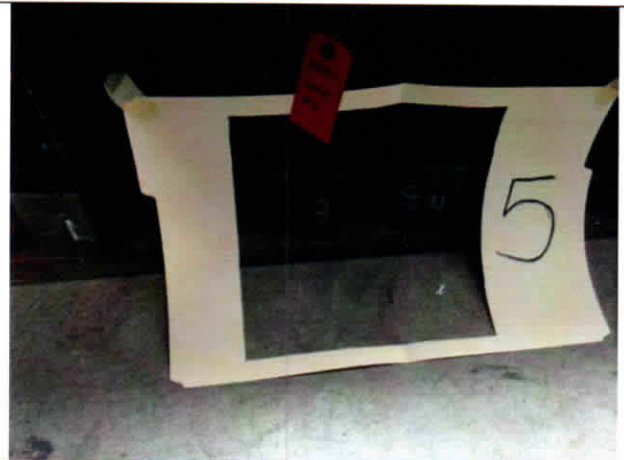
Sample, Weapons Vault



Sample, Weapons Vault



Sample, Weapons Vault



Sample, Weapons Vault



Unit Storage Building



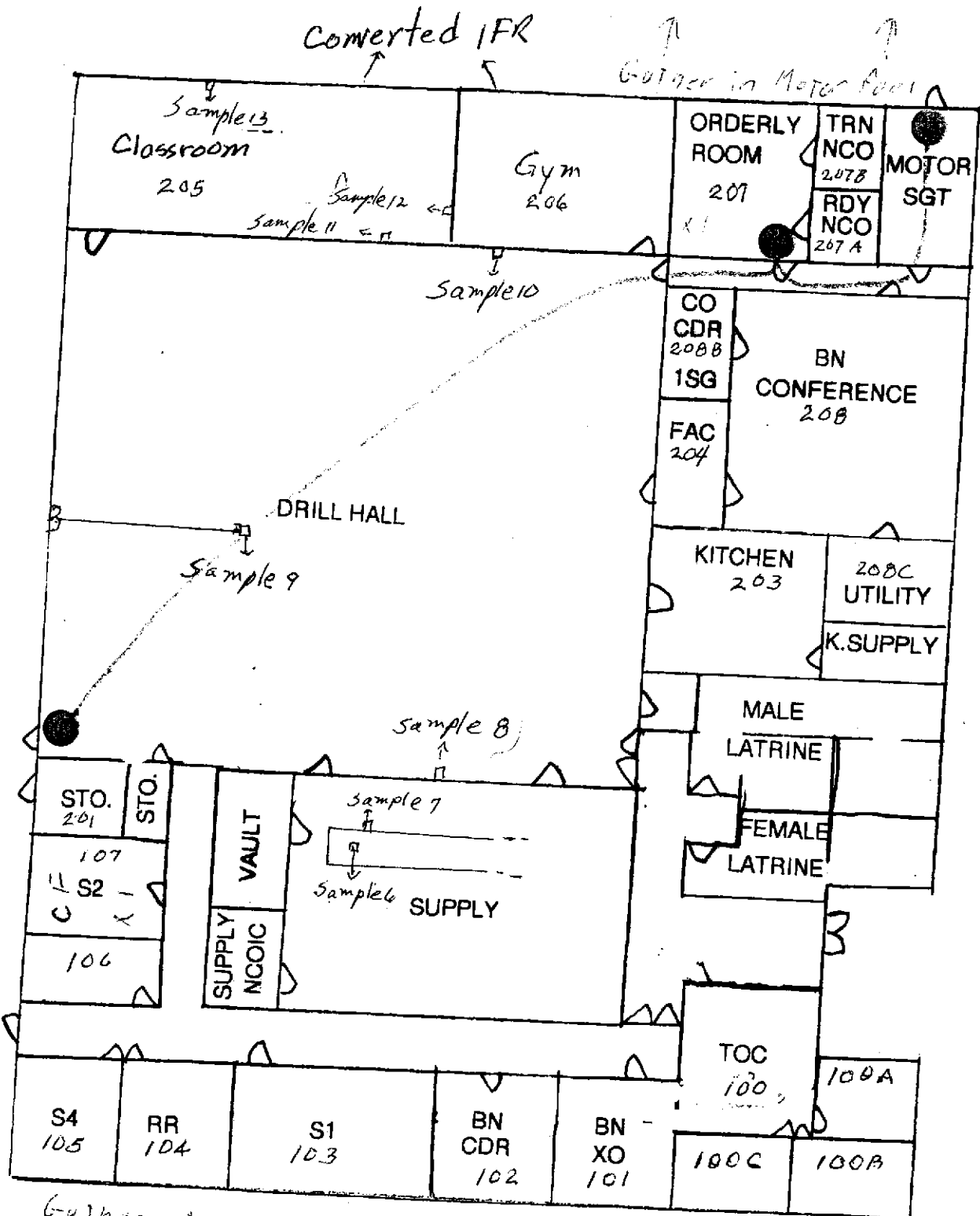
Motor Pool



Motor Pool

Conway, AR Armory

BEST AVAILABLE COPY
NORTH



Gather at Soap on Parking

Conway, AR Armory

RED DOT: FIRE EXIT
GREEN DOT: CURRENT LOCATION
YELLOW DOT: FIRE EXTINGUISHER



BEST AVAILABLE COPY
DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349

ARNG-CSG-P (40-5f)

February 12, 2011

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG: ATTN: SSG [Non-Responsive] DET
1 Troop A 1-151st Cavalry Squadron, Crossett Armory, 705 North Florida, Crossett, Arkansas
71654.

Thru: LTC [Non-Responsive] Deputy State Surgeon, BLDG 15309 BOX 09, Camp Robinson, NLR,
AR 72199-9600.

SUBJECT: Industrial Hygiene Survey of AR ARNG Crossett Armory, Crossett, Arkansas

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1998.
- b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.
- f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, 10 December 1998, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2003, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. USAEHA TG-141, January 2007, Guidelines for Air Sampling and Bulk sample Collection.
- k. Title 29, Code of Federal Regulations (CFR), 2004 rev., part 1910, Occupational Safety and Health Standards.

2. General. At the request of AR ARNG Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling at the AR ARNG Crossett Armory, Crossett, AR.

ARNG-CSG-P (40-5f)

February 12, 2011

SUBJECT: Industrial Hygiene Survey of AR ARNG Crossett Armory, Crossett, Arkansas

3. Findings. The information that follows is based on the findings of the survey performed. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed (See ENCL 1). Operations of very short duration were not sampled due to the requirements of the sampling method. If the operation changes or if the length of the operation is increased, contact this office to schedule sampling if it is deemed needed.
4. Recommendations. Follow the recommendations made in the enclosed report, requesting industrial hygiene (IH) services where needed to complete the recommendations.
 - a. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY2011. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2012 IHIP.
 - b. Have all HHIM data entered into the HHIM computer module.
 - c. Use the report to help in correcting all deficiencies noted.
 - d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.
 - e. Contact the State Occupational Health Office for any medical Surveillance that may be needed.
 - f. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
5. The present report addressed to the local facility commanders was divided in such a way that personal data can be detached and kept by the OHM or blocked when forwarding these reports to other entities within the appropriate offices of AR ARNG. If additional information is needed please contact Mr. **Non-Responsive** Regional Industrial Hygienist, (404) 559-4174 OR 1 (800) 326-0262.

Non-Responsive

Regional Industrial Hygienist

CF:

State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.
State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl

as

BEST AVAILABLE COPY
Industrial Hygiene Report
For
Arkansas Army National Guard
(AR ARNG)
At
Crossett Armory
705 North Florida
Crossett, Arkansas 71654



Prepared for:
National Guard Bureau
Regional Industrial Hygiene Office
Region South
510 Plaza Drive, Suite 1530
College Park, Georgia 30349
By
Non-Responsive
SES Solutions
18 January 2011

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2. Listing of hazardous chemicals/materials at the facility	
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SESS

January 18, 2011

MEMORANDUM FOR: Arkansas Army National Guard, ATTN: SSG [Non-Responsive] DET 1
Troop A 1-151st Calvary Squadron, 705 North Florida, Crossett, Arkansas 71654

SUBJECT: Industrial Hygiene Consultation and Health Hazard Information Module (HHIM)
Survey, DET 1 TRP A 151st CAV SQDN

1. REFERENCES: See Enclosure 7.
2. BACKGROUND: At the request of Mr. [Non-Responsive] National Guard Bureau Regional Industrial Hygienist, Atlanta, Georgia, an Industrial Hygiene Consultation and Health Hazard Information Module Field Survey were performed at the Arkansas Army National Guard Armory, 705 North Florida, Crossett, Arkansas 71654 on January 18, 2011. The POC was SSG [Non-Responsive] at (501) 212-7461. The primary mission of Troop A 1-151 CAV is Calvary Scout. The purpose of the survey was to perform lead wipe samples; a ventilation survey, an Illuminations Survey, and complete HHIM field survey forms on all industrial operations at the facility (see Encl 1 for completed HHIM Survey Form).
3. INSTRUMENTATION: The following survey instrumentation was provided by the contractor and was used to obtain lead wipe dust samples and illumination measurements. All other instrumentation was operated according to manufacturer recommendations.
 - a) Reed LM-81LX, Light Meter, S/N: Q303521, calibrated: 12/15/2010
 - b) Ghost Lead Dust Wipes, Manufactured: February 2, 2010, Expiration: 08/2013
4. FINDINGS:
 - a) DET 1 TRP A Company and Supply:
 - i) Administrative duties included pay, promotions, schools, family support, assignments, and supplies. The supply area was broken down into Class 2 items of clothing and equipment. The supply area was also responsible for maintaining some TA 50.
 - ii) Twenty M-Day soldiers trained at the facility.

SESS

SUBJECT: Industrial Hygiene Consultation and Health Hazard Information Module

b) General Area Armory Information:

- i) Material Safety Data Sheets (MSDS) were located in the facility. All employees must be initially trained in the Federal Hazardous Communication Program IAW 1910.1200 (see Encl 2 for a listing of hazardous chemicals/materials at the facility).
- ii) Twelve lead dust wipe samples were taken, using a 12 inch by 12 inch template. Two samples were above the federal standard of $40\mu\text{g}/\text{ft}^2$. No sample was above the National Guard Standard of $200\mu\text{g}/\text{ft}^2$. Pictures of the lead sample wipes were taken (see Encl. 8, photos M001 to M012). Also two asbestos samples were taken and the results determined that One sample contained low levels of chrysotile asbestos at 1%. (ND means Non Detected). The analytical lead result sheet included the sampled locations and corrected results. The following table notes where the samples were taken, the surveyor's field number, and the lead results:

Location:	Surveyor's Field No:	Results:
Drill Hall Floor N.W. Side	M001	BRL
Drill Hall Floor N.E. Side	M002	BRL
Drill Hall Floor Center	M003	45
Drill Hall Floor S.W. Side	M004	BRL
Drill Hall Floor S.E Side	M005	BRL
Supply Room Floor	M006	BRL
Vault Floor	M007	BRL
Water Fountain In Drill Hall	M008	BRL
Metal Table in the Kitchen	M009	BRL
OLD ID Range Floor	M010	103
OLD ID Range Wall East Side	M011	BRL
OLD ID Range Back Wall	M012	BRL
Blank		BRL
Ceiling of Boiler RM (Asbestos)	1	ND
Boiler RM Floor Tiles(Asbestos)	2	ND

Note 1: $\mu\text{g}/\text{ft}^2$ refers to micrograms or one millionth of a gram per sq ft.

Note 2: BRL means Not Detected at the Reporting Limit.

- iii) Drill Hall: Conducting classes and drill formations is the main purpose in the hall. (See Encl. 8, photo 15 & 16). Illumination levels ranged from 2 to 17 FC's.
- iv) Furnace/General Mechanical Ventilation: Good.

SESS

SUBJECT: Industrial Hygiene Consultation and Health Hazard Information Module

- v) The following table identifies area deficiencies:

AREA	DEFICIENCIES
Drill Hall	Wall Insulation Falling
Kitchen	Water Leaks in Ceiling & Wall
Kitchen	Floor Tiles need replacing
Extra Latrine	Sink stopped up

- vi) Due to the low noise levels (administrative areas) there was no requirement for a Hearing Conservation Program. The only requirement would be when the M-Day troops were firing their weapons. All M-Day and full-time soldiers had earplugs.
- vii) A listing of DET 1 TRP A 1-151st CAV SQDN personnel is attached as Encl. 4.
- viii) A design floor plan of the armory is attached as Encl. 5. Illumination levels are listed below in Paragraph 5.

5. ILLUMINATION SURVEY RESULTS:

- a) Illumination Levels: The following additional illumination level readings were taken during the survey and are reported below in foot candles (FC's).

AREA/LOCATION	FOOT CANDLES (FC)
Front Entrance Hallway	55-68
Commander's Office	86-110
Admin Office	54-118
Recruiting Office	26-49
Copy Office	41-59
Female Latrine	18-29
Male Latrine	34-53
Vault	85-116
Kitchen	41-85
Supply Room	14-20
Class Room	65-80
Drill Hall	2-17
Class Room	24-71
Storage	21-24

SESS

SUBJECT: Industrial Hygiene Consultation and Health Hazard Information Module

As indicated in the IES Lighting Handbook, Application Volume 1987, Offices: 20-50 FC's, Supply and Publication Areas: 20-50 FC's, Assembly 20-50 FC's, Restrooms: 5-10 FC's, Classrooms: 50-100 FC's, Kitchen: 20-50 FC's, FC's, Library: 50-100 FC's, Storage Rooms: 10-20 FC's, Mail Room: 20-50 FC's.

6. TECHNICAL ASSISTANCE:

POC for further assistance concerning this evaluation is **Non-Responsive**

Non-Responsive

SES Solutions

7. RECOMMENDATIONS:

- a) Due to the lead dust wipe results, it is recommended that the Drill Hall floor and the converted Old Indoor Range floor is cleaned IAW NGB (AR) 385-15 Appendix C. The floors should be thoroughly wiped down and or wet mopped with an industrial cleaner using tri-phosphates, Mr. Clean or Spic-n-Span. For additional lead cleaning measures, see Enclosure 6. **(RAC 2)**
- b) Each employee working in the armory should be notified that asbestos exist within the boiler room. The damaged floor tiles contain 1% asbestos. Also notify the Facility Maintenance Office (FMO) of the findings so a plan of action for removal may be determined (see encl. 8 photo 14). **(RAC 2)**
- c) Conduct semi-annual inventories and update MSDS's on all chemicals in the facility and establish an inventory roll up sheet. **(RAC 3)**
- d) Submit a work order to the Facilities Maintenance Office (FMO) to repair the Wall insulation in the Drill Hall (see encl 8, photo 20). **(RAC 3)**
- e) Submit a work order to (FMO) to have the water leak in the kitchen repaired (see encl 8, photo 17). **(RAC 3).**
- f) Continue to perform monthly checks on fire extinguishers each month, ensure that the devices are checked, recorded, turn upside down and tapped with a rubber mallet to loosen any material at the bottom. Have the local fire department conduct annual inspections of fire extinguishers. **(RAC 3)**
- g) Unclog the sink in the Extra latrine (see encl 8, photo 19) **RAC 3**
- h) Request FMO replace the damaged and water stained floor tiles in the Kitchen (see encl 8, photo 18). **(RAC 3)**
- i) Request FMO repair the lighting in the Drill Hall to increase lighting (38 lights not working in the Drill Hall). **(RAC 2)**
- j) If work practices change, a new assessment should be made on the controls in Place.

e^s = evaluator's recommendation or agreement

Reminders: ergonomics - dermatitis - physical agents - flammable storage
EYE (permanent) _____ - SHW - GMV - LEV

ACO ADM DSA DSN LAB LCK
RAD ECB EPL RHS SPR WEL

HHHMS Industrial Hygiene Survey Form

Back page

PONISECO
POFOOTHAZ
POFLYPROJ
POEYEMHAZ
POFLAMHAZ
POLFTING
POSHARPOB
POHOTOBJE
POELSHOCK
COLUBEOIL

CAS code

PAC

EPC

Hazard Description

Social Security Number or Unique Identifier

Last Name (20 characters max)

First Name (20 characters max)

MI

Sex

Category

Comments
Personnel data provided by the facility is attached to this form

Insert Privacy Act Statement

Operation described is

*Personnel and Administration duties record updating, promotions
Extension Actuator*

This operation was explained to the evaluators, but was not actually observed.

There is a noise data sheet attached to this form

There is a ventilation data sheet attached to this form

(Comments continued on attached)

Print Inventory

Unit		Storage		Month		Submitted			
Crossett / DET 1 Troop A 1-151 Cav		FL-01		1/2011		1/13/2011 1:38:00 PM			
SLN	Item	NSN	Manu.	MSDSID	Quantity	Ctn. Size	SL	HCC	Date Updated
A01	ATF, DEX III	---	CONOCO	BWDXC	4	1 quart			1/13/2011
A02	Cleaner Lubricant & Preservative	9150-01-079-6124	Royal Lubricants	CJMZT	1	spray bottle			1/13/2011
A03	Lubricating, Oil, Semi-Fluid	9150-00-889-3522	American Writing Ink Inc	BSFJF	1	4 oz			1/13/2011
A04	OIL, 2 CYCLE		HOP INDUSTRIES	MSDS-0300	1	19 oz			1/13/2011
A05	VACANT								1/13/2011
B01	LUBRICATING OIL, WD-40	8030-01-418-9008	WD-40 COMPANY	CFVZM	14	11oz			1/13/2011
B02	ELECTRIC CONTACT CLEANER		CRC INDUSTRIES	BSLVR	2	11oz			1/13/2011
B03	O'Reilly Carb & Choke Cleaner		O'Reilly	ORC72414	4	12.5 oz			1/13/2011
B04	Lubricating Oil, Engine	9150-01-438-6076	Safety-Kleen Corp	CJGLM	8	1 quart			1/13/2011
B05	VACANT								1/13/2011
C01	AIR FRESHENER	6840-00-721-6055	LHB INDUSTRIES	BFMFX	1	14 oz			1/13/2011

C02	SPRAY PAINT, FLAT BLK	WAL-MART	BLZWG	3	10oz	1/13/2011
C03	SPRAY PAINT, FLAT WHT	WAL-MART	BQBFT	2	10 oz	1/13/2011
C04	SPRAY PAINT, PRIMER, WHT	KRYLON PRODUCT GROUP	BSMSD	2	12 oz	1/13/2011
C05	SPRAY PAINT, SATIN	KRYLON Product Group	BTHTP	3	12 oz	1/13/2011
E01	Ortho Orthene Fire Ant Killer	Solaris Group	6012	2	12 oz	1/13/2011
E02	VACANT					1/13/2011
E03	VACANT					1/13/2011
E04	VACANT					1/13/2011
E05	VACANT					1/13/2011

Print Inventory

Print Inventory

Cancel

Unit		Storage		Month	Submitted				
Crossett / DET 1 Troop A 1-151 Cav		SA-01		1/2011	1/13/2011 9:13:00 AM				
SLN	Item	NSN	Manu.	MSDSID	Quantity	Ctn. Size	SL	HCC	Date Updated
A01	SCOURING POWDER	7930-01-294-1115	CAPITAL SOAP PRODUCTS		3	14 oz			1/13/2011
A02	HAND CLEANER, CHERRY BOMB		ZEP INDUSTRIES		2	1 gallon			1/13/2011
A03	GOJO HAND CLEANER		GOJO INDUSTRIES		1	1 gallon			1/13/2011
A04	HAND LOTION SOAP, MICRELL	8520-01-490-7370	GOJO INDUSTRIES		72	12 oz			1/13/2011
B01	BLEACH, CLOROX		CLOROX COMPANY		3	1.42 gallon			1/13/2011
B02	CLEAN UP, CLOROX, SPRAY		CLOROX COMPANY		6	1 quart			1/13/2011
B03	GLASS CLEANER, BOTTLE	7930-00-664-6910	SKILCRAFT		26	8 oz			1/13/2011
B04	GLASS CLEANER, SPRAY	7930-01-326-8110	SKILCRAFT		19	16 oz			1/13/2011
B05	GLASS CLEANER, REFILL	7930-00-901-2088	SKILCRAFT		7	1 gallon			1/13/2011
C01	KABOOM BATHROOM CLEANER		CHURCH & DWIGHT CO.		2	19 oz.			1/13/2011
C02	LYSOL		RECKITT BENCKISER INC.		2	19 oz			1/13/2011

C03	FABULOSO		COLGATE- PALMOLIVE CO.	1	44 oz	1/13/2011
C04	CLEANER, PINE OIL	6840-01- 342-4143	SKILCRAFT	22	1 liter	1/13/2011

Analytical Environmental Services, Inc

Date: 31-Jan-11

Lab Order: 1101E96

Client: SES

Project: Crossett, Ar Armory

Matrix: Wipe

Date Received: 1/24/2011 1:30:00 PM

LEAD ON WIPES (N9100/7082)

N7082

Laboratory ID	Client Sample ID	Result	Units	Reporting Limit	DF	Qual	Date Collected	Date Analyzed	Analyst
1101E96-001A	M001	BRL	ug, Total	20	1		01/18/2011	01/26/2011	JY
1101E96-002A	M002	BRL	ug, Total	20	1		01/18/2011	01/26/2011	JY
1101E96-003A	M003	45	ug, Total	20	1		01/18/2011	01/26/2011	JY
1101E96-004A	M004	BRL	ug, Total	20	1		01/18/2011	01/26/2011	JY
1101E96-005A	M005	BRL	ug, Total	20	1		01/18/2011	01/26/2011	JY
1101E96-006A	M006	BRL	ug, Total	20	1		01/18/2011	01/26/2011	JY
1101E96-007A	M007	BRL	ug, Total	20	1		01/18/2011	01/26/2011	JY
1101E96-008A	M008	BRL	ug, Total	20	1		01/18/2011	01/26/2011	JY
1101E96-009A	M009	BRL	ug, Total	20	1		01/18/2011	01/26/2011	JY
1101E96-010A	M010	103	ug, Total	20	1		01/18/2011	01/26/2011	JY
1101E96-011A	M011	BRL	ug, Total	20	1		01/18/2011	01/26/2011	JY
1101E96-012A	M012	BRL	ug, Total	20	1		01/18/2011	01/26/2011	JY
1101E96-013A	BLANK	BRL	ug, Total	20	1		01/18/2011	01/26/2011	JY

Qualifiers: BRL - Not Detected at the Reporting Limit

DF - Dilution Factor

B - Analyte detected in the associated Method Blank

Results are blank corrected where applicable



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

Bulk Sample Summary Report

Client Name: SES

Project Name: CROSSETT, AR ARMORY

Project Number:

NVLAP

Lab ID# 102082-0

AES Job Number: 1101E98

Page 1 of 1

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
#1	1101E98-001A	Boiler Room Ceiling	ND	ND	ND	ND	ND	ND	Paint included as binder
Layer: 1									
#2	1101E98-002A	Boiler Room Floor Tiles	<1	ND	ND	ND	ND	ND	Tan Floor Tile
Layer: 1									
#2	1101E98-002A	Boiler Room Floor Tiles	ND	ND	ND	ND	ND	ND	Glue with black mastic. Insufficient amount of black mastic to be analyzed
Layer: 2									

Note: CH=chrysotile, AM=amosite, CR=crocidolite, AC=actinolite, TR=tremolite, AN=anthophyllite

For comments on the samples, see the individual analysis sheets.

ND = None Detected

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to determine the conclusive asbestos content.

It is certified by the signatures below that the laboratory identified is accredited by the National Institute of Standards and Technology for Polarized Light Microscopy (PLM) analysis under the EPA Interim Asbestos Bulk Sample Quality Assurance Program, Laboratory ID 102082-0. All percentages given are by visually estimated volume. All analyses are performed in accordance with the EPA "Method for the Determination of Asbestos in Bulk Building Materials, EPA/600/R-93/116, July 1993." This report must not be reproduced except in full without the approval of Analytical Environmental Service, Inc. These test results apply only to the samples actually tested.

Microanalyst:

Non-Responsive

QC Analyst:

Non-Responsive

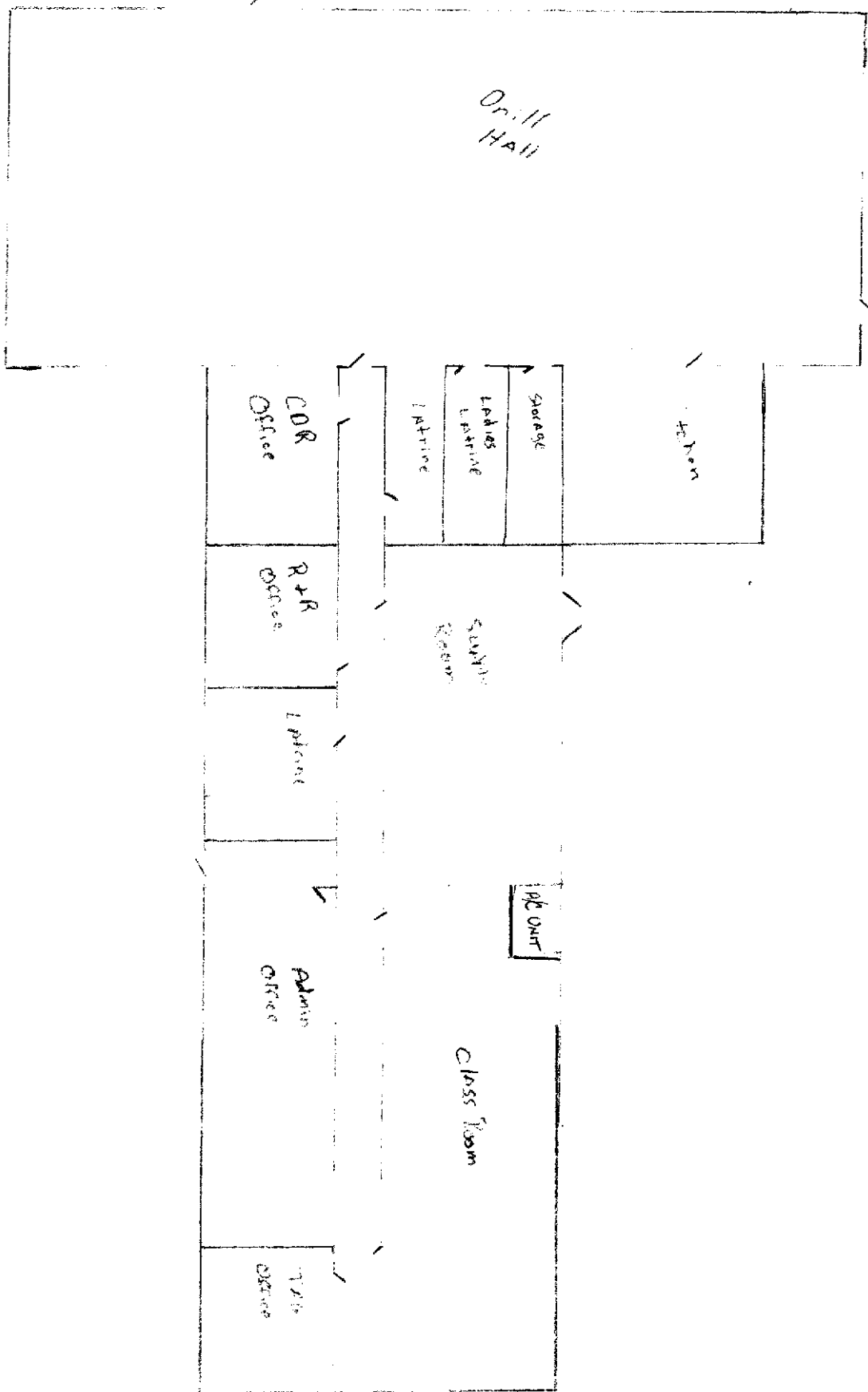
Personnel Roster, Crossett Arkansas, Armory

SSG William Dye

Training NCO

SGT Shake Ali

Admin NCO



ENCLOSURE 6

ARMORY CLEANUP REQUIREMENTS

High Test Results

If the public utilizes your facility and the test results for lead came back above 40 $\mu\text{g}/\text{ft}^2$ you are responsible for cleaning this area and adjoining areas to meet the 40 $\mu\text{g}/\text{ft}^2$ or less, unless:

1. You can guarantee that no children under the age of 7 will come into your facility.
2. Your state public health has other guidance, for example, signage is required to warn personnel who are pregnant or of child bearing age, or under the age of 7 years old.
3. Signs stating "No smoking, drinking, eating, or applications of cosmetics without washing of hands prior to activity" are properly installed in your facility.

1. Cleaning of Building.

Before proceeding into the cleanup mode, first discuss with your Environmental Office what procedures are recommended and then coordinate your cleanup efforts with local agencies, if warranted.

- a. The building, as well as the dusty materials and equipment in it, should be cleaned one time to reach the lead dust levels that are appropriate for the function of the facility, for example, facilities used by full-time personnel only, utilized by adults or children 7 years old or older children only, or not utilized by pregnant individuals and/or children under the age of 7. **NOTE: This type of cleaning implies that this is not at a facility that has an active Indoor Firing Range. For facilities with active ranges, these facilities should be monitored with wipe samples taken over the drill floor area by the Range Custodian quarterly, to ascertain that the level of lead is at the required level for your particular facility and situation.**
1. This cleanup can be accomplished using a HEPA vacuum (a very tedious and time-consuming operation) and then by utilizing a wet method with "Spic n Span" or something equivalent to this detergent – using wet rags to wipe down surfaces and mops soaked in this solution to do the entire floor area. **NOTE: Personal protective gloves, rubber boots, or protective disposable shoe/boot covers should be used during this procedure and personnel who have performed the cleanup should wash their clothing separately from their family's clothing,**

ENCLOSURE 6

especially if they have young children at home. Personnel should wash their hands after performing this operation to assure that lead contaminates are not ingested.

2. Frequent changing out of the water used for cleaning is vital. Disposal of this hazardous waste water and rags/mop heads, Personal Protective Equipment (PPE), etc., should be coordinated with your Environmental office.
- b. Clean all ductwork where lead was found. EPA has a protocol specifically for replacing or cleaning lead in dust form in HVAC systems. EPA Office of Pollution Prevention and Toxics, "*Renovate Right – Important Lead Hazard Information for Families, Child Care Providers and Schools*". <http://www.epa.gov/lead/pubs/rrpamph.pdf>.
- c. Continue to enforce good housekeeping and hygiene practices. These measures make good sense to minimize exposures to any toxic chemicals in the workplace.
- d. Provide lead awareness training to the general workforce and any occupants of your facility.

NOTE: Before you start any new procedures or practices be aware of the local city and state regulations in your area.

ENCLOSURE 6

ARMORY

CLEANUP & FOLLOW-UP HOUSEKEEPING RECOMMENDATIONS

Materials Needed:

1. Cloth Mop head(s) & Mop head holder(s) with handle.
2. Mop bucket(s) with wringer.
3. Clean cotton rags and sponges.
4. Disposable gloves.
5. Large barrel (55 gallon) to store wastewater in after changing out of dirty scrub water.
6. Disposable overshoes or rubber boots. Personnel conducting cleaning operations should not take clothes, boots, etc. home for laundering.
7. HEPA vacuum
8. Six (6) mill plastic bags to dispose of waste.
9. Wastewater containers.

Disposal of Waste Water and Cleaning Materials:

1. **NOTE:** Consult with the Local Army National Guard Environmental Office prior to taking any collection, disposal, or commencement of wiping activities. Each state and territory may have additional regulatory guidance regarding the collection, storage, and disposal of wastewater.
2. Mop heads should be disposed of after initial cleaning, unless otherwise advised by Environmental Office personnel. **NOTE: Thorough cleaning of mop heads may be sufficient enough to permit subsequent reuse on future Armory cleanups, but check with the local Environmental Office before reuse.**
3. Disposable gloves should be treated as hazardous waste material.
4. Soiled cotton rags should be treated as hazardous waste material.
5. Wash water contaminated with lead may be collected and allowed to slowly evaporate leaving lead deposits/sludge that may be collected in plastic containers, placed in metal drums, and stored for future delivery to an authorized hazardous waste disposal site.

ENCLOSURE 6

- a. Drums shall be properly labeled to identify contents in accordance with (IAW) Federal, state, and local regulatory guidance.
- b. Disposal of containerized waste shall be coordinated IAW state hazardous waste program requirements.
- c. The Environmental Office shall coordinate removal and disposal of all containerized hazardous waste through established waste streams.

Post-Cleanup Precautionary Measures:

1. Thoroughly wash hands with soap and water.
2. Rinse off rubber boots with soap and water, capturing wastewater for collection into the established waste stream. If personnel have chosen to use overshoes for protection, dispose of the used overshoes into the established waste stream. **NOTE: This recommendation is for initial cleanup activities; PPE requirements may be reduced after it has been determined that non-hazardous levels of lead have been achieved.**
3. Wash BDU's or personal clothing separately from children's clothes.

IMPORTANT NOTES:

1. **No eating, drinking or application of cosmetics is allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area).**
2. **Avoid blowing, shaking or like actions which could potentially disperse lead dust. Dry sweeping, dusting, wiping, or blowing with compressed air shall not be permitted.**

Initial Armory Cleanup:

1. Use a vacuum cleaner equipped with a HEPA exhaust filter. HEPA vacuum all surfaces in room (ceiling, wall trim, and floors). Start with the ceiling and work down, moving toward the entry door. **Completely clean each room before moving on.**
2. Prepare water and detergent for the wipe down phase, according to manufacturer's recommendations.

ENCLOSURE 6

3. Wet wipe, with cotton rags or sponge, any horizontal, diagonal or vertical surfaces up six (6) feet from floor surfaces using hot water and "Spic-n-Span" or an equivalent product.

NOTE: If walls to be cleaned show signs of deterioration, for example, chipping or crumbling paint in which wiping, scrubbing, or disrupting might potentially increase or spread contamination, then this portion of the cleanup should be avoided.

4. Now prepare water and detergent (for example, Spic n Span, Mr. Clean, Pine Sol) for the mopping phase, according to manufacturer's recommendations, which should be found on the product's label for general clean up.
 - a. Change out water and detergent frequently (when water appears dirty)
 - b. Rinse out mop heads frequently to prevent contamination of dirty water.
5. Cover entire drill floor surface with above prescribed water and detergent.
6. Final rinse should be with clean water only – after mop heads have been cleaned.

Recommended Follow-up Housekeeping Practices after Clearance sampling of cleaned area is performed by certified personnel:

1. Floor cleaning and dusting should be accomplished using the wet cleaning described in Initial Armory Cleanup SOP.

NOTE: The only exception to these wet cleaning procedures is the use of an approved chemically treated dust floor mop. This can be used for follow-up armory cleaning by sweeping of large particles of dirt and paper.

- a. Use of a pre-treated (chemically treated) dust floor mop will prevent lead dust particles from being disbursed into the surrounding atmosphere.
 - b. If a pre-treated dust mop is used – Do Not Shake Mop Head – have mop head laundered after use. **Always keep used dust mop heads in sealed double plastic bags when stored at an armory or facility.** Shaking of a pre-treated mop head may release unwanted contaminants into surrounding atmosphere.
2. Frequency of Cleanup – Armories will vary, according to usage and how often they should be cleaned. The following cleaning schedule is provided:
 - a. Only full-time technicians and traditional soldiers using facility during the month. (Cleaned Monthly.)

ENCLOSURE 6

- b. Occasional activities taking place during the month, for example, 1-2 classes or volleyball games, etc. (Cleaned Twice Monthly.)
- c. Used regularly by soldiers or outside agencies/personnel. (Cleaned Regularly – at least Weekly)

IMPORTANT NOTES:

1. Armories with adjoining Indoor Firing Ranges (IFR) should be cleaned more than weekly, again depending on the use of the Armory and IFR.
2. Clearance sampling/testing is to be accomplished by certified IH personnel after these cleanup procedures are followed. If the area is an average Armory, occupied by adults only, for whom you are cleaning and is not a converted IFR space, you may continue to utilize the Armory space before officials re-test this space. Please notify your Safety and/or Occupational Health personnel of the completion of this cleaning regime and they will notify the proper officials of the sampling/testing requirements needed.
3. If lead cleanup work was contracted out, a third party should do the clearance sampling.
4. If young children and pregnant females are, or may be present, signs shall be posted on all facilities, warning of the potential danger of exposure to lead dust.

References

Army Regulation (AR) 11-34, The Army Respiratory Protection Program.

Army Regulation (AR) 40-5, Preventative Medicine.

Army Regulation (AR) 385-10, The Army Safety Program.

NGR 385-10, Army National Guard Safety and Occupational Health Program.

TB MED 503, The Army Industrial Hygiene Program.

Title 29, Code of Federal Regulations (CFR), 1999, revision, Part 1910, Occupational Safety and Health Standards.

TG 022, US Army Environmental Hygiene Agency (YSAEHA), Industrial Hygiene Evaluation Guide.

TG 141, US Army for Health Promotion and Preventative Medicine (USACHPPM) Industrial Hygiene Air Sampling Guide.

IES Lighting Handbook



Photo No. 1

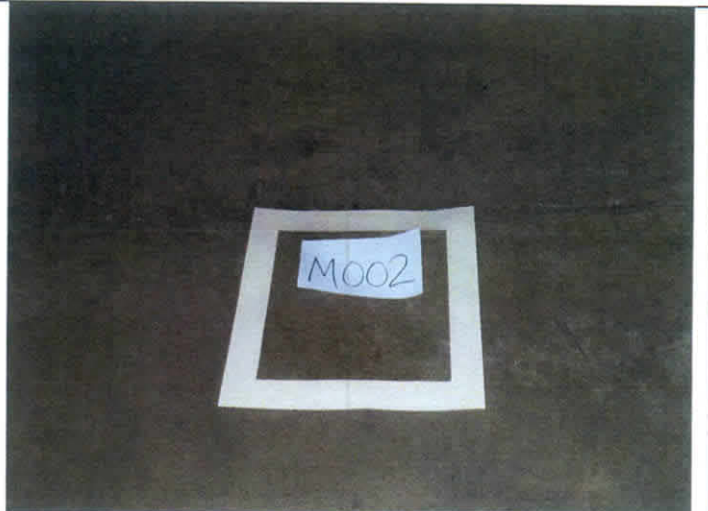


Photo No. 2



Photo No.3

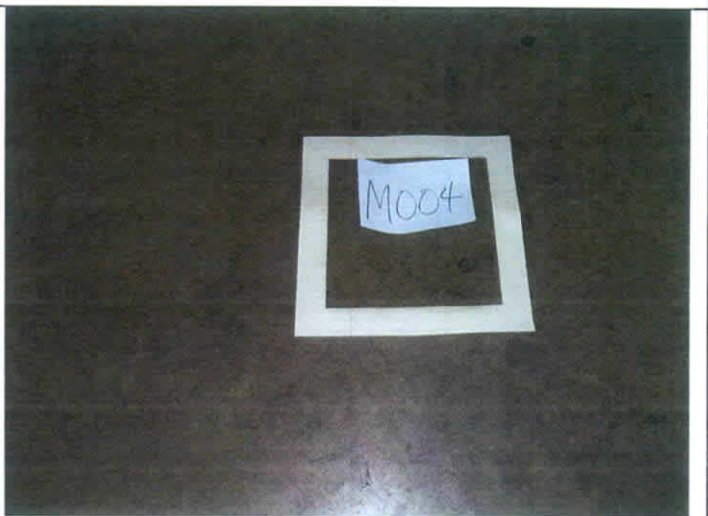


Photo No.4

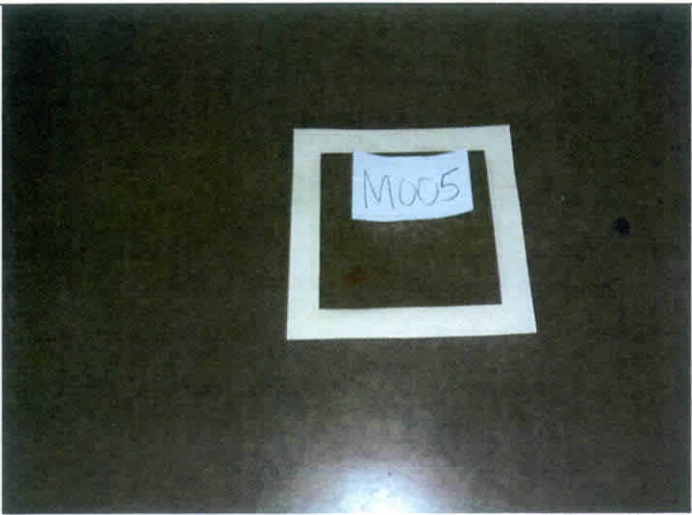


Photo No.5



Photo No.6

ENCLOSURE 8

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Photo No.7

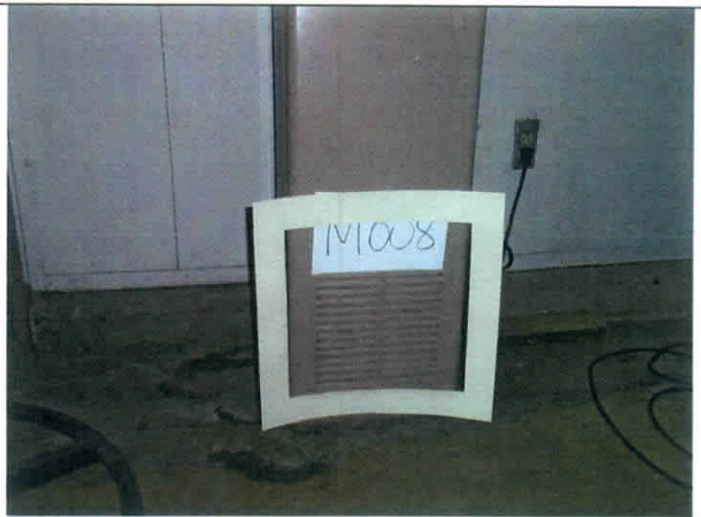


Photo No.8



Photo No.9



Photo No.10



Photo No.11



Photo No.12

ENCLOSURE 8

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Photo No.13



Photo No.14



Photo No.15



Photo No.16



Photo No.17



Photo No.18



Photo No.19



Photo No. 20



Photo No.21



Photo No.22



Photo No.23



Photo No. 24



NATIONAL GUARD REGION SOUTH
INDUSTRIAL HYGIENE OFFICE
510 PLAZA DRIVE, SUITE 1530
COLLEGE PARK, GA 30349

ARNG-CSG-P (40-5f)

Aug 30, 2010

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG: ATTN: MAJ [Non-Responsive]
[Non-Responsive] HQ 142 FiB (FA), AR Army National Guard Armory, 3590 South School,
Fayetteville, AR 72701.

Thru: LTC [Non-Responsive] Deputy State Surgeon, BLDG 15309 BOX 09, Camp Robinson,
NLR, AR 72199-9600.

SUBJECT: Transmittal of IH Survey of AR ARNG Fayetteville Armory (HQ 142),
Fayetteville, AR.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 19 August 1998.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1996 rev.
- c. Army Regulation (AR) 40-5, Medical Service, Preventive Medicine, 25 May 2007
- d. AR 385-10, The Army Safety Program, 23 August 2007.
- e. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- f. National Guard Regulation (NGR) 385-10, Army National Guard Safety and Occupational Health Program, 23 May 2008.
- g. TB MED 503, The Army Industrial Hygiene Program, 30 October 2000.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2008, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 26th rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. Title 29, Code of Federal Regulations (CFR), 2001 rev., part 1910, Occupational Safety and Health Standards.
- k. National Guard Pam 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006

ARNG-CSG-P (40-5f)

Aug 30, 2010

SUBJECT: Transmittal of IH Survey of AR ARNG Fayetteville Armory (HQ 142), Fayetteville, AR.

1. Report dated August 2010, Industrial Hygiene Survey, Mr. **Non-Responsive** Fayetteville, GA.
2. General.
 - a. At the request of the AR ARNG Safety and Occupational Health Office, an Industrial Hygiene Baseline Survey was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling of the of the ARARNG Fayetteville Armory, Fayetteville, AR.
 - b. The survey was conducted by Mr. **Non-Responsive** 583 Ginger Cake Rd, Fayetteville, GA 30214.
3. Findings: The information that follows is based on the findings of the survey performed. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed (See ENCL 1). Operations of very short duration were not sampled due to the requirements of the sampling method. If the operation changes or if the length of the operation is increased, contact this office to schedule sampling if it is deemed needed then.
4. Recommendations. Understand that all findings documented in the enclosed report have been reviewed by the Regional Industrial Hygienist and the following recommendations are the ones to be followed.
 - a. Use the guidance given in the enclosed report as good IH practices, requesting industrial hygiene (IH) services where needed. The recommendations that follow are based on the survey findings as reported for the areas surveyed:
 - i. Upgrade lighting to appropriate recommended light levels (SEE REPORT). Painting the walls and floors a light color, cleaning existing light fixtures, rearranging furniture to make better use of available light, and supplemental or task lighting are considerations in increasing available light levels. [ANSI/IES-RP7-1991]. (RAC 2)
 - ii. Replace burnt out lights and to replace the non functional ballasts on the light fixtures that are out if it has not been done yet. (RAC 2)
 - iii. Ensure to perform semi-annual inventories and updates of MSDS's on all chemicals in the facility. Establish an inventory roll up sheet to be kept and evaluate the chemical inventory and update MSDS when new materials arrive and when old ones are replaced. Ensure employees attend annual Hazard Communication training. Ensure all hazardous materials are stored in appropriate locations (RAC 3)
 - iv. Decontaminate the areas where the lead dust wipe results were high IAW NGB (AR) 385-15 Appendix C. (RAC 2)

ARNG-CSG-P (40-5f)

Aug 30, 2010

SUBJECT: Transmittal of IH Survey of AR ARNG Fayetteville Armory (HQ 142), Fayetteville, AR.

- v. Ensure that weapon maintenance and cleaning is done in a well-ventilated area. Practice good personal hygiene by washing hands after handling and cleaning weapons and handling ammunition especially after live fire exercise. Ensure that the weapons are well cleaned before placing them back in the vault. (RAC 2)
 - vi. Ensure service is provided to the HVAC system, to provide preventive maintenance to the system to include periodic cleaning of air vents. (RAC 3)
 - b. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY2010. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2011 IHIP.
 - c. Use the report to help in correcting all deficiencies noted.
 - d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.
 - e. Contact the State Occupational Health Office for any medical Surveillance that may be needed.
 - f. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
5. If additional information is needed about the industrial hygiene survey or air sample results, please contact Mr. **Non-Responsive** Regional Industrial Hygienist, NGB-ARS-IHSE, 1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF: NGB-ARS-IH

LTC **Non-Responsive** OHN/SRPO, State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl
as

Non-Responsive

**583 GINGER CAKE RD
FAYETTEVILLE, GA 30214
(770) 461-2684**

August 12-13, 2010

MAJ **Non-Responsive**
HQ 142 FiB (FA)
AR Army National Guard Armory
3590 South School
Fayetteville AR 72701

RE: Baseline Industrial Hygiene Survey

FINAL REPORT

FOR

BASELINE INDUSTRIAL HYGIENE SURVEY

ARKANSAS ARMY NATIONAL GUARD

FAYETTEVILLE ARMORY

FAYETTEVILLE, AR

DATE:

AUGUST 12-13, 2010

PREPARED BY

Non-Responsive
583 GINGER CAKE RD
FAYETTEVILLE, GA 30214
(770) 461-2684

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2.0 INSTRUMENTATION

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Attachment 2 Laboratory Reports: Deactivated Indoor Firing Range
Weapons Vault
Laboratory Reports: A/C-Heating System Outlet Grills & Filter

Attachment 3 Weapons Vaults and IFR Sampling Areas

Attachment 4 Photographs of the Facility

Attachment 5 Schematic Drawing of Facility

1.0 INTRODUCTION

At the request of the National Guard Bureau South Region Industrial Hygiene Office **Non-Responsive** performed a Baseline Industrial Hygiene Survey at the HQ 142 FiB (FA), AR ARNG, Fayetteville Armory. The purpose of the survey was to perform a baseline survey to evaluate health hazards, controls present in the work site, collect lead swipe samples from renovated/inactive or closed Indoor Firing Ranges, Weapons Vault, A/C-Heating System, illumination survey and to make recommendations regarding health hazards associated with the work at the HQ 142 FiB (FA), AR ANRG, Fayetteville Armory.

The facility was built in 1973 or 74. Personnel reported that in 1983 the size of the facility was increased by the addition of many new offices, classroom, conference room and meeting area located in the front of the building. The facility houses the HQ 142 FiB (FA), HHB 142 FiB (FA) and a third one, F BTRY (TAB) 142 FiB. The armory is used by the troops of the above mentioned units for their December weekend drills.

The HQ 142 FiB had about 13 AGR personnel at the time of the survey. The HHB 142 FiB (FA) with about 65 troops had three full time AGR personnel at the time of the survey. The F BTRY (TAB) FiB with about 42 troops had three AGR personnel at the time of the survey. The AGR employees are assigned to perform administrative duties Monday-Friday 7:00am-3:30pm. The facility houses administrative areas, a drill hall, classroom, conference room, two supply rooms, two weapons vaults, a kitchen, and a deactivated Indoor Firing Range. The building had a new roof done about five years ago. It stopped all the roof leaks throughout the facility. There is a building at the rear that was an FMS until a few years ago. It has been cleaned in order to convert it to a storage area. Personnel stated that the oil and paints that were stored in the POL, are going to be properly disposed of so the units can use it to store things they may use in the future. The old FMS may then be designated for storage. There were a couple of A/C filters missing. There is no A/C or electrical outlets in the HHB 142 FiB supply room. Personnel reported that a request has already been submitted to install electrical outlets in this room. A schematic drawing of the facility can be found in Attachment 5.

The facility was visually examined and personnel consulted to assess potential hazards present. Health Hazard Information Modules were completed. Illumination survey was performed throughout the facility.

2.0 INSTRUMENTATION/CALIBRATION

The following instrumentation was used to obtain light measurements. The instrument used has been calibrated and was operated according to the manufacturer's recommendations:

- EXTECH INSTRUMENTS Light Meter
- GHOST WIPES, Lead Wipes

3.0 FINDINGS

Illumination

Illumination levels were recorded in administration offices, classroom, the meeting room, the conference room, the drill hall and the supply rooms. Light measurements were above IES guidelines throughout the facility. Several offices had light fixtures out due to defectives ballasts. See Light Readings Table at the end of this section.

Administration

Personnel perform administrative duties that consist of reading, handling and generating paper work. Computer use comprises a large portion of the working day, four to five hours per day. This continuous use of computers can in the long run lead to eyestrain and hand/wrist soreness. Personnel reported no health problems associated with the job at this time.

Motor Pool

The motor pool is located behind the building. It is a large, fenced, concrete covered area. There were four military vehicles parked in the area the day of the survey. They belong to the F BTRY (TAB) 142 FiB. The only times the HHB 143 FiB has vehicles at the armory is in the winter when they may use them for emergency purposes. Otherwise they are kept at Ft Chaffee. Operator level PMCS are performed at the armory when the vehicles are used. Major repairs when needed are done at the FMS in Ft. Chaffee.

Drill Hall

The Drill Hall is located at the rear center of the building. It is used for formation on the December weekend drill that is held at the facility. The Drill Hall is used for training (Physical) during the week. Personnel exercise on the floor using a TV set with videos. There was several exercise machines located around the sides of the Drill Hall. The floor of the room is kept clean. There are air exhaust ventilation fans in the room. At the time of the survey both air exhaust ventilation fans were working. Personnel reported that no weapons are cleaned at the Drill Hall. New air exhaust ventilation/hood equipment for the kitchen was stored in the Drill Hall next to the rear roll-up door until it is installed in the kitchen. The Drill Hall has been rented in the past for outside activities. It has not been rented recently and not expecting to rent for now.

Kitchen

The facility has a kitchen that is not used to cook on weekend drills. Since they drill at Ft. Chaffee, the cooking is done there during weekend drills. In December,

when meet at the armory for the weekend drill, a caterer is hired to bring the food for the troops. The units eat at Ft. Chaffee on weekend drills. The kitchen however is going to be renovated by installing new air exhaust ventilation/hood equipment in the near future because the kitchen may be used in emergency situations like ice storms in the winter. The Drill Hall would be used as a shelter then. The kitchen was clean the day of the survey.

Deactivated Indoor Firing Range

There is a deactivated Indoor Firing Range (IFR) at the facility that was built in the mid 1980s. Personnel reported that it never certified because the EPA changed the requirements and the IFR did not meet them. It was also reported that after it was checked to be "cleaned", the state authorized the use of the IFR as needed. The space was empty the day of the survey. The backstop has been removed. The floor is all concrete. The roof leak was corrected when the roof was replaced. However because the floor of the room is about two feet below ground level, when it rains very hard or for long periods of time, water leaks at the level of the ground into the room. Except for a few tables, it is not been used for storage for now. Plans are been made to probably raise the level of the floor to ground level, then place a new concrete floor to solve the water leak, install A/C-Heating system and then start using the room for other purposes. All lead samples were taken using a 10 inch by 10 inch template. The US environmental Protection Agency (EPA), under a new standard issued in 2000, considers lead dust as a hazard if levels are greater than 40 micrograms of lead in dust per square foot on floors. The National Guard Bureau recommends a limit of 200 micrograms per square foot for surface contamination. Four wipe samples were taken from the IFR. None of the samples were above the clearance level of 200ug/ft². See table 1 for results. See attachment 3 & 4 for sampling locations and pictures.

Table 1

Sample Number	Sample Location	Results	
63	Floor, right side, 63" from the front wall	BRL	BRL
64	Floor, left side, 45" from the front wall	BRL	BRL
65	Midway in the room, floor, right side, 37"3" from the front wall	BRL	BRL
66	Rear at Plexiglas wall and ledge, 2 nd from right to left	BRL	BRL

71	Blank	BRL	BRL
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Weapons Vault

The Fayetteville Armory has two weapon storage vaults. One is located in the Supply Room of the HHB 142 FiB (FA) and the other in the Supply Room of the F BTRY (TAB) 142 FiB. Weapons are usually cleaned about once a year at Ft. Chaffee. Supply NCO transports the weapons from the armory to the field. The weapons are distributed there. After using them they are cleaned in the field, placed back in the racks and return to the armory. The dehumidifier in the weapons vault of the HHB 142 FiB (FA) was not working the day of the survey. The dehumidifier in the weapons vault of the F BTRY (TAB) 142 FiB was working the day of the survey. It was reported that it is on all the time. The water container is emptied weekly. All lead samples were taken using a 10 inch by 10 inch template. The US environmental Protection Agency (EPA), under a new standard issued in 2000, considers lead dust as a hazard if levels are greater than 40 micrograms of lead in dust per square foot on floors. The National Guard Bureau recommends a limit of 200 micrograms per square foot for surface contamination. Four wipe samples were taken from the weapons vault racks of the HHB 142 FiB (Table 2) and three wipe samples were taken from the weapons vault of the F BTRY (TAB) 142 FiB (Table 3). One of the samples from the HHB weapons vault was above the clearance level of 200ug/ft². None of the samples from the F BTRY weapons vault were above clearance level of 200ug/ft². See table 2 & 3 for results. See attachments 3 and 4 for sampling locations and pictures.

Table 2

HHB 142 FiB

Sample Number	Sample Location	Results	
48	Weapons Vault, Floor in front of 1 st rack, left side (See Attach. 3 & 4)	66ug	94ug/ft ²
49	Weapons Vault, Floor in front and Rack bottom, 3 rd rack, left wall (See Attachment 3 & 4)	133ug	190ug/ft ²
50	Weapons Vault, Floor in front and rack bottom, 2 nd rack rear wall (See Attach. 3 & 4)	146ug	208ug/ft ²
51	Weapons Vault, Floor in front of rack right wall	85ug	121ug/ft ²

71	Blank	BRL	BRL
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Table 3**F BTRY (TAB) 142 FiB**

Sample Number	Sample Location	Results	
52	Weapons Vault, Floor in front of 1 st rack, rear wall (See Attach. 3 & 4)	28ug	40ug/ft2
53	Weapons Vault, and Floor in front & rack bottom of 2 nd rack, rear wall, (See Attachment 3 & 4)	73ug	104ug/ft2
54	Weapons Vault, Floor in front & rack bottom of only rack, right wall (See Attach. 3 & 4)	70ug	100ug/ft2
71	Blank	BRL	BRL

A/C System

Central A/C units are used to cool the administration offices, the classroom, the conference room and the meeting room. Personnel reported that A/C-Heating units heats and cools well. The A/C filter that goes at the ceiling next to the entrance to office of SFC Combs & SSG Jones was missing the day of the day of the survey. All lead samples were taken using a 10 inch by 10 inch template. The US environmental Protection Agency (EPA), under a new standard issued in 2000, considers lead dust as a hazard if levels are greater than 40 micrograms of lead in dust per square foot on floors. The National Guard Bureau recommends a limit of 200 micrograms per square foot for surface contamination. Nine wipe samples were collected from the supply air outlet grills in offices of the HQ 142 FiB, the classroom and the conference room. All samples were below the clearance level of 200 ug/ft2.

Table 3

Sample Number	Sample Location	Results
57	A/C-Heating Outlet, Conference Room	BRL
58	A/C-Heating Outlet, Classroom	BRL
59	A/C-Heating Outlet, SGT Appleget Office	BRL
60	A/C-Heating Outlet, SSG Baker Office	BRL
61	A/C-Heating Outlet, MSG Osner Office	BRL
62	A/C-Heating Outlet, MAJ Gibbons Office	BRL
67	A/C-Heating filter, roof unit, Right front of building, Supply side	BLR
69	A/C-Heating Outlet, CPT Leimberg Office	BLR
70	A/C-Heating Filter, at ceiling next to SGT. Sabatini's office, Supply side	BLR
71	Blank	BLR

Material Safety Data Sheets

There is an MSDS Book in the armory located in the Drill Hall. It is updated when new products arrive. There are three flammables cabinets at the facility. There is one inside the building (Formerly a FMS) behind the main building. It contains several aerosol can paint, lawn mower oil, regular oil and insect killer. There is one next to the kitchen at the rear end of the Drill Hall, and the third one in the Supply Room of the F BTRY (TAB). Both of these contain household goods supplies. They all have Hazardous Materials Inventory Lists attached to the outside of the doors.

Light Readings

Light measurements were taken in various locations throughout the facility. The results were compared to guidelines recommended by the Illuminating Engineering Society (IES). The results of the survey are shown in Table 4.

Table 4

Location	Light Reading (footcandles)	IES Recommendation (footcandles)
HQ Brigade A O (MAJ Gibbons) Office	57-92 (Avg. 78)	50-100
HQ Brigade S-4 (MAJ Drost) Office	51-80 (Avg. 61)	50-100
HQ Brigade S-1 (CPT Leimberg) Office	48-135 (Avg. 94)	50-100
HQ Targeting Officer(CW3 Lassiter) Office	54-95 (Avg. 68)	50-100
HQ SGM [Redacted] Office	51-120 (Avg. 90)	50-100
HQ MSG [Redacted] Office	55-66 (Avg. 60)	50-100
HQ MSG [Redacted] Office	37-89 (Avg. 62)	50-100
SFC [Redacted] SSG [Redacted] Office	52-123 (Avg. 91)	50-100
HQ SSG [Redacted] Office	53-79 (Avg. 70)	50-100
HQ SGT [Redacted] Office	76-112 (Avg. 96)	50-100
ID Card Room	51-83 (Avg. 71)	50-100
Conference Room	56-102 (Avg. 86)	50-100
Meeting Place	37-127 (Avg. 74)	50-100
Classroom	26-106 (Avg. 75)	50-100
Drill Hall	29-115 (Avg. 69)	30

Light measurements were above IES guidelines throughout the facility. Several offices had light fixtures out due to defective ballasts. ANSI RP7-1991.

4. REFERENCES

- Guide to Occupational Exposure 2000, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.

- American National Standards Institute (ANSI), /Illuminating Engineering Society (IES), Industrial Lighting 1991.
- Title 29, Code of Federal Regulations (CFR). 1999, revision, Part 1910. Occupational Safety and Health Standards
- AR 40-5, Preventative Medicine, 15 October 1990.
- AR 385-10, The Army Safety Program, 23 May 1988.
- National Safety Council, Fundamentals of Industrial Hygiene, 4th edition, 1996.
- AR 385-16, National Guard Pamphlet, Safety Guidelines for Converting Indoor Firing Ranges to Other uses.
- TB MED 503, The Army Industrial Hygiene Program, February 1985.
- Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- Title 29 CFR, Part 1910.1200, The Hazard Communication Standard.

Non-Responsive

RECOMMENDATIONS

- Consideration should be given to replace the non functional ballasts on the light fixtures that are out if it has not been done yet. See Light Readings Section.
- Recommend that when using computers for extended periods of time, personnel should take occasional breaks and change position to minimize the possibility of eyes and/or hands/wrist injury.
- Continue to ensure that weapon maintenance and cleaning is done in a well-ventilated area. Continue to practice good personal hygiene by washing hands after handling and cleaning weapons and ammunition. Ensure that the weapons racks are well cleaned before placing them back in the vault.
- A request should be submitted to the appropriate state office to install electrical outlets in the HHB 142 FiB Supply Room if it has not been done yet. And to consider the possibility of adding A/C to the Supply NCO Office.
- A request should be submitted to the appropriate state office to solve the water leak problem in the room that was originally built as an indoor firing range that is caused because the floor is below ground level if it has not been done yet.
- Recommend that missing A/C filter should be installed and continue to change filters regularly according to manufacturers' recommendation).
- Ensure that personnel and troops have knowledge of the location of the MSDS book. And is enrolled hazardous materials safety training.

SECTION 1.

DEMOGRAPHIC DATA

BEST AVAILABLE COPY

a. ARLOC

b. INSTALLATION

Fayetteville, AR Armory

c. BLDG/RM NUMBER

d. LOCATION/CODE

FBTRY (TAG) FCB Readiness NCO

e. OPERATION/CODE

ADD

f. DESCRIPTION

g. MACOM/CODE

NG

h. SUBMACOM/CODE

j. TELEPHONE/AUTOVON NUMBER

479 442 5989

k. RAC

l. SUPERVISOR

m. NO CIV(S)

n. NO MIL

o. NO CONTRACTOR(S)

p. NO LOC(S)

q. NO OTHER

SECTION 2.

IH STAFFING DATA

a. LAB HOODS

b. VAPOR DEGREASERS

c. MAINTENANCE BAYS

d. SPRAY BOOT-S

e. OPEN SURFACE TANKS

f. VENTILATION UNITS

SECTION 3.

SURVEY DATA

Non-Responsive

a. SURVEY DATE

8/13/10

b. EVALUATOR (INITIAL)

c. CONTROLS PRESENT	d. EVALUATION	e. UNIT CODE	f. CONTROLS REQUIRED	g. STATUS
Lighting	71100; Aug 89	FC	SD-100	Light

h. PERSONAL PROTECTIVE EQUIPMENT (R=REQUIRED; A=AVAILABLE)

1. RESPIRATOR

MANUFACTURER

NIOSH TC NO

R/A

DISPOSABLE

u. FACE AIR PURIFYING

v. FACE AIR PURIFYING

FULL FACE AIR PURIFYING

POWERED AIR PURIFYING

AIRLINE

SELF-CONTAINED

ABRASIVE BLASTING HOOD

2. GLOVES	R/A	3. EYES/FACE	R/A	4. HEARING	R/A	5. BODY	R/A	6. HEAD/FOOT	R/A
ACID	/	CHEMICAL/SPLASH	/	MUFFS	/	APRONS	/	HARD HATS	/
OIL	/	SAFETY/IMPACT	/	EARPLUGS	/	COVERALLS	/	IMPERMEABLE BOOTS	/
SOLVENTS	/	CHEMICAL/SAFETY	/	CANAL CAPS	/	FULL BODY SUIT	/	SAFETY CONDUCT SHOES	/
HOT SURFACES	/	FULL FACE SHIELD	/	HELMETS	/	SAFETY BELT/HARNES	/	SAFETY/NONCONDUCTIVE SHOES	/
COLD SURFACES	/	WELDING HELMET	/			HEAT REFLECT VEST/SUIT	/		
NBC AGENTS	/								

SECTION 4.

HAZARD INVENTORY DATA

a. CAS CODE	b. HAZARD DESCRIPTION	c. PAC or EPC	d. MEDICAL SURVEILLANCE RECOMMENDED (YES or NO)
POVDT	Eye/Hand Strain Computer work for long periods of time	3	
FOOT HAZ	Falling Objects	3	
PO LIFTING	Heavy Lifting	3	

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FOIA Requested Record #J-15-0085 (AR)

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SECTION 1.

DEMOGRAPHIC DATA

BEST AVAILABLE COPY

a. ARLOC _____ b. INSTALLATION Fayetteville AR Ammory c. BLDG/RM NUMBER Supply NCO Office
 d. LOCATION/CODE Supply NCO, FERRY (TAB) 142 FIB e. OPERATION/CODE ADD SAH f. DESCRIPTION _____
 g. MACOM/CODE NSA h. SUBMACOM/CODE _____ i. SUPERVISOR Commeyford
 j. TELEPHONE/AUTOVON NUMBER 479 442 5789 k. RAC _____ l. FREQUENCY (Hz Per Day) _____
 m. NO CIV(S) _____ n. NO MIL _____ o. NO CONTRACTOR(S) _____ p. NO LOC(S) _____ q. NO OTHER _____

SECTION 2.

IH STAFFING DATA

a. LAB HOODS _____ b. VAPOR DEGREASERS _____ c. MAINTENANCE BAYS _____ d. SPRAY BOOTHS _____
 e. OPEN SURFACE TANKS _____ f. VENTILATION UNITS Non-Responsive

SECTION 3.

SURVEY DATA

a. SURVEY DATE 8/12/10 b. EVALUATOR (INITIAL) _____

c. CONTROLS PRESENT	d. EVALUATION	e. UNIT CODE	f. CONTROLS REQUIRED	g. STATUS
Lighting - Office	56-77; Aug 67	EC	50-100	Adopted
Lighting - Storage	35-48; Aug 43	EC	20	Adopted

h. PERSONAL PROTECTIVE EQUIPMENT (H-REQUIRED; A-AVAILABLE)

i. RESPIRATOR	MANUFACTURER	NIOSH TC NO	R/A
DISPOSABLE			
FACE AIR PURIFYING			
FACE AIR PURIFYING			
FULL FACE AIR PURIFYING			
POWERED AIR PURIFYING			
AIRLINE			
SELF-CONTAINED			
ABRASIVE BLASTING HOOD			

2. GLOVES	R/A	3. EYES/FACE	R/A	4. HEARING	R/A	5. BODY	R/A	6. HEAD/FOOT	R/A
ACID	/	CHEMICAL/SPLASH	/	MUFFS	/	APRONS	/	HARD HATS	/
OIL	/	SAFETY/IMPACT	/	EARPLUGS	/	COVERALLS	/	IMPERMEABLE BOOTS	/
SOLVENTS	/	CHEMICAL/SAFETY	/	CANAL CAPS	/	FULL BODY SUIT	/	SAFETY CONDUCT SHOES	/
HOT SURFACES	/	FULL FACE SHIELD	/	HELMETS	/	SAFETY BELT/HARNES	/	SAFETY/NONCONDUCTIVE SHOES	/
COLD SURFACES	/	WELDING HELMET	/			HEAT REFLECT VEST/SUIT	/		
NBC AGENTS	/								

SECTION 4.

HAZARD INVENTORY DATA

a. CAS CODE	b. HAZARD DESCRIPTION	c. PAC or EPC	d. MEDICAL SURVEILLANCE RECOMMENDED (YES or NO)
POVD	Hand/eye exam. Computer work for long periods of time	3	
FOOT HAZ	Falling Objects	3	
PO LIFTING	Heavy Lifting	3	

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Analytical Environmental Services, Inc

Date: 23-Aug-10

Lab Order: 1008C61

Client: Angel Guardiola

Project: Fayetteville, AR Armory

Matrix: Wipe

Date Received: 8/16/2010 12:55:00 PM

LEAD ON WIPES (N9100/7082)

N7082

Laboratory ID	Client Sample ID	Result	Units	Reporting Limit	DF	Qual	Date Collected	Date Analyzed	Analyst
1008C61-001A	48	66	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-002A	49	133	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-003A	50	146	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-004A	51	85	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-005A	52	28	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-006A	53	73	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-007A	54	70	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-008A	55	BRL	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-009A	56	BRL	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-010A	57	BRL	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-011A	58	BRL	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-012A	59	BRL	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-013A	60	BRL	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-014A	61	BRL	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-015A	62	BRL	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-016A	63	BRL	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-017A	64	BRL	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-018A	65	BRL	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-019A	66	BRL	ug, Total	20	1		08/12/2010	08/19/2010	MP
1008C61-020A	67	BRL	ug, Total	20	1		08/13/2010	08/19/2010	MP
1008C61-021A	68	BRL	ug, Total	20	1		08/13/2010	08/20/2010	MP
1008C61-022A	69	BRL	ug, Total	20	1		08/13/2010	08/20/2010	MP
1008C61-023A	70	BRL	ug, Total	20	1		08/13/2010	08/20/2010	MP
1008C61-024A	71	BRL	ug, Total	20	1		08/13/2010	08/20/2010	MP

Qualifiers: BRL - Not Detected at the Reporting Limit

DF - Dilution Factor

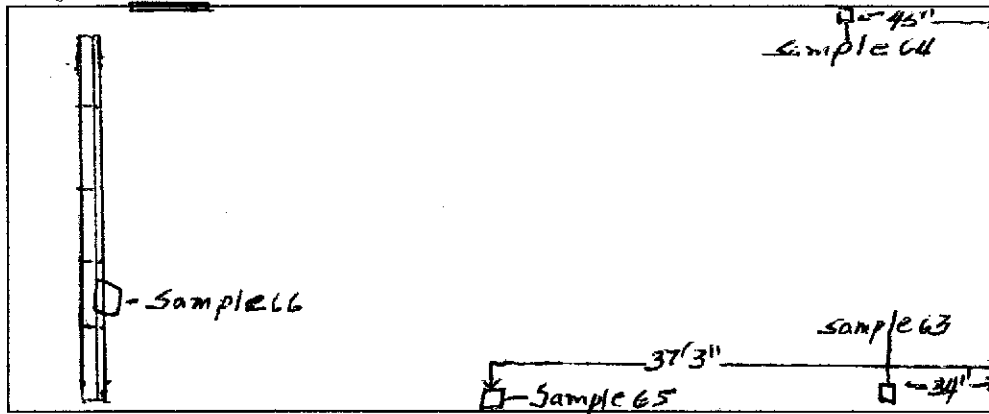
B - Analyte detected in the associated Method Blank

Results are blank corrected where applicable

FOIA Requested Record #J-15-0085 (AR)

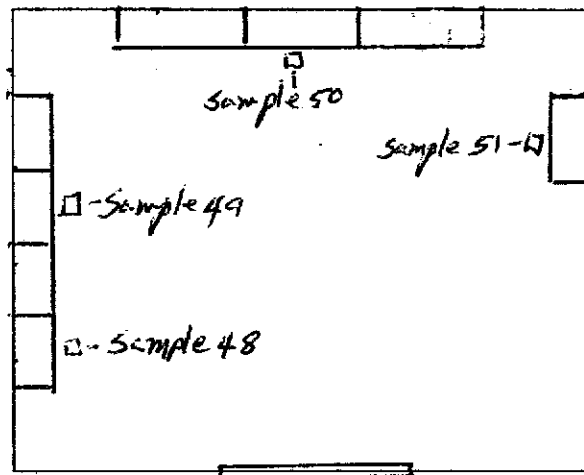
Released by National Guard Bureau

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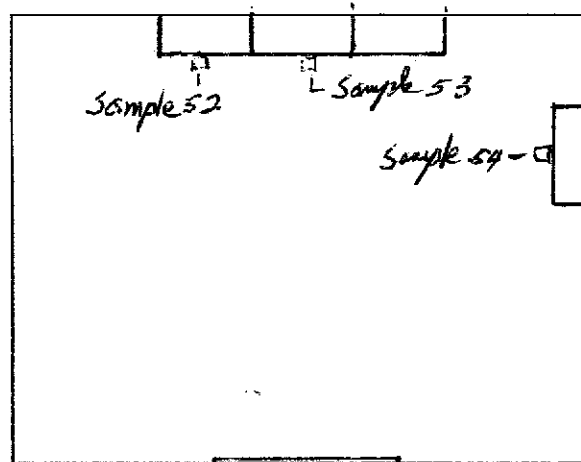


Front

Converted IFR Sampling Areas



Weapons Vault Sampling Areas
HHB Vault



Weapons Vault Sampling Areas
FBTRY (TAB) Vault

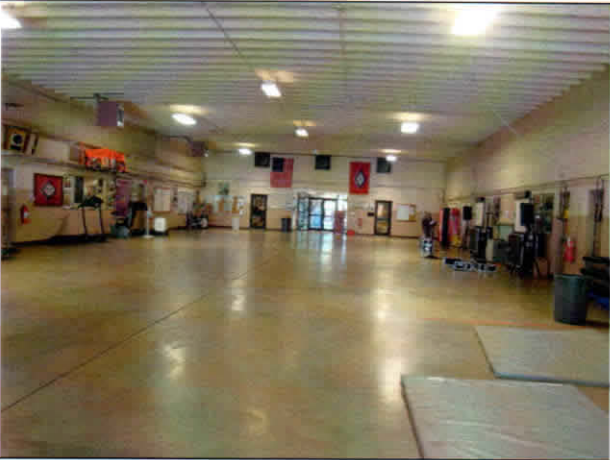
Fayetteville, AR Army



Fayetteville, AR Armory



Sign Outside



Drill Hall



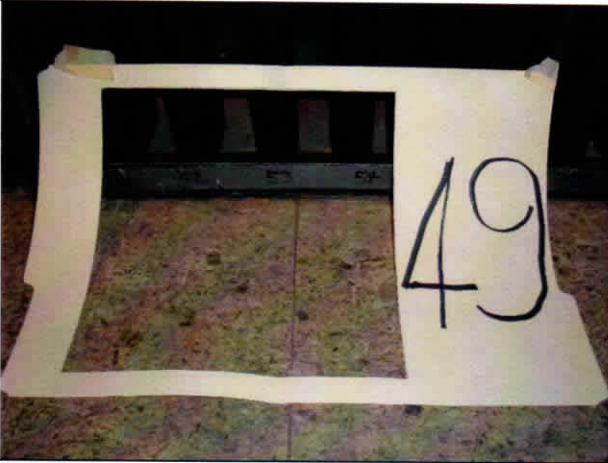
MSDS Book, Drill Hall



New Kitchen Equipment in D H waiting to be Installed



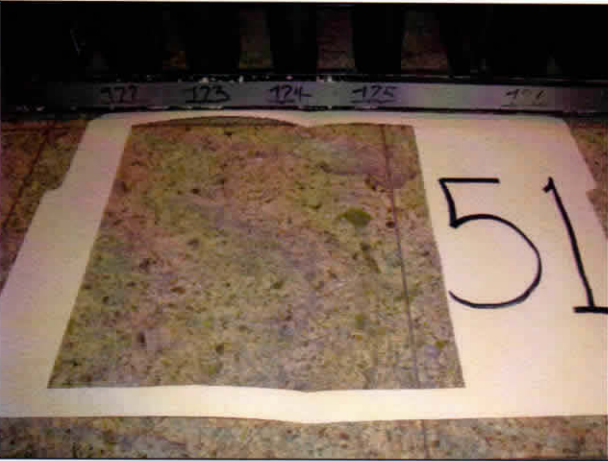
Sample, Weapons Vault



Sample, Weapons Vault



Sample, Weapons Vault



Sample, Weapons Vault



Sample, A/C-Heating Outlet



Sample, A/C-Heating Outlet



Sample, A/C-Heating Outlet



Sample, A/C-Heating Outlet



Sample, A/C-Heating Outlet



Sample A/C-Heating Filter Supply Side



Sample, A/C-Heating Outlet



Sample A/C- Heating Filter, Supply Side



Missing A/C Filter, Next to SFC Combs/SSG Jones Office



A/C =Heating Filter



Motor Pool



Storage Building(Former FMS), Rear Area



Inside, Storage Building



Flammables Cabinet 1 in Storage Building



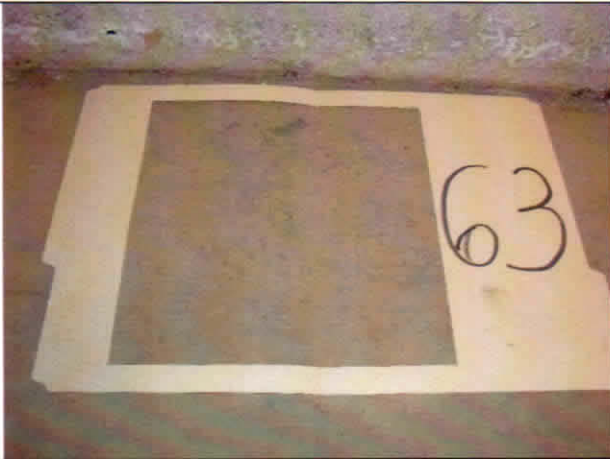
Flammables Cabinet 2 in Storage Building



Converted IFR, Front View



Converted IFR, Rear View



Sample, Converted IFR



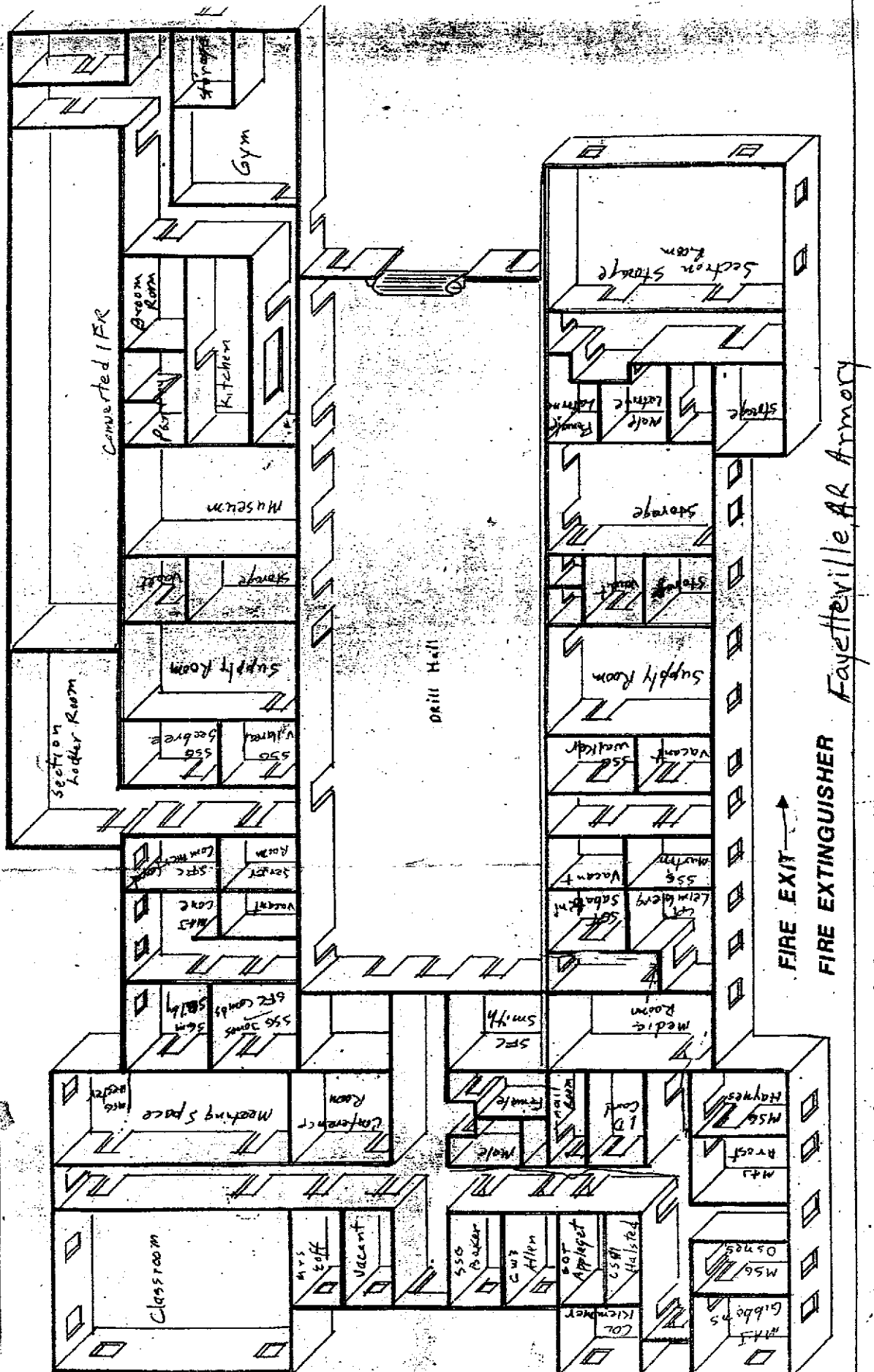
Sample, Converted IFR



Sample, Converted IFR



Sample, Converted IFR





BEST AVAILABLE COPY
DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349

ARNG-CSG

July 6, 2013

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG: ATTN: LTC **Non-Responsive**
Executive Officer, HQ 142D Fires Brigade, Arkansas Army National Guard, 3590 South
School Rd, Fayetteville, AR. 72701.

Thru: LTC **Non-Responsive** AR ARNG Deputy State Surgeon, BLDG 15309 BOX 09, Camp
Robinson, NLR, AR 72199-9600.

SUBJECT: Industrial Hygiene Survey of AR ARNG Fayetteville Armory, Fayetteville,
Arkansas.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program.
- b. Army Regulation (AR) 40-5, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program.
- f. DA PAM 40-503, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2011, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. USAEHA TG-141, January 2007, Guidelines for Air Sampling and Bulk sample Collection.
- k. Title 29, Code of Federal Regulations (CFR), 2011 rev., part 1910, Occupational Safety and Health Standards.

2. General. At the request of the AR ARNG Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys

July 6, 2013

SUBJECT: Industrial Hygiene Survey of AR ARNG Fayetteville Armory, Fayetteville, Arkansas.

and industrial hygiene sampling at the AR ARNG ARNG Fayetteville Armory, Fayetteville, Arkansas.

3. Findings. The information that follows is based on the findings of the survey performed. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed (See ENCL 1). Operations of very short duration were not sampled due to the requirements of the sampling method. If the operation changes or if the length of the operation is increased, contact this office to schedule sampling if it is deemed needed.
4. Recommendations. Follow the recommendations made in the enclosed report, requesting industrial hygiene (IH) services where needed to complete the recommendations.
 - a. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY2013. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2014 IHIP.
 - b. Have all HHIM data entered into the HHIM computer module.
 - c. Use the report to help in correcting all deficiencies noted.
 - d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.
 - e. Contact the State Occupational Health Office for any medical Surveillance that may be needed.
 - f. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
5. The present report addressed to the local facility commanders was divided in such a way that personal data can be detached and kept by the OHM or blocked when forwarding these reports to other entities within the appropriate offices of AR ARNG. If additional information is needed please contact Mr. **Non-Responsive** Regional Industrial Hygienist, **Non-Responsive**

Non-Responsive

Regional Industrial Hygienist

CF:

State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.
State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl

as

Initial Baseline Industrial Hygiene Survey

6 Mar, 2013

Arkansas Army National Guard

HQ 142D Fires Brigade

3590 South School Rd

Fayetteville, AR. 72701



Prepared For:

Dept of the Army and Air Force

National Guard Bureau

Regional Industrial Hygiene Office

Region South

510 Plaza Drive, Suite 1530

College Park, Georgia 30349

By

Non-Responsive

DBA: Pinnacle IH

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Appendix D – Drawings of Facility	
Appendix E – Photographs of Facility	
Appendix F – HHIM Forms	
Appendix G – Personnel Roster	

EXECUTIVE SUMMARY:

An Initial Baseline Industrial Hygiene Survey was conducted at the National Guard armory in Fayetteville, Arkansas on 6 March, 2013, as part of the Arkansas Army National Guard Occupational Health Program, to identify potential health hazards in the workplace. The survey consisted of conducting lead wipe samples from the weapons vault and general areas of the facility, illumination survey, noise evaluation, review of the MSDS inventory, interviews with personnel assigned to this facility on a daily basis, and a walkthrough of the building, to evaluate the general condition as it relates to indoor air quality.

TOPIC	SUMMARY OF FINDINGS	RECOMMENDATIONS
Lead Dust sampling in Weapons Vaults	Lead in dust was detected in all three weapons vaults. See Table 1.	Recommend to clean the weapons racks and floor in this vault per NG PAM 420-15. See Recommendations.

6 March, 2013

MEMORANDUM FOR: LTC **Non-Responsive** Executive Officer, HQ 142D Fires Brigade, Arkansas
Army National Guard, 3590 South School Rd, Fayetteville, AR. 72701

SUBJECT: Industrial Hygiene Survey for the Fayetteville AR armory.

INTRODUCTION

At the request of Mr. **Non-Responsive** with the National Guard Bureau South Region Industrial Hygiene Office, a Baseline Industrial Hygiene Survey was performed by **Non-Responsive** at the Fayetteville AR armory, on 06 March, 2013. The purpose of this survey was to evaluate any Health Hazards that may be present at the facility. The POC for this survey was SFC **Non-Responsive**

The armory was reportedly built around 1970. It was reported to have been occupied between 1970 and 1971, and has been added onto twice throughout the years, with the last one being in 1983/84. A large addition was added to the front of the building, which contains several offices, a classroom, conference room, meeting area, and latrines. They also added 30 feet onto the back of the drill hall. In the original section of the armory there are the drill hall, admin areas, kitchen, latrines, 3 weapons vaults, 3 supply rooms, and a converted IFR. The converted IFR is currently being used as a gym. Outside there is an old OMS/FMS shop that has been converted to storage for landscaping equipment primarily. There is also a Motor Pool area, a decommissioned vehicle wash bay, a large metal storage building, POL building, and three Conex containers for the Hazardous/Flammable chemicals. Due to the large amount of poured concrete, it was reported that they had drainage problems at one time. A French drain system was installed, and personnel report that it is functioning well. There is no vehicle maintenance bay at this facility.

Three units are assigned to this armory. They are the HHB 142 FiB (FA), the F BTRY(TAB) 142 FiB, and the 142 BSC. Two full time civilian contractors and 25 military troops work at the facility daily. Between the three units, there are a total of 238 Mday troops assigned to this facility. The drill hall is designated as a Red Cross "warming center" for major weather events, but reportedly has never been used for that purpose. Personnel reported that the only time young kids are in the drill hall is for the Family Day drill weekend in December. It was said that the BSB units typically provide the food for drill weekends, and therefore the kitchen is rarely used.

METHODOLOGY

The following instruments and testing methods were used during this survey:

- Exttech Light Meter (meets calibration requirements)
 - Illumination readings were taken from all work areas, approximately four feet from the floor, and compared to IES (Illuminating Engineering Society) and ANSI RP7-1991 recommendations.
- Quest Sound Level Meter (SLM), model 2200. S/N KOL070045.
 - Calibration Certificate 281229KOL070045.
 - SLM was set to Slow on the A-scale. Range setting was 60-120dba.
- Ghost Wipes (To test for the presence of Lead in dust)
 - Unscented "baby wipes" were used to sample one square foot areas in the weapons vaults and supply rooms, and maintenance bays. The samples were sealed, and sent to an AIHA accredited laboratory for analysis.
- The survey of the facility included photographs of the building and areas of interest, a walkthrough of the facility, and informal discussions with the POC, SFC Joseph Smith.

SURVEY FINDINGS

BUILDING CONDITION

The building is reported as structurally sound, with no roof leaks or chronic issues. In 2005 the roof was replaced. All areas were neat and clean at the time of the inspection. There were no mold issues reported or observed during the survey, and no reports of standing water around the building foundation. Lighting and ventilation was excellent overall. There were no visible signs of moisture damage to ceiling tiles, walls, or floors. Latrines and locker rooms were neat and clean. Conference rooms were neat and clean. It was reported that the kitchen is rarely used, and is in good repair. The hood is inspected semi-annually. It was also reported that the kitchen has not been certified to prepare large meals for drill activities at this time, but may be used by the Red Cross in the event of major weather events for basic food prep.

MOTOR POOL

There is a small motor pool area in the back of the facility, with a decommissioned OMS and FMS shop, and decommissioned vehicle wash bay. It was reported that a few vehicles are kept at this armory during the winter for "winter response" purposes. All vehicle maintenance is performed at Ft. Chaffee.

PERSONNEL

There are two civilian contractors and twenty five military personnel assigned to this armory full time. Through interviews with the Readiness Officer, there were no reports of excessive noise, eye strain, muscle strain, repetitive motion issues, back strain, or ergonomic issues. Most employees work an 8-hour day. SFC [Non-Responsive] typically will work 9-10 hours per day, but stated that his work does not involve any repetitive motion or other risks involved with working long hours. It was also stated that there are no concerns with water or air quality, and that employees are generally in good spirits, with no chronic sicknesses or other health issues affecting the staff as a group. PT is conducted daily. It was reported that personnel are not asked to perform heavy lifting. A forklift is available for tasks involving heavy lifting, reportedly.

MSDS

Reportedly, the supply sergeant for the HHB, Sgt [Non-Responsive] is responsible for the MSDS inventory for the entire armory. The chemicals are stored outside in three Conex units. The HHB and the F BTRY TAB unit each have a small cabinet in their supply rooms with a small inventory of unit-specific supplies primarily. Most unit-specific chemicals are stored at Ft. Chaffee. The MSDS sheets for those supplies are also managed by Sgt [Non-Responsive] reportedly. MSDS info is posted in the drill hall, and an inventory of each conex container is posted on the inside of the door. These inventories are updated as new chemicals arrive. An inventory of all three conex containers was performed during the survey.

LEAD WIPE SURVEY

SFC [Non-Responsive] stated that weapons are taken to the range two times per year, and that all weapon cleaning is performed at Ft. Chaffee, in cleaning vats. Samples for lead in dust were taken from the drill hall, converted IFR, supply rooms, and weapons vaults. The only samples that tested positive for lead were taken from the weapons vaults. See Table 1. The F BTRY vault had one sample that exceeded the National Guard Bureau recommended limit of 200 micrograms of lead in dust per square foot for work areas that require abatement. The weapons vault is an area where this applies. The vaults should not present lead in dust contamination since weapons should be cleaned before returning them to their racks. All vaults had samples that tested positive for lead, but were below the NGB limit of 200 micrograms. It is recommended to use the wet cleaning method described in NG PAM 420-15 to clean the vault floor and weapons racks. See References below. Continue to ensure that weapons are not cleaned in the weapons vault and drill hall areas.

SFC [Non-Responsive] stated that the drill hall is used by the public approximately two times per year for various activities. The EPA standard for lead in dust per square foot (40 CFR 745) specifies limits of 40

micrograms of lead in dust in areas where children, pregnant women or people of child-bearing age occupy the area. This standard is applicable to the drill hall. There were no positive samples for lead in dust found in the drill hall. See Table 1.

CONVERTED IFR

It was reported that this IFR was constructed in the mid 1980s, but never certified for use by the EPA and never used. It was also reported that the IFR was decommissioned, and was certified by the state to be used as desired. It is currently being used as an exercise and weight room. The floor and walls are sealed, and a dropped ceiling has been installed. Lead wipe samples were taken throughout this room, and no lead in dust was detected. See Table 1.

ILLUMINATION SURVEY

Results of the survey showed light measurements meeting or exceeding IES (Illuminating Engineering Society) and ANSI RP7-1991 guidelines throughout most areas of the facility. Refer to Table 2 for survey results. SFC [REDACTED] estimated there are several ballasts that may be bad throughout the facility, but the number is minimal.

DRILL HALL

Monthly Mday drills are conducted at Ft. Chaffee typically. It was reported that the drill hall is used by the public approximately two times per year. The drill hall appeared to be clean, and in good condition. PT for the full-time troops is held every morning in the drill hall. There were large stand-alone fans for cooling, and several heaters mounted near the ceiling. Personnel reported that no vehicle maintenance is performed in the drill hall, and that vehicles are not left running in the drill hall for any length of time. It was estimated that the large fluorescent lights were all replaced in early 2011. Lighting exceeded IES guidelines.

SUPPLY ROOMS

There is a supply room for each of the three units in this facility. Each of them had sufficient lighting, and appeared to be neat and clean. The supply sergeants reported no flammable or hazardous materials in the cages or cabinets in these areas. Lead in dust sampling was negative in all three supply rooms.

NOISE

Personnel did not report any loud, persistent noises that caused them concern. The loudest noise seemed to be coming from the computer network cabinet in the Readiness Office. A dba meter showed the noise level in the rear of the cabinet to be in the high 60dba range, which is still in the safe range.

HVAC SYSTEM

The A/C compressors were said to be between 15 and 17 years old. There are three of them, and Sgt [REDACTED] stated that some engineers had been out the week before to assess their present condition. A contract company handles the maintenance of the HVAC system, including changing the monthly filters.

TABLE 1 (LEAD WIPE TEST RESULTS)

SAMPLE LOCATION	Surveyor's Field No	RESULT $\mu\text{g}/\text{ft}^2$
Weapons Vault - HHB 142	JPR130	199
Weapons Vault - HHB 142 (no pic)	JPR131	104
Weapons Vault - HHB 142	JPR132	98
Weapons Vault - HHB 142	JPR133	BRL
Weapons Vault - HHB 142 Blank	JPR134	BRL
Weapons Vault - F-BTRY (TAB) 142 FiB	JPR135	59
Weapons Vault - F-BTRY (TAB) 142 FiB	JPR136	110
Weapons Vault - F-BTRY (TAB) 142 FiB	JPR137	BRL
Weapons Vault - F-BTRY (TAB) 142 FiB	JPR138	231
Weapons Vault - F-BTRY (TAB) 142 FiB Blank	JPR139	BRL
Weapons Vault - 142 BSC - Rack (4x4 Template)	JPR140	97
Weapons Vault - 142 BSC	JPR141	56
Weapons Vault - 142 BSC	JPR142	62
Weapons Vault - 142 BSC	JPR143	27
Weapons Vault - 142 BSC Blank	JPR144	BRL
Converted IFR (Gym)	JPR145	BRL
Converted IFR (Gym)	JPR146	BRL
Converted IFR (Gym)	JPR147	BRL
Supply Rm - F-BTRY (TAB) 142 Fib	JPR148	BRL
Supply Rm - F-BTRY (TAB) 142 Fib	JPR149	BRL
Supply Rm - 142 BSC	JPR150	BRL
Supply Rm - 142 BSC	JPR151	BRL
Armory Drill Hall	JPR152	BRL
Armory Drill Hall	JPR153	BRL
Armory Drill Hall	JPR154	BRL
Armory Drill Hall	JPR155	BRL
Converted IFR (Gym)	JPR156	BRL
Converted IFR (Gym)	JPR157	BRL
Converted IFR (Gym)	JPR158	BRL
Converted IFR (Gym)	JPR159	BRL
Converted IFR (Gym) (no pic)	JPR160	BRL
Converted IFR (Gym)	JPR161	BRL
Converted IFR (Gym)	JPR162	BRL
Converted IFR (Gym)	JPR163	BRL
Converted IFR (Gym)	JPR164	BRL
Converted IFR (Gym) Blank	JPR165	BRL

Note 1: $\mu\text{g}/\text{ft}^2$ refers to micrograms or one millionth of a gram per sq ft.

Note 2: BRL means Not Detected at the Reporting Limit.

[illegible]

FOIA Requested Record #J-15-0085 (AR) Page 8
Released by National Guard Bureau
Page 147 of 709

6 March, 2013

RECOMMENDATIONS

- Use the report to help in correcting all deficiencies noted.
- Recommend to clean the floors and gun racks in all three weapons vaults, using the wet method described in NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges. (RAC 2)
- Continue to ensure that weapon maintenance and cleaning is performed at Ft. Chaffee. Practice good personal hygiene by washing hands after handling weapons and ammunition. (RAC3)
- Correct discrepancies that may have been discovered in the review of the MSDS inventory. Ensure to perform semi-annual inventories and updates of all MSDS's on all chemicals in the facility. Ensure all hazardous chemicals are stored in appropriate locations. Establish an inventory roll up sheet to manage the chemical inventory, and update the MSDS when new materials arrive and old ones are replaced. Ensure that troops have knowledge of the location of the MSDS books, and are enrolled in annual Hazard Communication training. (RAC3)
- Replace the light fixture bulbs and/or ballasts in areas with illumination levels below IES recommendations. (RAC3)

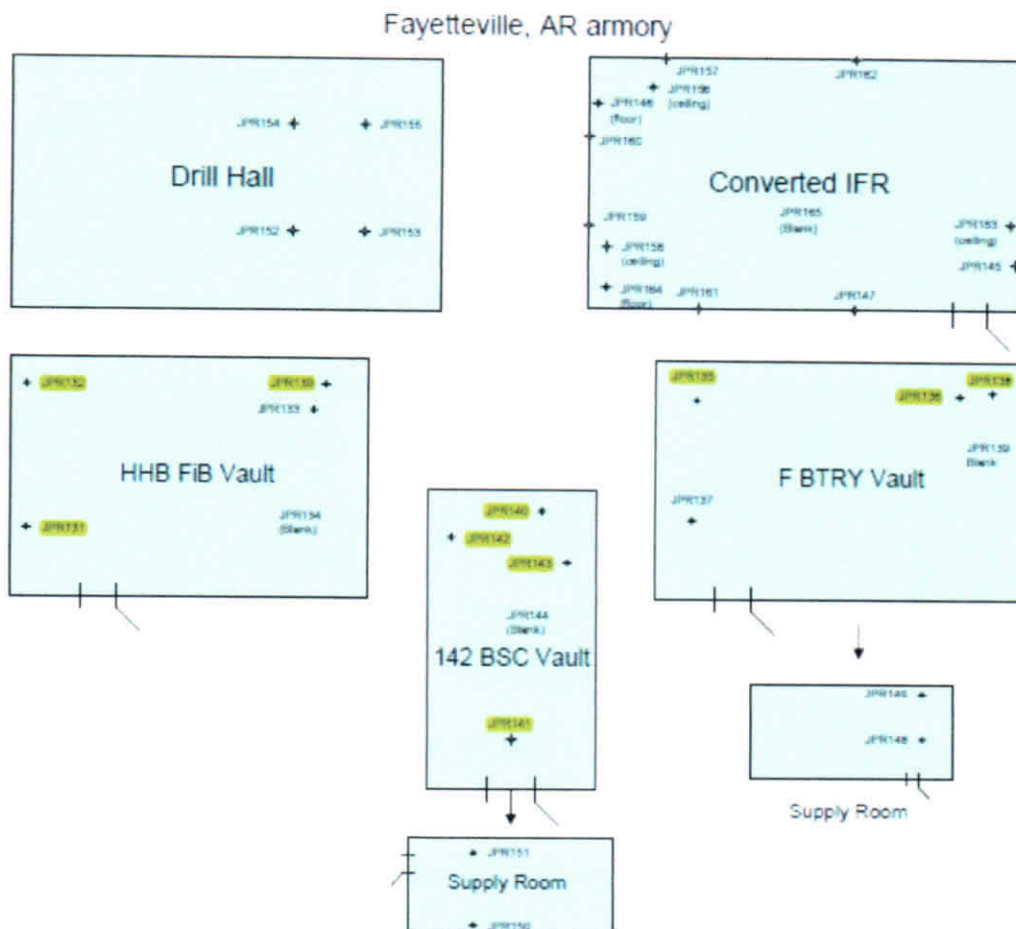
REFERENCES

- Guide to Occupational Exposure 2000, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- American National Standards Institute (ANSI). /Illuminating Engineering Society (IES), Industrial Lighting 1991.
- Title 29, Code of Federal Regulations (CFR). 1999, revision, Part 1910. Occupational Safety and Health Standards
- AR 40-5, Preventative Medicine, 15 October 1990.
- AR 385-10, The Army Safety Program, 23 May 1988.
- NG PAM 420-15 , Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges
- AR 385-16, National Guard Pamphlet, Safety Guidelines for Converting Indoor Firing Ranges to Other uses.
- TB MED 503, The Army Industrial Hygiene Program, February 1985.
- Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- Title 29 CFR, Part 1910. 1200, The Hazard Communication Standard.
- DG 415-1, Design Guide for Armories

Non-Responsive



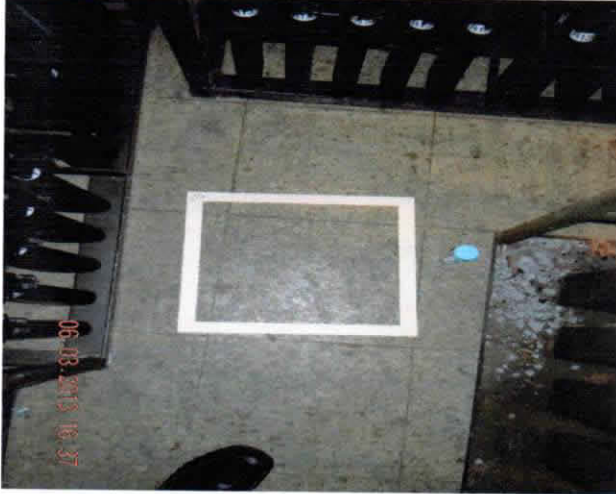
APPENDIX B
Drawing of Sampled Areas
Highlighted samples indicated Lead in Dust



APPENDIX C

Photographs of Areas Sampled for Lead in Dust

JPR130 Weapons Vault - HHB 142



JPR132 Weapons Vault - HHB 142



JPR131 Weapons Vault - HHB142



JPR138 Weapons Vault F-Btry



JPR135 - JPR136 Weapons Vault F-Btry



JPR141 - 143 Weapons Vault - BSC



JPR161 Converted IFR wall



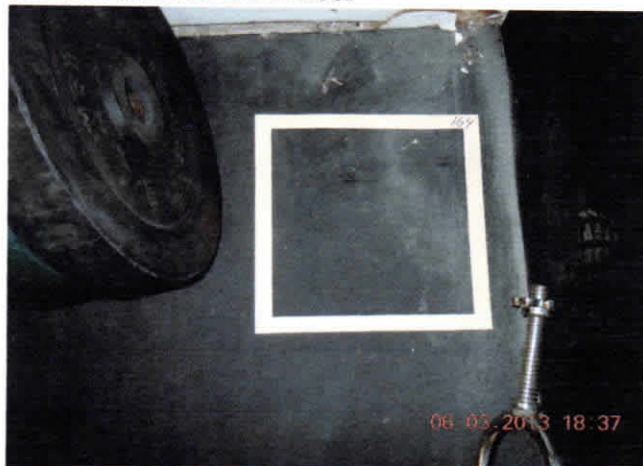
JPR162 Converted IFR wall



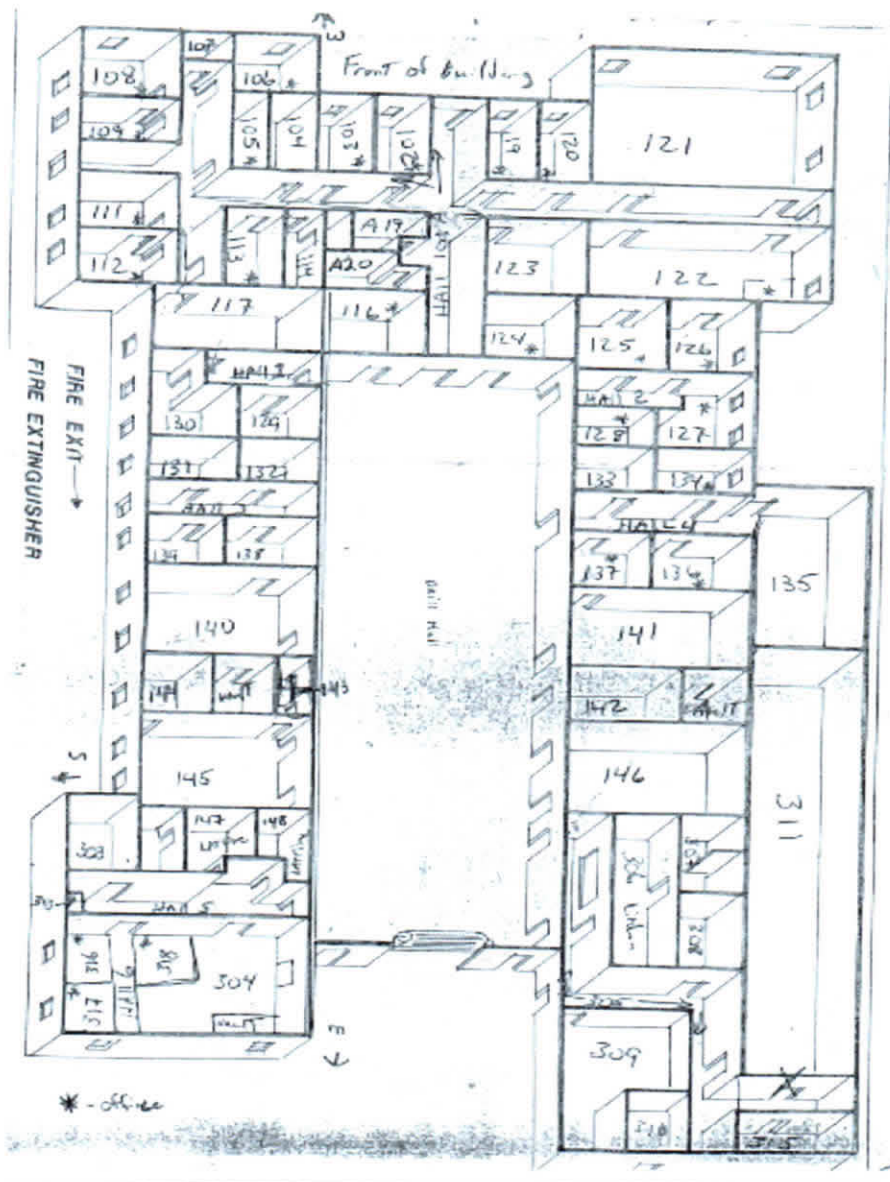
JPR163 Converted IRF ceiling



JPR164 Converted IFR floor



APPENDIX D DRAWING OF FACILITY



APPENDIX E PHOTOS OF FACILITY

Bldg Front



Bldg Rear View



Former Vehicle Maint Bays



Motor Pool



Storage



Storage



6 March, 2013

Flammable/Hazardous Chemicals



Flammable/Hazardous Chemicals



POL



A/C System



Supply Room



MSDS Documentation Posted



6 March, 2013

APPENDIX F HHIM Forms

HEALTH HAZARD INFORMATION MODULE FIELD SURVEY

*SEE PRIVACY ACT STATEMENT ON REVERSE.
If you use of this form, see (HHIM User's Instructions.)

SECTION 1. DEMOGRAPHIC DATA

1. A. LOC 250000 B. INSTALLATION Fort Huachuca C. BLDG/RM NUMBER Army Post mess office
 D. LOCATION/ADDRESS Army Post E. OPERATION/ADDRESS Post mess office F. DESCRIPTION
General Mess Hall Computer phase with paperwork filing
Occasional heavy lifting
 G. MACON/CODE McGowan H. SUBMACON/CODE Office I. SUPERVISOR ETC **Non-Responsive**
 J. TELEPHONE/AUTODYN NUMBER 501 214 6270 K. RAC 4 L. FREQUENCY (hrs Per Day) 1
 M. NO CIVIS 24 N. NO MIL 24 O. NO CONTRACTOR(S) 2 P. NO LOC(S) 2 Q. NO OTHER 24

SECTION 2. IH STAFFING DATA

1. LAB ROOMS 2. VAPOR DEGREASERS 3. MAINTENANCE BAYS 4. SPRAY BOOTHS
 5. OPEN SURFACE TANKS 6. VENTILATION UNITS

SECTION 3. SURVEY DATA

1. SURVEY DATE 6 Mar 2013 2. EVALUATOR (INITIALS) JLB

1. CONTROLS PRESENT	2. EVALUATION	3. UNIT CODE	4. CONTROLS REQUIRED	5. STATUS
Lighting	Req = 10"	PC	10-100	Adequate
Lighting	Req = 10"	PC	10-100	Adequate
Lighting	Req = 10"	PC	10-100	Adequate

1. PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIRED, A=AVAILABLE:

1. RESPIRATOR	MANUFACTURER	NIOSH TC NO	R/A
DISPOSABLE			
FACE AIR PURIFYING			
FACE AIR PURIFYING			
FULL FACE AIR PURIFYING			
POWERED AIR PURIFYING			
AIRLINE			
SELF-CONTAINED			
ABRASIVE BLASTING HOOD			

2. GLOVES	R/A	3. EYES/FACE	R/A	4. HEARING	R/A	5. BODY	R/A	6. HEAD/FOOT	R/A
ACID	1	CHEMICAL/SPASH	1	MUFFS	1	APRONS	1	HARD HATS	1
CHL	1	SAFETY/IMPACT	1	EARPLUGS	1	COVERALLS	1	IMPERMEABLE BOOTS	1
SOLVENTS	1	CHEMICAL/SAFETY	1	CANAL CAPS	1	FULL BODY SUIT	1	SAFETY CONDUCT SHOES	1
WET SURFACES	1	FULL FACE SHIELD	1	HELMETS	1	SAFETY BELT	1	SAFETY/PROTECTIVE	1
WELDING SURFACES	1	WELDING HELMET	1		1	HAIR NET	1	TIVE SHOES	1
WELDING	1		1		1		1		1

SECTION 4. HAZARD INVENTORY DATA

1. CAS CODE	2. HAZARD DESCRIPTION	3. PAC OR EPC	4. MEDICAL SURVEILLANCE RECOMMENDATION
20-21F224	Heavy lifting	3	No
20-21F224	Heavy lifting	3	No
20-21F224	Heavy lifting	3	No
20-21F224	Heavy lifting	3	No

SECTION 5. SAMPLING DATA

A. HAZARD	B. SAMPLE TYPE	C. RESULTS	D.
Lead in Dust	Wipe	See Report	

SECTION 6. PERSONNEL DATA

A. LAST NAME	B. FIRST NAME	C. MI/SSN	D. SEN
* See Report			See Report

SECTION 7. COMMENTS (Add blank sheet of paper if necessary)

- ① No Health issues reported at this armory
- ② All areas were neat and clean, with good Lighting and Climate Control
- ③ Facility built approx 1970

PRIVACY ACT STATEMENT

Title 5 U.S. Code, Section 552a, Executive Order 12958 authorizes the use of your Social Security Number as a identifier of this information is to identify and monitor data relating such U.S. citizen employee exposed to a hazardous workplace. The information is to provide histories of exposure for any given worker.

Disclosure of your Social Security Number is not mandatory; however, nondisclosure

6/22/2013

Signature

Non-Responsive

HEALTH HAZARD INFORMATION MODULE FIELD SURVEY

*SEE PRIVACY ACT STATEMENT ON REVERSE

(For use of this form, see IHEIM User's Instructions.)

SECTION 1. DEMOGRAPHIC DATA

1. APLC 050000 2. INSTALLATION Fayetteville AR 3. BLDG/RM NUMBER 1000 4. DESCRIPTION Heavy lifting, falling objects, working in cages and weapons vaults, working with hazardous chemicals

5. MACOM/CODE Nat Guard, AR 6. SUBMACOM/CODE Other, XX 7. SUPERVISOR LTC

8. TELEPHONE/AUTOVON NUMBER 501 212 6390 9. RAC 3 10. FREQUENCY (Per Pet Use) 1

11. NO CIVIS 12. NO MIL 24 13. NO CONTRACTORS 14. NO LOC(S) 15. NO OTHER

Non-Responsive

SECTION 2. IH STAFFING DATA

1. LAB HOODS 2. VAPOR DEGREASERS 3. MAINTENANCE BAYS 4. SPRAY BOOTHS

5. OPEN SURFACE TANKS 6. VENTILATION UNITS

SECTION 3. SURVEY DATA

1. SURVEY DATE 6 Mar 2013 2. EVALUATOR (INITIALS) JPB

1. CONTROLS PRESENT	2. EVALUATION	3. UNIT CODE	4. CONTROLS REQUIRED	5. STATUS

1. PERSONAL PROTECTIVE EQUIPMENT IN-NAME (A-A AVAILABLE)

1. RESPIRATOR	2. MANUFACTURER	3. NIOSH TC NO	4. R/A
DISPOSABLE			
FACE AIR PURIFYING			
FACE AIR PURIFYING			
FULL FACE AIR PURIFYING			
POWERED AIR PURIFYING			
AIRLINE			
SELF-CONTAINED			
ABRASIVE BLASTING HOOD			

1. GLOVES	2. R/A	3. EYES/FACE	4. R/A	5. HEARING	6. R/A	7. BODY	8. R/A	9. HEAD/FOOT	10. R/A
ACID		CHEMICAL/SPLASH		MUFFS		APRONS		HARD HATS	
		SAFETY/IMPACT		EARPLUGS		COVERALLS		IMPERMEABLE BOOTS	
SOLVENTS		CHEMICAL/SAFETY		CANAL CAPS		FULL BODY SUIT		SAFETY CONDUCT SHOES	
HOT SURFACES		FULL FACE SHIELD		HELMETS		SAFETY BELT/HARNES		SAFETY/CONDUCTIVE SHOES	
COLD SURFACES		WELDING HELMET				HEAT REFLECT VEST/SUIT			
INOC AGENTS									

SECTION 4. HAZARD INVENTORY DATA

1. CAS CODE	2. HAZARD DESCRIPTION	3. RAC in EPC	4. MEDICAL SURVEILLANCE RECOMMENDED (YES/NO)
2437-92-1	Lead Particulates	3	No
NO LISTING	Heavy Metals	3	No
NO LISTING	Falling Objects	3	No

NEHA Form 271, 1 MAR 88 (TEST)

(HSHB-MO-1F)

Previous editions of this form are obsolete

6 March, 2013

SECTION 3. SAMPLING DATA

1. HAZARD	2. SAMPLE TYPE	3. RESULTS	4.
Lead in Dust	4/16	See Report	

SECTION 4. PERSONNEL DATA

1. LAST NAME	2. FIRST NAME	3. SSN	4. SIGN
Mize	Thomas	M	3.8.38
* See Report for complete roster			

SECTION 5. COMMENTS (Add blank sheet of paper if necessary.)

- ① SSG Thomas Mize is primary Supply Sgt
- ② 3 Units at this armory, H&B F-13 (20), 1 SSG (448) H&B F-13, H&B F-13
- ③ No health cases reported by personnel
- ④ All areas were neat and clean, with good lighting and climate control
- ⑤ Facility built approx 1920

PRIVACY STATEMENT

This is U.S. Code, Section 552, Executive Order 13526 authorizes the use of your Social Security Number as a identifier of this information & to identify and monitor data relating with the official employee assigned to a hazardous workplace. This information is to provide history of exposure for the given worker.

Signature of your Social Security Number is not mandatory; however, confidential.

Signing Date

Non-Responsive

6 March, 2013

APPENDIX G Personnel Roster

Fayetteville, AR

Non-Responsive

LTC	
MAJ	
MAJ	
CPT	
CW4	
CW4	
MSG	
SSG	
SSG	
SGT	
SGM	
MSG	
SFC	
SFC	
SFC	
SSG	
SSG	
SSG	
SFC	
SSG	
SGT	
SFC	
SSG	
SSG	

APPENDIX G
Personnel Roster

Fayetteville, AR

LTC
MAJ
MAJ
CPT
CW4
CW4
MSG
SSG
SSG
SGT
SGM
MSG
SFC
SFC
SFC
SSG
SSG
SSG
SFC
SSG
SGT
SFC
SSG
SSG

Non-Responsive

Non-Responsive

**DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349**

NGB-AVN-SI

December 17, 2003

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG, ATTN.: State Safety and Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

SUBJECT: Transmittal of the Survey Reports for Bentonville Armory, Fayetteville Armory, Rodgers Armory and Springdale Armory, AR in Arkansas.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.
- b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.
- f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, 10 December 1998, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2001, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.

NGB-AVN-SI

SUBJECT: Transmittal of the Survey Reports for Bentonville Armory, Fayetteville Armory, Rodgers Armory and Springdale Armory, AR in Arkansas.

j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.

k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.

l. Report dated 28 November 2003, Industrial Hygiene Survey LAE Consulting, Severn, MD. 21144

2. General.

- a. At the request of the AR ARNG Safety and Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling of the for Bentonville Armory, Fayetteville Armory, Rodgers Armory and Springdale Armory, AR in Arkansas.
- a. The surveys were conducted by Ms Non-Responsive of LEA Consulting, 1218 Scattered Pines Ct., Severn, MD.

3. Findings. All Health Hazard information is on the survey findings of the report. (See enclosure 1)

4. Recommendations.

- a. Follow all recommendations made in reference 1.l., requesting industrial hygiene (IH) services where needed to complete the recommendations.
- b. Control water infiltration in the armory and/or replace or repair damaged surfaces or components (ceiling and floor tiles). Building conditions that present IAQ concerns or problems not only exacerbates normally minor health issues but also tend to promote or accelerate building deterioration.
- c. The recommendations given in the comment section and data collected will serve as a baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY-04. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY-04 IHIP.
- d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present survey, especially if this will help eliminate health hazards and reduce medical surveillance cost.

NGB-AVN-SI

SUBJECT: Transmittal of the Survey Reports for Bentonville Armory, Fayetteville Armory, Rodgers Armory and Springdale Armory, AR in Arkansas.

- e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
 - f. Give special consideration to cleaning light fixtures, increasing the wattage and painting walls a lighter color when upgrading the lighting in the facility.
5. If additional information is needed about the industrial hygiene survey or air sample results, please contact Mr. **Non-Responsive** Regional Industrial Hygienist, NGB-AVN-SI, 1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

NBG-AVN-SH

State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl
as

LAE Consulting

1218 Scattered Pines Court, Severn, Maryland 21144
Telephone: (410) 551-2717

28 November 2003

MEMORANDUM FOR: HHB 142nd Field Artillery BDE, ATTN: LTC [REDACTED] 3590
South School, Fayetteville, Arkansas 72701

SUBJECT: Industrial Hygiene Survey of Fayetteville National Guard Armory,
Fayetteville, Arkansas

1. References.

- a. Title 29, Code of Federal Regulations (CFR) Part 1910, Occupational Safety and Health Administration (OSHA).
- b. AR 40-5, Preventive Medicine, 15 October 1990.
- c. AR 385-10, 23 May 1988, Army Safety Program.
- d. TB MED 503, The Army Industrial Hygiene Program.
- e. Title 29 CFR, Part 1910.1200, The Hazard Communication Standard.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- g. Industrial Ventilation, 22nd, Edition, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- h. IES Lighting Handbook, Application Volume 1981, Illumination Engineering Society of North America.
- i. National Institute for Occupational Safety and Health (NIOSH), (76-130) Technical Information, Lead Exposure and Design Considerations for Indoor Firing Ranges GPO, 1975.
- j. Title 40, Code of Federal Regulations (CFR) Part 745, Lead, Identification of Dangerous Levels of Lead: Final rule.

SUBJECT: Industrial Hygiene Survey of Fayetteville National Guard Armory, Fayetteville, Arkansas

2. Purpose. The purpose of this survey was to conduct a baseline Industrial Hygiene survey of the Fayetteville NG Armory. The facility was visually examined and the Building Custodian was interviewed for historical information related to the building and the operations performed. A diagram of the building can be found in Enclosure 1. Laboratory results of Lead wipe samples at Enclosure 2. Photographs of the facility can be found in Enclosure 3. Health Hazard Inventories can be found in Enclosure 4.

3. Background. At the request of **Non-Responsive** of the National Guard Bureau Region South Industrial Hygiene Office, Ms. **Non-Responsive** of LAE Consulting conducted an industrial hygiene survey at Fayetteville National Guard Armory, Fayetteville, Arkansas on 6 November 2003.

4. Facility Description. This facility currently houses HHB 142nd FA BDE. The Armory has four full time soldiers. The soldiers perform administrative duties Monday through Friday between 0700 and 1700 hours. The facility was built in 1974. A complete tear off and replacement of the roof was being done during the survey. The Armory is utilized for drills on the weekend. The facility houses administrative areas, Supply Room, and an Arms Room and a drill hall.

5. Findings.

a. Radioactive warning signs were posted in areas storing radioactive containing material. The flammable storage cabinet for this Company is in a hallway. The cabinet contained containers of paint. Material Safety Data Sheets are located on the Drill Hall floor.

b. An ice machine was found in the janitorial room in the Armory. The machine is hard plumbed.

c. A survey was performed on the lighting within the Armory. Lighting was measured in foot-candles (FC). All areas measured were above the recommended 50 FC stated in reference h except: the S-3 office 29.0 FC; weather source admin office 3.1 FC.

d. Mouse droppings were found in a cabinet in the kitchen. The hot water was not working at the hand-washing sink in the kitchen.

LAE Consulting
1218 Scattered Pines Court, Severn, Maryland 21144
Telephone: (410) 551-2717

Page 2

SUBJECT: Industrial Hygiene Survey of Fayetteville National Guard Armory, Fayetteville, Arkansas

e. A maintenance building is located outside the Armory. The building is called the Training Bay by the State. The building is said to be used for training purposes of the maintenance personnel of the 142nd Battalion. A recycling solvent tank and or parts washer is located in the bay. A sander and grinder are also noticed. A large fan mounted through a wall provides exhaust ventilation. Eyewash is not provided.

f. An asbestos sample was taken on the gray tile floor in the hallway threshold. The majority of the facility is carpeted. The original tile is present in some spots of the Armory. A contract is pending for removal and installation of new carpeting.

g. A deactivated Indoor Firing Range is located within the Armory. The range was built in 1983 as an addition to the original structure. The range was said to never been activated because of health and safety or design discrepancies. Currently range is used to store excess items, tentage, chairs and tables. All associated range materials are still present (i.e. backstop). The range can accommodate 4-5 firing lanes. An observation room with an entrance from an outer hallway is located behind the firing lines. The observation room is currently being used for storage. The ceiling in the range is a drop ceiling. The ceiling tiles and acoustic material on the walls are damaged and/or missing from frequent roof water leaks. Fifteen Lead wipe samples and one blank sample was taken (Table 1).

Sample Number	Sample Location	Results
1	Table used to issue weapons in supply	50 ug/ft ²
2	Floor drill hall 6 Ft front of supply room	<12 ug/ft ²
3	Table used to clean weapons	15ug/ft ²
4	Top of refrigerator in the kitchen	<12 ug/ft ²
5	Observation room range side	<12 ug/ft ²
6	Range right wall 6 feet up	<12 ug/ft ²
7	Podium stored in range	19 ug/ft ²
8	Floor, middle of range	23 ug/ft ²
9	Acoustic wall right side under the desk	<12 ug/ ft ²
10	Range backstop lane 2, 5 ft up	49 ug/ ft ²
11	Range backstop lane 4, 15 ft up	23 ug/ ft ²
12	Range left deflector	<12 ug/ ft ²
13	Range right deflector 4 ft up	<12 ug/ft ²
14	Backstop lane 3, 15 ft up	19 ug/ ft ²
15	Floor front of Pit	20 ug/ ft ²
16	1 ft outside range on the floor	17 ug/ ft ²
17	Observation room 10 ft up	16ug/ ft ²
18	Drill Hall floor center	<12 ug/ ft ²
19	Blank	<12 ug/ ft ²

LAE Consulting
1218 Scattered Pines Court, Severn, Maryland 21144
Telephone: (410) 551-2717

SUBJECT: Industrial Hygiene Survey of Fayetteville National Guard Armory,
Fayetteville, Arkansas

6. Recommendations.

a. Produce a Chemical Inventory for the chemicals that are utilized by the Armory. Suggest all Armory personnel obtain education on Hazard Communication. Contact the Arkansas Occupational Safety and Health Office for assistance on training requirements.

b. Cross contamination can occur from janitorial chemicals being placed on the top of the machine and possibly spilling into the ice machine. Ice is considered food by all sanitary regulations. Consider removing the ice machine to a safer location to preclude the possibility of a food borne illness.

c. Consider purchasing supplemental lighting such as desk lamps and a floor lamp. If monies are available, recommend upgrading the lighting fixtures in the areas below 50 FC to meet the required 50 FC recommended [IES/ANSI RP1-1993].

d. Contact a certified pest controller to eliminate the rodent population. Place all food items in a rodent proof container with a tight fitting lid. Contact a plumber to fix the hot water supply to the hand-washing sink.

e. Recommend that the Arkansas Safety and Occupational Health office conduct further evaluation of this possible maintenance operation.

f. No Asbestos was detected in the tile sample taken from the Armory.

g. Recommend that the Texas Safety and Occupational Health office review the Lead wipe sample results of this facility to determine if the range was properly decontaminated. If sample results are greater than or equal to 40 ug/ft² consider decontamination of the range.

SUBJECT: Industrial Hygiene Survey of Fayetteville National Guard Armory,
Fayetteville, Arkansas

7. Technical Assistance. For technical assistance, regarding information found in this report, please contact Etienne Rodriguez of the Southeast Regional Industrial Hygiene Office, 1-800-326-0262.

Non-Responsive

4 Encl

1. Building Diagram
2. HHIM
3. Facility Photos
4. Lead Wipe Results

LAE Consulting

CF: Arkansas Army National Guard, Safety Occupational Health Office,
Little Rock, Arkansas

LAE Consulting
1218 Scattered Pines Court, Severn, Maryland 21144
Telephone: (410) 551-2717

Page 5



Exterior views of the Maintenance Training Building



View of the Exhaust in the Maintenance Building



Interior views of the Maintenance Training Bay

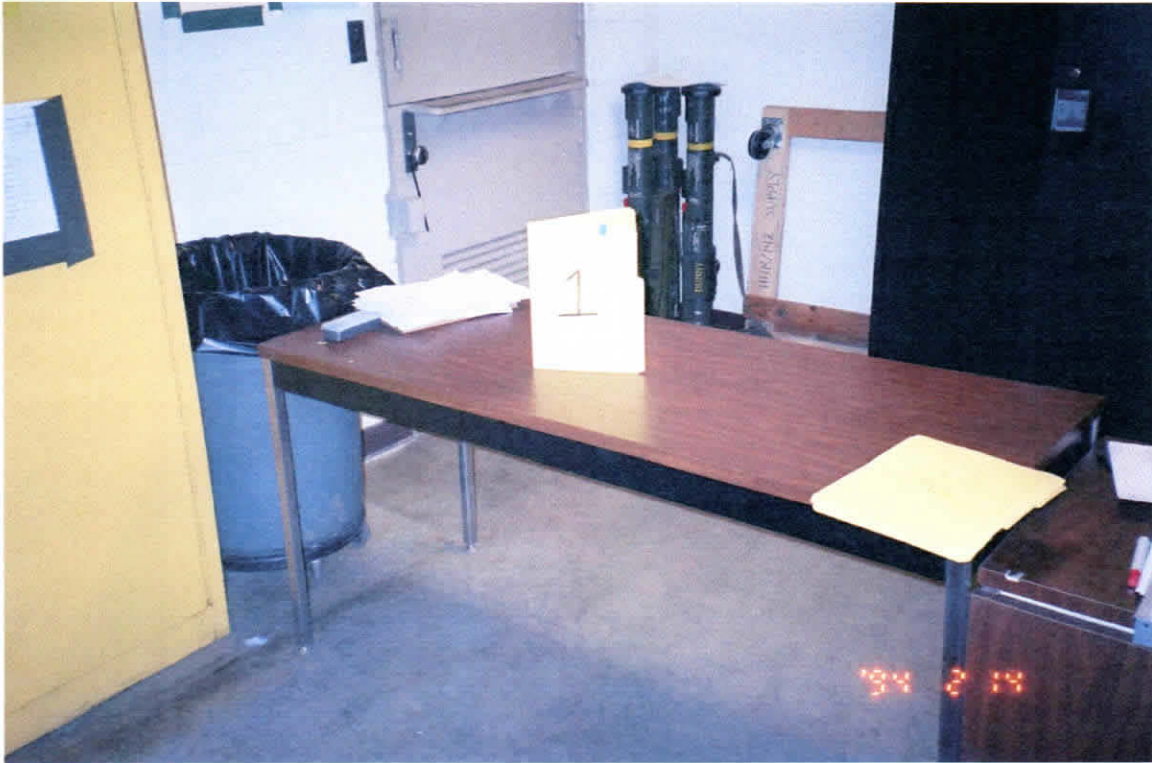




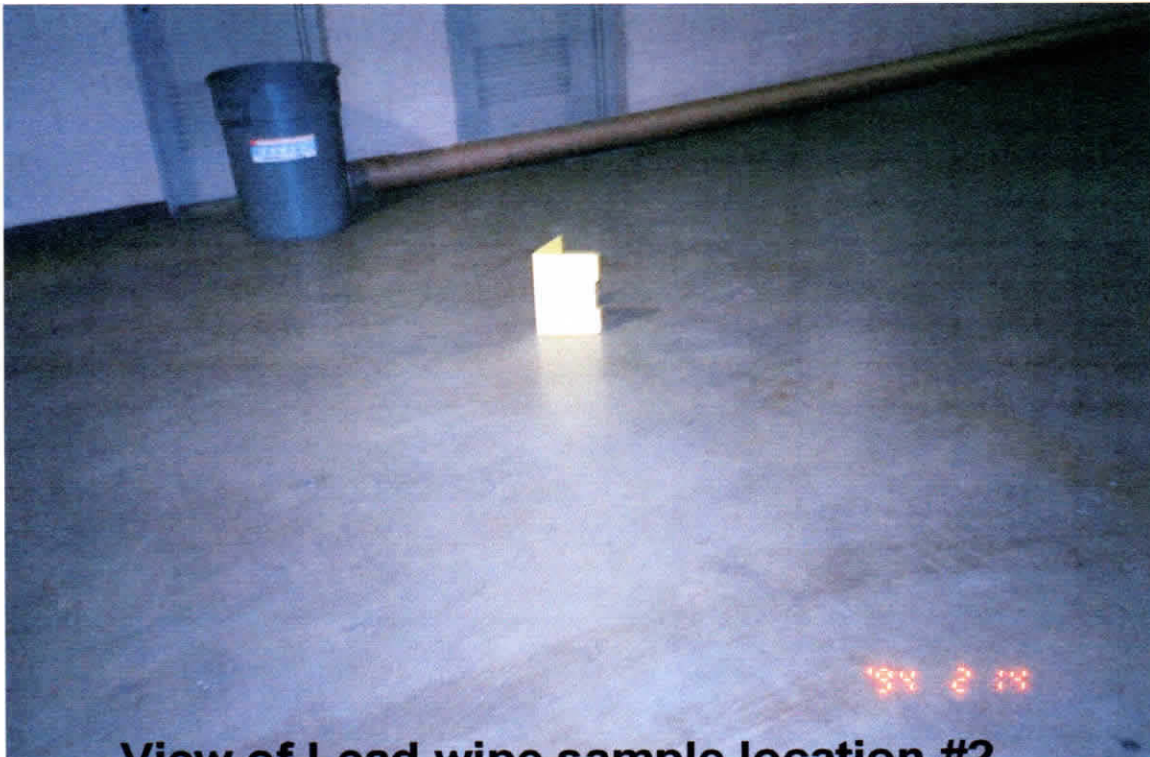
View of Rodent droppings on the shelves in the food storage area



View of ice machine located in the janitorial area



View of Lead wipe sample location #1,
on a tabletop used to clean weapons



**View of Lead wipe sample location #2,
Drill Hall floor 6 ft in front of supply room**



View of Lead wipe sample location #3,
Table used to clean weapons



View of Lead wipe sample #4,
Top of refrigerator in the kitchen



View of Lead wipe sample location #5,
observation wall range side



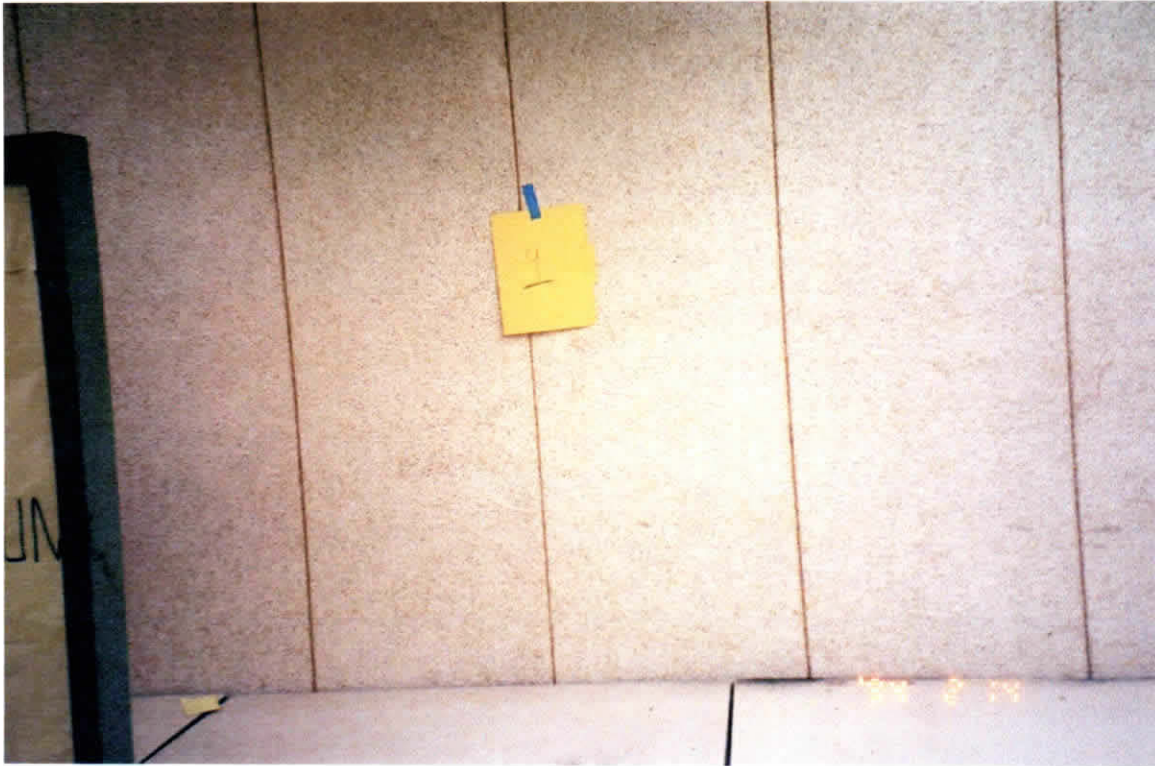
View of Lead wipe sample location #6, Right wall 6 ft



View of Lead wipe sample location #7,
Podium stored in the range



View of Lead wipe sample location #8,
Middle of floor in the range



View of Lead wipe sample location #9, acoustic material right side, above the desk



View of Lead wipe sample location #10,
Backstop lane 2, 5 ft up



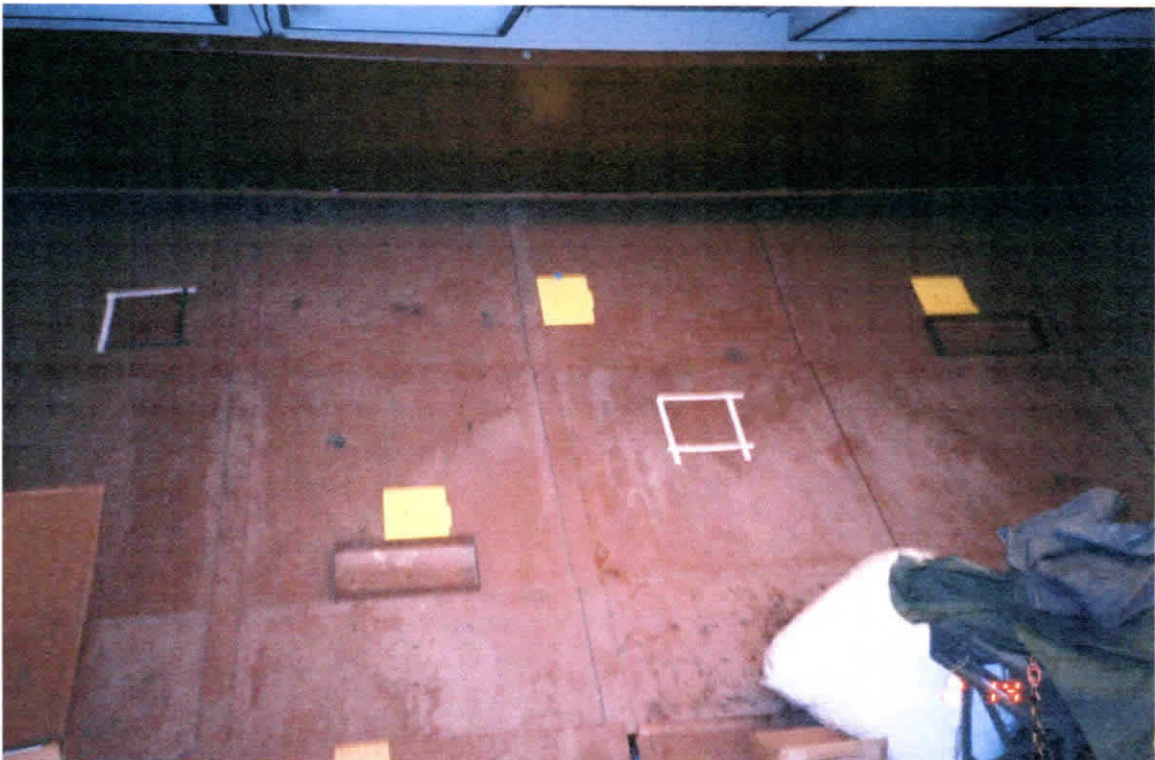
View of Lead wipe Sample location#11,
Backstop lane 4, 15 ft up



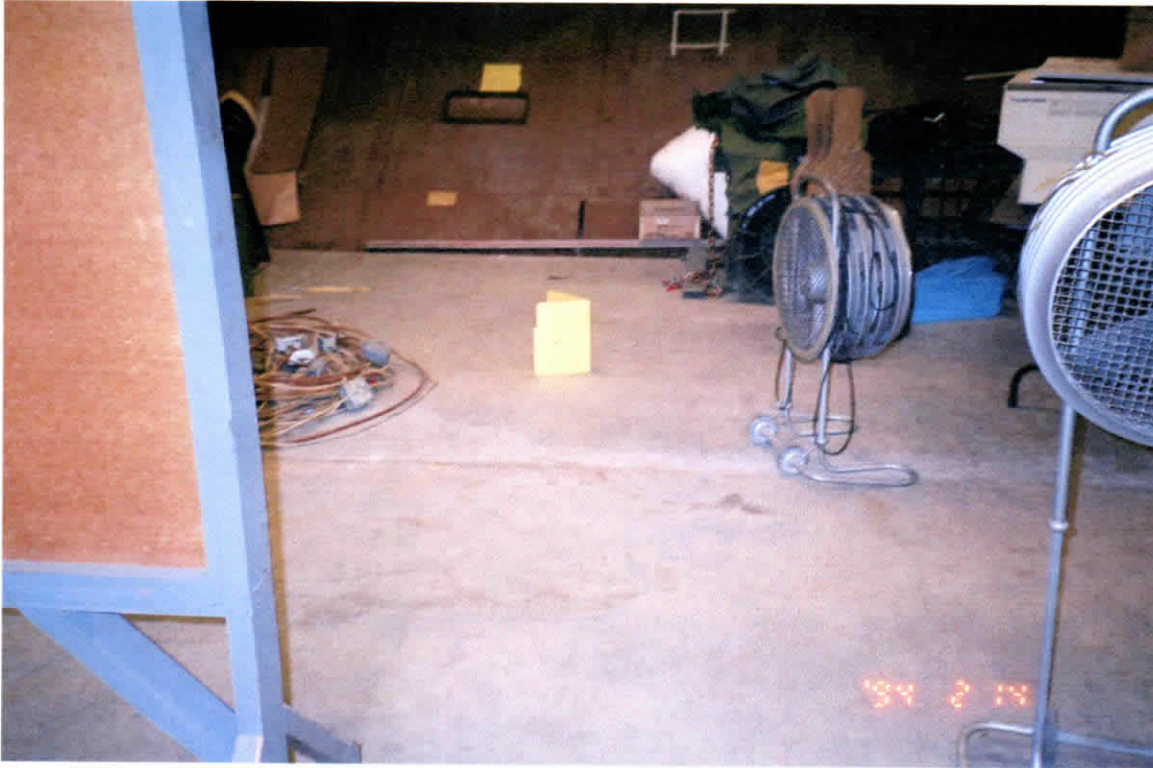
View of Lead wipe sample location #12, left deflector



View of Lead wipe sample location #13,
right deflector 4 ft up



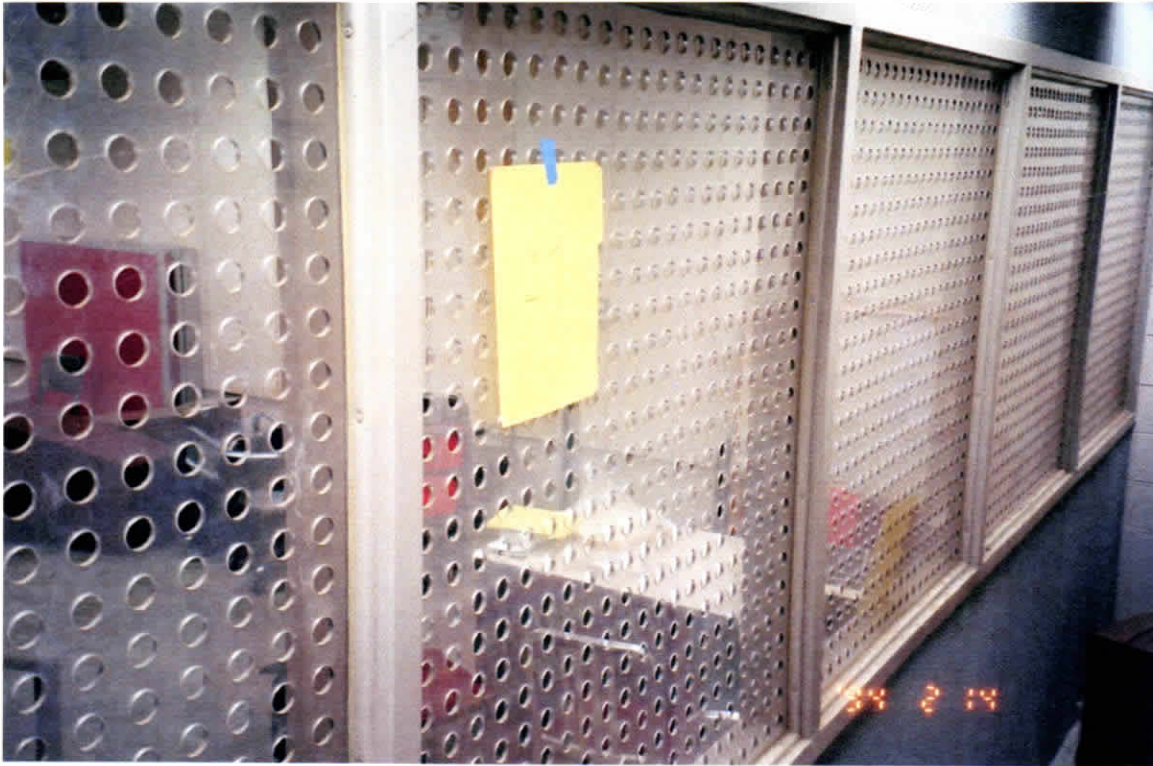
View of Lead wipe sample location #14,
backstop lane 3 15ft up



View of Lead wipe sample location #15,
Floor in front of Pit



View of Lead wipe sample location #16, Floor outside range



View of Lead wipe sample location #17,
observation side of plexiglass wall



Up and downrange views of the deactivated indoor firing range at Fayetteville Arkansas Armory





Views of the Fayetteville Arkansas,
National Guard Armory Drill Hall



CERTIFICATE OF ANALYSIS

Client: LAE Consulting
Address: 1218 S. altered Pine Court
Severn Maryland 21144

Job Name: National Guard Amory
Job Location: Fayetteville, Arkansas
Job Number: Not Provided
P.O. Number: Not Provided

Chain Of Custody: 114872
Date Analyzed: 11/13/2003
Person Submitting: [Redacted]
Report Date: 17-Nov-03

Attention: [Redacted]

Page 1 of 2

Summary of Atomic Absorption Analysis for Lead

AMA Sample Number	Client Sample Number	Analysis Type	Sample Type	Air Volume (L)	Area Wiped (ft ²)	Reporting Limit	Final Result	Comments
0407978	1	Flame	Wipe	****	1.000	12.00 ug/ft ²	50 ug/ft ²	
0407979	2	Flame	Wipe	****	1.000	12.00 ug/ft ²	12 ug/ft ²	
0407980	3	Flame	Wipe	****	1.000	12.00 ug/ft ²	15 ug/ft ²	
0407981	4	Flame	Wipe	****	1.000	12.00 ug/ft ²	12 ug/ft ²	
0407982	5	Flame	Wipe	****	1.000	12.00 ug/ft ²	12 ug/ft ²	
0407983	6	Flame	Wipe	****	1.000	12.00 ug/ft ²	12 ug/ft ²	
0407984	7	Flame	Wipe	****	1.000	12.00 ug/ft ²	19 ug/ft ²	
0407985	8	Flame	Wipe	****	1.000	12.00 ug/ft ²	23 ug/ft ²	
0407986	9	Flame	Wipe	****	1.000	12.00 ug/ft ²	12 ug/ft ²	
0407987	10	Flame	Wipe	****	1.000	12.00 ug/ft ²	49 ug/ft ²	
0407988	11	Flame	Wipe	****	1.000	12.00 ug/ft ²	23 ug/ft ²	
0407989	12	Flame	Wipe	****	1.000	12.00 ug/ft ²	12 ug/ft ²	
0407990	13	Flame	Wipe	****	1.000	12.00 ug/ft ²	12 ug/ft ²	
0407991	14	Flame	Wipe	****	1.000	12.00 ug/ft ²	19 ug/ft ²	
0407992	15	Flame	Wipe	****	1.000	12.00 ug/ft ²	20 ug/ft ²	
0407993	16	Flame	Wipe	****	1.000	12.00 ug/ft ²	17 ug/ft ²	
0407994	17	Flame	Wipe	****	1.000	12.00 ug/ft ²	16 ug/ft ²	
0407995	18	Flame	Wipe	****	1.000	12.00 ug/ft ²	12 ug/ft ²	
0407996	19	Flame	Wipe Blank	****	N/A	12.00 ug	12 ug	

BEST AVAILABLE COPY

BEST AVAILABLE COPY

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations and collection protocols are based upon the information provided by the persons submitting them and, unless collected by personnel of these laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of this information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. NVLAP Accreditation applies only to polarized light microscopy of bulk samples and transmission electron microscopy of AIHA air samples.

AN AIHA (#8863), NVLAP (#101143), & New York ELAP (#10920) Accredited Laboratory
4475 Forbes Blvd. • Lanham, MD 20706 • (301) 459-2643 • Toll Free (800) 346-0961 • Fax (301) 459-2643

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CERTIFICATE OF ANALYSIS

Client: LAE Consulting
Address: 1218 Scattered Pine Court
Severn, Maryland 21144
Job Name: National Guard Armory
Job Location: Fayetteville, Arkansas
Job Number: Not Provided
P.O. Number: Not Provided
Chain Of Custody: 114872
Date Analyzed: 11/13/2003
Person Submitting: [Redacted]
Report Date: 17-Nov-03

Summary of Atomic Absorption Analysis for Lead

AMA Sample Number	Client Sample Number	Analysis Type	Sample Type	Air Volume (L)	Area Wiped (ft ²)	Reporting Limit	Final Result	Comments
-------------------	----------------------	---------------	-------------	----------------	-------------------------------	-----------------	--------------	----------

Analysis Method for Flame: Air, Wipes, Paints, and Soil/Solids: EPA 600/R-93/200(M)-7420; Water: SM-3111B
Analysis Method For Furnace: Air, Wipes, Paints, and Soil/Solids : EPA 600/R-93/200(M)-7421; Water: SM-3113B
N/A = Not Applicable mg/Kg = parts per million (ppm) by weight mg/L = parts per million (ppm)
%Pb = percent lead by weight ug = micrograms ug/L = parts per billion (ppb)
Note: All results have two significant digits. Any additional digits shown should not be considered when interpreting the result.

Analyst: [Redacted]

Technical Manager: [Redacted]

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CERTIFICATE OF ANALYSIS

Client: LAE Consulting
Address: 1218 Seattered Pine Court
Severn, Maryland 21144

Job Name: National Guard Armory
Job Location: Fayetteville, Arkansas
Job Number: Not Provided
P.O. Number: Not Provided

Chain Of Custody: 114870
Date Analyzed: 11/13/2003
Person Submitting: [REDACTED]

Attention: [REDACTED] Page 1 of 1

Summary of Polarized Light Microscopy

AMA Sample Number	Client Sample #	Total Asbestos	Chrysotile Percent	Amosite Percent	Crocidolite Percent	Other Asbestos Percent	Mineral Wool Percent	Fiberglass Percent	Organic Percent	Synthetic Percent	Other Percent	Particulate Percent	Sample Color	Analyst ID	Comments
-------------------	-----------------	----------------	--------------------	-----------------	---------------------	------------------------	----------------------	--------------------	-----------------	-------------------	---------------	---------------------	--------------	------------	----------

0407977	1	NAD	--	--	--	--	--	--	TR	--	--	100	Gray	LR	
---------	---	-----	----	----	----	----	----	----	----	----	----	-----	------	----	--

The following footnotes only apply to those samples which the total asbestos result is flagged with a note number.

- 1 TEM RECOMMENDATION - Please note, due to resolution limitations with optical microscopy and/or interference from matrix components of this sample, results which are reported via PLM as negative or trace (<1%) for asbestos may contain a significant quantity of asbestos. It is recommended that the additional analytical technique of TEM be used to check for asbestos fibers below the resolution limits of optical microscopy.
- 2 MATRIX REDUCTION RECOMMENDATION - Please note, due to interference from the matrix components of this sample, results which are reported via PLM as negative or trace (<1%) for asbestos may contain a significant quantity of asbestos which is obscured from view. It is recommended that the additional preparation technique of gravimetric reduction be performed on this sample to minimize the obscuring effects of matrix components, followed by reanalysis by PLM and/or TEM.

Analysis Method - EPA/600/R-93/116 dated July 1993

NAD = "No Asbestos Detected" TR = "Trace equals less than 1% of this component"

Non-Responsive

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HEALTH HAZARD INFORMATION MODULE: INDUSTRIAL HYGIENE SURVEY

(For use of this form, see HHIM User's Guide)

ARLOC	INSTALLATION Fayetteville ARKANSAS N6 Army		BLDG/RM NO. 3590 S. School ST Fayetteville, AR 72701	
LOCATION/CODE AA		OPERATION/CODE FSD		
SURVEY DATE 6 NOV 03		EVALUATOR		
MACOM/CODE	SUBMACOM/CODE		SUPERVISOR / TC SFC Non-Responsive Non-Responsive	
TELEPHONE/DSN NO. (779) 442-5789	UNIT/ORGANIZATION HQ 142 ND FA BN		RAC 4	FREQUENCY (hrs/day) 8 hrs / day
NO. CIV(S)	NO. MIL 3	NO. CONTRACTORS	NO. LOC(S)	NO. OTHER

SECTION 2: FACILITY DATA

LAB HOODS	VAPOR DEGREASERS	SPRAY BOOTHS
MAINTENANCE BAYS 2	OPEN SURFACE TANKS	VENTILATION UNITS

SECTION 3: SURVEY DATA

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS

PERSONAL PROTECTIVE EQUIPMENT (R= REQUIRED; U = UTILIZED)

GLOVES	R/U	RESPIRATOR	NIOSH TC NO.	MANUFACTURER	R/U
ACID	/	AIR LINE			/
COLD SURFACES	/	ABRASIZE BLASTING HOOD			/
HOT SURFACES	/	DISPOSABLE			/
NBC AGENTS	/	FULL FACE AIR PURIFYING			/
OIL	/	1/2 FACE AIR PURIFYING			/
SOLVENTS	/	1/4 FACE AIR PURIFYING			/
SURGICAL GLOVES	/	SELF CONTAINED			/

EYES/FACE	R/U	HEARING	R/U	BODY	R/U	HEAD/FIT	R/U
CHEMICAL SPLASH	/	CANAL CAPS	/	APRONS	/	COLD WEATHER BOOTS/HATS	/
FULL FACE SHIELD	/	EARPLUGS	/	COLD WEATHER CLOTHING	/	HARD HATS	/
CHEMICAL/SAFETY	/	HELMETS	/	COVERALLS	/	IMPERMEABLE BOOTS	/
SAFETY/IMPACT	/	MUFFS	/	FULL BODY SUIT	/	SAFETY/CONDUCTIVE SHOES	/
WELDING HELMET	/	MUFF/EARPLUG COMBO	/	HEAT REFLECTIVE VEST/SUIT	/	SAFETY/NCN-CONDUCTIVE SHOES	/
		MUFF/EARPLUG W/TIME LIMIT	/	SAFETY BELT/HARNES	/		/

SECTION 4: HAZARD INVENTORY DATA

CAS CODE	HAZARD DESCRIPTION	PAC	EPC
7439-92-1	Lead, inorganic, Dust fines		
POLIGHTIN	LIGHTING, INADEQUATE		

SECTION 5: PERSONNEL DATA

LAST NAME	FIRST NAME	MI	SEX	SSN	CATEGORY

SECTION 6: COMMENTS

☐ No comments

☐ See attached sheet



DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349

NGB-ARS-IHSE (40-5f)

November 18, 2005

MEMORANDUM FOR: Adjutant General AR ARNG, ATTN: MAJ **Non-Responsive** State
Occupational Health Office, Camp Robinson North Little Rock, AR 72118-2200.

SUBJECT: Transmittal of the Survey Reports for Augusta Armory, Bebe Armory, Sercey Armory and
Herber Armory in AR.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.
- b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.
- f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, 10 December 1998, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2003, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.
- k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.

NGB-ARS-IHSE (40-5f)

November 18, 2005

SUBJECT: Transmittal of the Survey Reports for Augusta Armory, Bebe Armory, Sercey Armory and Herber Armory in AR.

1. Industrial Hygiene Survey Report, OSHEA II, Industrial Hygiene Consulting, Fayetteville, NC.
2. General.
 - a. At the request of MAJ **Non-Responsive** AR ARNG Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling at the Combined Support Maintenance Shop, Camp Robinson, North Little Rock, Arkansas, 22 May -2 June 2000.
 - b. The surveys were conducted by OSHEA II, Industrial Hygiene Consulting, P.O. Box 35669 Fayetteville, N.C. 28303
3. Findings. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed (See ENCL 1). The afford mentioned report has been designed, by this office, to extract personal data from the report which is enclosed. Additionally three Hearing Conservation Program Notification Letters were generated based on the noise dosimetry performed.
4. Recommendations.
 - a. Follow all recommendations made in paragraph 6 of the enclosed report. Request industrial hygiene (IH) services where needed to complete the recommendations.
 - b. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY2005. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2006 IHIP.
 - c. Have all HHIM data entered into the HHIM computer module.
 - d. Use the report to help in correcting all deficiencies noted.
 - e. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.
 - f. Contact the State Occupational Health Nurse, MAJ **Non-Responsive** for any medical Surveillance that may be needed.
 - k. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

NGB-ARS-IHSE (40-5f)

November 18, 2005

SUBJECT: Transmittal of the Survey Reports for Augusta Armory, Bebe Armory, Sercey Armory and Herber Armory in AR.

5. The present report addressed to the local facility commanders was divided in such a way that personal data can be detached and kept by the OHM or blocked when forwarding these reports to other entities within the appropriate offices of AR ARNG. If additional information is needed please contact Mr. [REDACTED] Non-Responsive Regional Industrial Hygienist, NGB-AVN-SI, COMM. (404) 559-4174 OR 1 (800) 326-0262.

Non-Responsive

Regional Industrial Hygienist

CF: NGB-AVN-SH

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

ENCL.

as

OSHEA II
IH CONSULTING

Arkansas Army National Guard
Heber Springs Armory



OSHEA II IH CONSULTING PO BOX 35669 FAYETTEVILLE, NC 28303

MEMORANDUM FOR: Illinois Army National Guard: ATTN: SSG Non-Responsive
Armory Supervisor B Company 39th Support Battalion, Heber Springs, Arkansas
72453

SUBJECT: Baseline Industrial Hygiene Health Hazard Information Module
(HHIM) Survey of B Company 39th Support Battalion, 701 South 7th Street
Heber Springs, Arkansas 72453
October 21, 2005

1. REFERENCES

a. Title 29 Code of Federal Regulations (CFR) part 1910, Occupational Safety and Health Administration (OSHA).

b. Army Regulation 385-10, The Army Safety Program, 29 February 2000.

c. Army Regulation 11-34, The Army Respiratory Protection Program, 15 February 1990

d. DA PAM 40-503, The Army Industrial Hygiene Program, 30 October 2000

e. Industrial Ventilation, 25th Edition, The American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.

f. National Guard Regulation 385-10, Army National Guard Safety and Occupational Health Program 20 December 1989

g. IES Lighting Handbook, Application Volume 2000, Illumination and Engineering Society of North America.

h. DA PAM 40-501, Hearing Conservation Program, 10 December 1998

i. Technical Bulletin (TB MED) 503, The Army Industrial Hygiene Program, 1 February 1985,

j. Army Regulation (AR) 40-5, Preventive Medicine, 22 July 2005

OSHEA II Industrial Hygiene Consulting
IH Survey, Arkansas Amory
October 2005

2. **GENERAL:** At the request of Mr. **Non-Responsive** National Guard Bureau South, Regional Industrial Hygienist, Atlanta, Georgia, a Health Hazard Information Module Baseline Survey was performed at Detachment B Company 39th Support Battalion, Heber Springs, Arkansas. The purpose of this survey was to evaluate health hazards, existing controls in the work site to perform a baseline survey in accordance with references 1a through 1j and collect bulk samples.

3. FINDINGS:

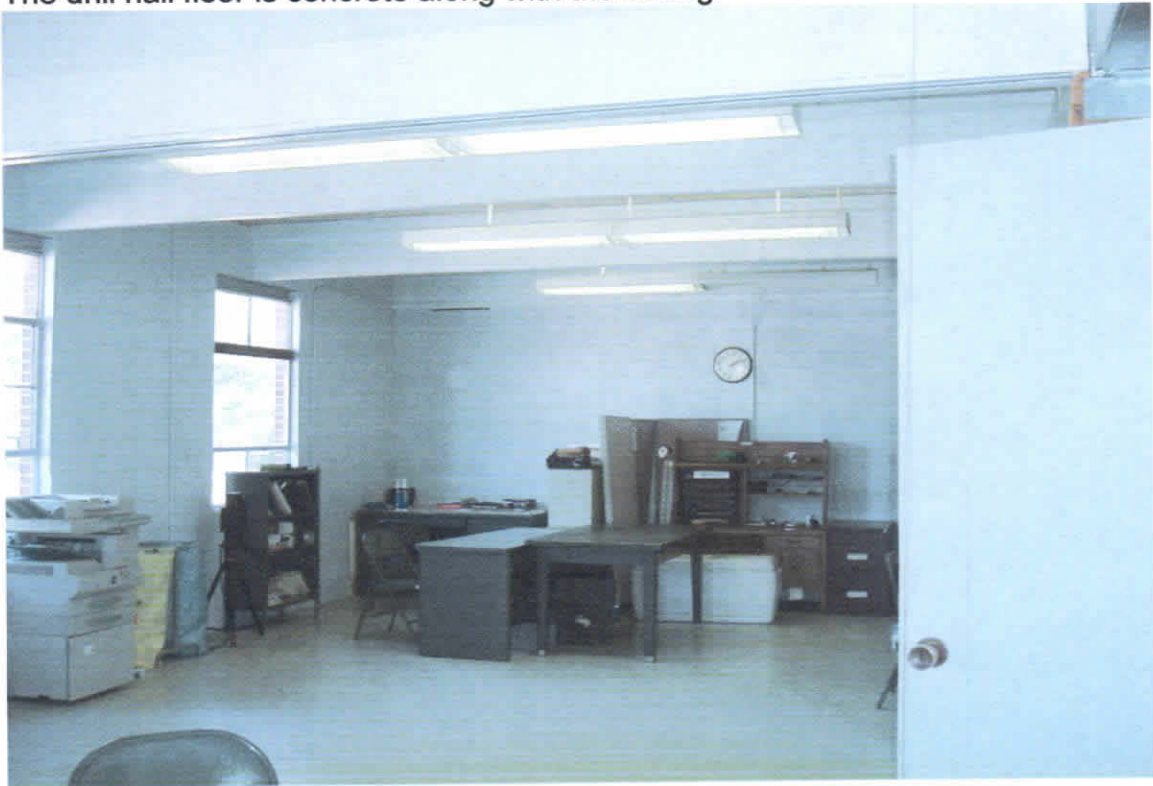
Armory Site Description: The armory is occupied by B Company 39th Support Battalion. Four full time individuals perform daily administrative duties six to eight hours a day. The armory was constructed around the 1950's and contains several offices/ four administrative areas, one kitchen, supply rooms, and a weapons room/vault. No tile was found friable on the floors or in the ceilings. The armory has never contained an indoor firing range. Illumination levels were recorded in all administrative areas, classrooms, training rooms and supply areas throughout the Armory. In some areas bulbs were found blown, missing or fuse problems existed.

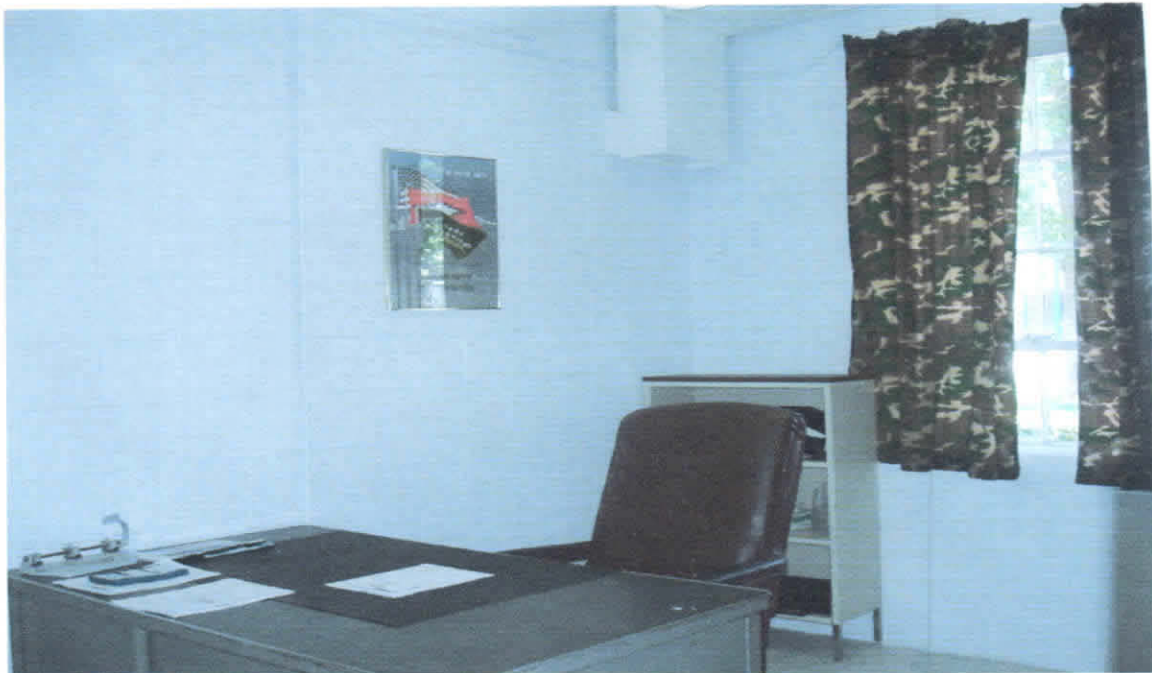


Illumination levels in the drill hall were 46.7-47.3 Foot candles.



The drill hall floor is concrete along with the ceiling.





Illumination in the office areas ranged from 49.5 to 55.3 foot candles



This training room is utilized during drill weekend. Lighting levels in this room ranged from 44.9 to 55.0 foot candles.



The kitchen is not used for meal prep. Meals are catered. Illumination levels in the kitchen ranged from 57.8 to 58.8 foot candles.





The only noticed evidence of water leaks was in the storage area.

- a. **Hearing Conservation Program:** All employees are enrolled in the Hearing Conservation Program and receive annual audiograms.
- b. **HAZCOM:** HAZCOM training had been performed prior to this survey. MSDS were available for their inventory.
- c. **Administrative Areas:** Personnel perform administrative duties that consist of reading, handling and generating paper work. Employees use computers and answer phones also.
- d. Wipe sampling was performed in the drill hall area, kitchen and vault. All thirty three sample results detected no presence of lead.
- e. **Military Vehicle Area:** Military vehicles are used to run errands or transport supplies on drill weekends. Armory's personnel perform no maintenance operations or vehicle repairs.
- f. A noise level survey was performed, of the vehicles site. Noise hazard caution signs are posted on vehicles and hearing protection is available and easily assessable for personnel and visitors. Enclosure No. 3 contains the noise survey.

OSHEA II Industrial Hygiene Consulting
IH Survey, Arkansas Amory
October 2005

g. Arms Room/Weapons Vault: There were no weapons stored in the armory's vault. It is reported that no weapons cleaning is performed inside of the weapons storage vault.

h. Solvent Bath: During drill training the solvent bath is used. The fluid in the solvent bath tank is warmed and weapons are cleaned on the drill hall floor. Full time Personnel place their weapon in the cleaning solution for a few minutes, remove it and finish the cleaning process. It is stated that it is a two part process. The cleaning process takes less than thirty minutes.

4. Technical Assistance:

For further assistance concerning this survey, you may contact Mr. [Non-Responsive] NGB Regional Industrial Hygienist at 1-800-326-0262.

[Non-Responsive]

Industrial Hygienist

CF: State Safety and Occupational Health Office
ATTN: LTC [Non-Responsive]
Camp Robinson, Arkansas

CF: State Safety and Occupational Health Office
ATTN: Major [Non-Responsive]
Camp Robinson, Arkansas

OSHEA II Industrial Hygiene Consulting
IH Survey, Arkansas Amory
October 2005

RECOMMENDATIONS

- a. Hearing Conservation Program. Continue with annual audiometric testing for relevant personnel in accordance with reference 1h.
- b. Hazardous communication or HAZCOM refresher training. Continue with annual HACOM training. Dated and signed records should be maintained of all HAZCOM training administered.
- c. Fluorescent bulbs need to be replaced immediately after they have become blown to give the maximum amount of light in classroom, offices, and training areas in accordance with reference 1h. A work order should be submitted to the appropriate office requesting repair/ replacement of fuses in non-functioning light fixtures.
- d. Weapons are never to be cleaned inside the weapon's storage vault or any other enclosed area without adequate ventilation in accordance with references 1a and 1c. Personal Protective equipment, such as goggles, should be worn to protect eyes from splash hazards and gloves should be worn to prevent solvent absorption through the skin.
- e. Based on the limited, short duration, nature, of contact cleaners, and solvents used at this armory, there is no need for a Respiratory Protection Program, neither is there a need to perform atmospheric monitoring during weapons cleaning if windows and doors are open to circulate air during weapons cleaning.

Enclosure No. 1

INSTRUMENTATION: The following survey instrumentation was utilized to obtain noise, illumination or ventilation measurements. All equipment was used according to manufacturer/ manual recommendations. All equipment was calibrated prior to and after use.

Nomenclature	Serial No.
Extech Light Meter	L595339
Extech Sound Level Meter	6134582
Extech Sound Calibrator	5431625
Extech Thermo Anemometer	9184009
Metrosonic Dosimeters	5427-5436
Spers Scientific Sound meter	

Enclosure No. 2

NOISE SURVEY (Sound Level Meter Survey)							
1. DATE (YYYYMMDD) 05/10/18				2. TYPE SURVEY (Enter Code) <div style="border: 1px solid black; display: inline-block; padding: 2px;">1</div> <div style="margin-top: 5px; font-size: small;">1- INITIAL SURVEY 2- RESURVEY 3- OTHER</div>			
3. SOUND LEVEL METER		4. MICROPHONE		5. CALIBRATOR			
a. MANUFACTURER Quest		a. MANUFACTURER		a. MANUFACTURER Quest			
b. MODEL	c. SERIAL NO. 9070019	b. MODEL	c. SERIAL NO.	b. MODEL	c. SERIAL NO. Q1907006		
d. LAST ELECTROACOUSTIC CALIB DATE YR/ M/D 09/22/05		d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D		d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D 09/22/05			
6. WIND SCREEN (X one) USED <input checked="" type="checkbox"/> NOT USED				7. MEASUREMENTS OBTAINED (X one) INDOORS <input checked="" type="checkbox"/> OUTDOORS			
8. DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form) 701 South 7 th Street Heber Springs, Arkansas					9. PRIMARY SOURCE OF NOISE Vehicles _____ 10. SECONDARY SOURCE OF NOISE		
11. SOUND LEVEL DATA					12. PROTECTION REQUIRED (re: dBA- Level)		
a. LOCATION	b. METER	c. dBC	d. dBA	e. RISK ASSESSMENT CODE	a. None (less than 85)	b. PLUG OR MUFF (85-108)	c. PLUG AND MUFF (108-118)
HUMMWV	S		85.1			X	
Hemmet	S		93.4			X	
Impact Wrench	S		100.3			X	
5 Ton	S		89.7			X	
Blazer	S		84.2			X	
Compressor	S		89.6			X	
NOTES: Range of levels noted by / i.e., 102/109. At operator stations, measure at ear level. METER ACTION: Enter F for fast meter action and S for slow meter action.							
13. REMARKS (i.e. Area and equipment posted, hearing protection in use, etc) 							
14. MORE DETAILED NOISE EVALUATION REQUIRED YES NO <input checked="" type="checkbox"/> (If "YES", identify type of evaluation needed)							
15. NAME(S) OF PERSON(S) IDENTIFIED FOR AUDIOMETRIC MONITORING (Use additional sheet if more space is needed and attach to form)							
16. SUPERVISOR OF NOISE- HAZARDOUS AREA OR OPERATION							
a. NAME (Last, First, Middle Initial) SSC Non-Responsive		b. TELEPHONE (Include area code) 501-362-2433			c. ORGANIZATION Heber Springs Armory		
17. SURVEY PERFORMED BY (Last Name, First Name ,MI) Non-Responsive					18. HEARING CONSERVATION MONITOR (Last Name,First Name ,MI)		

DD FORM 2214, JAN 2000

PREVIOUS EDITION MAY BE USED

Hazardous Material inventory

Scouring powder

Razor green

General purpose Detergent

Windex glass cleaner

Enclosure No. 4

OSHEA II Industrial Hygiene Consulting
IH Survey, Arkansas Amory
October 2005

Full time Personnel

SSG Non-Responsive
SSG
SSG
SGT

Enclosure No. 4

OSHEA II Industrial Hygiene Consulting
IH Survey, Arkansas Amory
October 2005

HHIMS

INDUSTRIAL HYGIENE SURVEY FORM

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ARLOC_05000

INSTALLATION_ARARNG

BLDG_____

ROOM_____

LOCATION	OPERATION	SURVEY DATE	EVALUATOR	MACOM
MN	ADO	YR 05/10/17	Non-Responsive	NG

SUPERVISOR	ORGANIZATION	RAC
SSG Non-Responsive	701 S. 7 th Street Heber Springs, Arkansas	3

PH NO.	COMMERICAL/DSN	FREQUENCY	# CIV	# MIL	# CONTRACT	# LOC
501-362-2433	x /	7-8 hours/ day	4 /			/

LAB HOODS	VAPOR/DEGREASERS	PAINTBOOTH	SANDBLASTING BOOTH	OPEN SURFACE
0	0	0	0	0
NO VENTILATION UNITS				

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED

PPE

REQUIRED UTILIZED

GLOVES

R U

ACID ☐ ☐

COLD SURFACE ☐ ☐

HOT SURFACE ☐ ☐

NBC AGENTS ☐ ☐

OIL ☐ ☐

SOLVENTS ☐ ☐

SURGICAL GLOVES ☐ ☐

OTHER ☐ ☐

RESPIRATOR

R U

AIRLINE ☐ ☐

ABRASIVE BLASTING HOOD ☐ ☐

DISPOSABLE ☐ ☐

FULL FACE AIR PURIFYING ☐ ☐

1/2 FACE AIR PURIFYING ☐ ☐

POWERED AIR PURIFYING ☐ ☐

3/4 FACE AIR PURIFYING ☐ ☐

SCBA ☐ ☐

EYES/FACE

R U

CHEM/SPLASH ☐ ☐

FULL FACE SHIELD ☐ ☐

CHEM/SAF IMPACT ☒ ☒

SAFETY IMPACT ☐ ☐

WELDING HELMET ☐ ☐

WELDING GOGGLES ☐ ☐

LASER EYE PROTECT ☐ ☐

OTHER ☐ ☐

EARS/ HEARING

R U

CANAL CAPS ☐ ☐

>85-108 STDY EPLG ☒ ☒

" "HLMT/PLG ☐ ☐

" " MUFF ONLY ☐ ☐

108-118 MUFF/PLG ☐ ☐

118 OR> MUFF/PLG ☐ ☐

W/ TIME LIMIT ☐ ☐

OTHER ☐ ☐

BODY

R U

APRONS ☐ ☐

COLD WEATHER CL ☐ ☐

COVERALLS ☐ ☐

FULL BODY SUIT ☐ ☐

HEAT REFLECTIVE ☐ ☐

VEST/SUIT ☐ ☐

SAFETY BELT/ HARNESS ☐ ☐

SPECIAL PURPOSE CLO ☐ ☐

OTHER BDU ☒ ☒

HEAD AND FEET

R U

COLD WEATHER BT&HAT ☐ ☐

HARD HAT ☐ ☐

IMPERMEABLE BOOTS ☐ ☐

SAFETY SHOE CONDUCT ☐ ☐

SAFETY NON CONDUCT ☒ ☒

OTHER ☐ ☐

	CAS CODE	PAC	EPC	HAZARD DESCRIPTION
PONOISECO	P0noiseco	2	0	Noise, continuous
POFOOTHAZ	P0stress	3	0	Mental / physical stress
POFLYPROJ	P0lifting	3	D	Heavy lifting
POEYHAZA	P0eyehaza	2	A	Eye Hazards
POFLAMMHAZ				
POLIFTING				
POSHARPOBJE				
POELSHOCK				
COLUBEOL				

DESCRIBED OPERATION

Administrative duties are performed six to eight hours a day which consists of answering phones, using computers, generating paper work and running errands for supplies.



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**DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349**

ARNG-CSG

November 25, 2015

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG: ATTN: CPT [Non-Responsive]
(Executive Officer), SFC [Non-Responsive] Co. B, 39th BSB Arkansas Army National Guard, 701
S. 7th Street, Heber Springs, AR 72543.

**Thru: LTC [Non-Responsive] AR ARNG Deputy State Surgeon, BLDG 15309 BOX 09, Camp
Robinson, NLR, AR 72199-9600.**

**SUBJECT: Industrial Hygiene Survey of AR ARNG Heber Springs Armory, Heber Springs ,
Arkansas.**

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program.
- b. Army Regulation (AR) 40-5, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program.
- f. DA PAM 40-503, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2011, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. USAEHA TG-141, January 2007, Guidelines for Air Sampling and Bulk sample Collection.
- k. Title 29, Code of Federal Regulations (CFR), 2011 rev., part 1910, Occupational Safety and Health Standards.

2. General. At the request of the AR ARNG Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling at the AR ARNG Heber Springs Armory, Heber Springs , Arkansas.

November 25, 2015

SUBJECT: Industrial Hygiene Survey of AR ARNG Heber Springs Armory, Heber Springs , Arkansas.

3. Findings. The information that follows is based on the findings of the survey performed. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed (See ENCL 1). Operations of very short duration were not sampled due to the requirements of the sampling method. If the operation changes or if the length of the operation is increased, contact this office to schedule sampling if it is deemed needed.
4. Recommendations. Follow the recommendations made in the enclosed report, requesting industrial hygiene (IH) services where needed to complete the recommendations.
 - a. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Action Plan (IHAP) for FY2016. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2017 IHAP.
 - b. Have all HHIM data entered into the HHIM computer module.
 - c. Use the report to help in correcting all deficiencies noted.
 - d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.
 - e. Contact the State Occupational Health Office for any medical Surveillance that may be needed.
 - f. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
5. The present report addressed to the local facility commanders was divided in such a way that personal data can be detached and kept by the OHM or blocked when forwarding these reports to other entities within the appropriate offices of AR ARNG. If additional information is needed please contact Mr. **Non-Responsive** Regional Industrial Hygienist, (404) 559-4174 OR 1 (800) 326-0262.

Non-Responsive

Regional Industrial Hygienist

CF:

1st LT **Non-Responsive** State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl
as

Initial Baseline Industrial Hygiene Survey

12 May, 2015

Arkansas Army National Guard

Co B, 39th BSB

701 S. 7th Street

Heber Springs, AR 72543



Prepared For:

Dept of the Army and Air Force

National Guard Bureau

Regional Industrial Hygiene Office

Region South

510 Plaza Drive, Suite 1530

College Park, Georgia 30349

By

Non-Responsive

Pinnacle IH

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Appendix E – Photographs of Facility	
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EXECUTIVE SUMMARY:

An Initial Baseline Industrial Hygiene Survey was conducted at the National Guard armory in Heber Springs, Arkansas on 12 May 2015, as part of the Arkansas Army National Guard Occupational Health Program, to identify potential health hazards in the workplace. The survey consisted of conducting lead wipe samples from the weapons vault and general areas of the facility, illumination survey, noise evaluation, review of the MSDS inventory, interviews with personnel assigned to this facility on a daily basis, and a walkthrough of all accessible armory areas to evaluate any potential health hazards.

TOPIC	SUMMARY OF FINDINGS	RECOMMENDATIONS
Lead Dust sampling.	Lead in dust was detected in several armory areas, but under allowable limits. Refer to Table 1.	Recommend to clean these areas using the wet method described in NG PAM 420-15. See Recommendations.

12 May 2015

MEMORANDUM FOR: CPT [Non-Responsive] (Executive Officer), SFC [Non-Responsive] Co. B, 39th BSB
Arkansas Army National Guard, 701 S. 7th Street, Heber Springs, AR 72543

SUBJECT: Industrial Hygiene Survey for the Heber Springs, AR armory.

INTRODUCTION

At the request of Mr. [Non-Responsive] with the National Guard Bureau South Region Industrial Hygiene Office, a Baseline Industrial Hygiene Survey was performed by [Non-Responsive] at the Heber Springs AR armory, on 12 May 2015. The purpose of this survey was to evaluate any Health Hazards that may be present at the facility. The POC for this survey was SFC [Non-Responsive]

The armory was reportedly built around 1960. It was reported to have been remodeled last in 2005. The building contains a drill hall, remodeled IFR backstop area that is now a gym, several offices, a classroom, computer room, kitchen, supply room, storage closets, and latrines. Outside there is an old FMS shop that has been converted for storage and light vehicle maintenance use primarily, another building that houses section equipment only in cages, and a very old building with one side completely open that stores section equipment on pallets. There is also a Motor Pool area, a decommissioned vehicle wash bay, POL building, and several Conex containers. The Co. B, 39th BSB unit is assigned to this armory. Three military troops work at the facility daily, and approximately 61 M-day troops drill here monthly.

METHODOLOGY

The following instruments and testing methods were used during this survey:

- Extech Light Meter, model 407026, S/N Q623737. Calibration certificate verified.
 - Illumination readings were taken from all work areas, approximately four feet from the floor, and compared to IES (Illuminating Engineering Society) and ANSI RP7-1991 recommendations.
- Ghost Wipes (To test for the presence of Lead in dust)
 - Unscented "baby wipes" were used to sample one square foot areas in the weapons vaults and supply rooms, and maintenance bays. The samples were sealed, and sent to an AIHA accredited laboratory for analysis.
- The survey of the facility included photographs of the building and areas of interest, a walkthrough of the facility, and informal discussions with the POC.

SURVEY FINDINGS

BUILDING CONDITION

The building is reported as structurally sound overall. Several minor roof leaks were reported, but no issues with mold. There were a few ceiling tiles in the gym with significant water damage observed. It was noted that the gym is used primarily for storage, and PT is performed offsite. All areas were very neat and clean at the time of the survey. There were no mold issues reported or observed during the survey, and no reports of standing water around the building foundation. It was stated that the kitchen is not used. Lighting and ventilation was excellent overall in the main armory building. The buildings outside need several bulbs/ballasts replaced, but otherwise were neat and organized.

MOTOR POOL

There is a small motor pool area in the back of the facility, with a decommissioned FMS shop that is used for light vehicle maintenance. The designated FMS is in Searcy, AR.

PERSONNEL

Three military troops work at the facility daily, and approximately 61 M-day troops drill here monthly. Through interviews with the POC, there were no reports of excessive noise, eye strain, muscle strain, repetitive motion issues, back strain, or ergonomic issues. Most employees work an 8-hour day. It was also stated that there are no concerns with water or air quality, and that employees are generally in good spirits, with no chronic sicknesses or other health issues affecting the staff as a group. PT is conducted offsite three times per week. It was reported that personnel are not asked to perform heavy lifting. A forklift is available for larger items.

MSDS

Sgt Julius Morgan manages the MSDS inventory. He is not a full timer at this armory, but reportedly receives annual MSDS training. There is a POL building outside that houses the majority of the POL inventory, with two smaller flammable cabinets for targeted inventories. Cabinet FL01 is in the drill hall, and contains primarily cleaning supplies and pest control products, while FL02 is in the maintenance building outside, and contains primarily spray paint and items associated with light vehicle maintenance. MSDS info is posted in the drill hall, and an inventory of each cabinet is posted on the inside of the door. A review of all three MSDS inventories was performed during the survey.

LEAD WIPE SURVEY

SFC [Non-Responsive] stated that when the original armory was built, soldiers would fire through the drill hall into a bullet stop area in the rear. The armory was remodeled extensively through the years, and this bullet stop area is now a small gym that is used for storage only. The room had been remodeled, with dropped ceilings, etc. Several lead wipe samples were taken in this room, and were all negative for lead in dust. See Table 1. It was stated that final weapon cleanings are performed on tables in the drill hall annually, and that the tables are always cleaned afterwards. Several of these tables were sampled for lead, in addition to sampling in the drill hall, gym, supply room, weapons vault, kitchen, and table storage room. The samples that tested positive for lead were taken from the supply room, weapons vault, and remote kitchen storage area. See Table 1 and Appendix B. The positive samples in these areas were below the NGB recommended limit of 200 micrograms per square foot for areas not occupied by children, pregnant women or people of child-bearing age. It is recommended to use the wet cleaning method described in NG PAM 420-15 to clean these areas. See References below. Continue to ensure that weapon maintenance and cleaning is performed outside the armory, and that good personal hygiene is practiced by washing hands after handling weapons and ammunition.

ILLUMINATION SURVEY

Results of the survey showed light measurements meeting or exceeding IES (Illuminating Engineering Society) and ANSI RP7-1991 guidelines throughout most areas of the facility. Refer to Table 2 for survey results. SFC [Non-Responsive] estimated there are several bulbs in the outside buildings that need to be replaced, and that he will be ordering them soon.

DRILL HALL

Monthly drills for the 61 M-day troops are conducted in the drill hall. It was reported that the drill hall is rarely rented out to the public. PT is not conducted in the drill hall. The appearance was neat and clean. Cooling fans and heaters were observed. The POC reported that no vehicle maintenance is performed in the drill hall, and that vehicles are not left running in the drill hall for any length of time. Lighting was upgraded recently, and exceeded IES guidelines.

SUPPLY ROOM

The supply room and weapons vault were surveyed and sampled for lead in dust. One sample in the supply room tested positive for lead, but at a low level according to EPA and NGB limits. All three samples in the vault were positive for lead, but were not above the EPA and NGB limits for a room of this type. Lighting was within EIS guidelines in all areas of the supply room. Cages did not contain toxic materials, according to the POC.

NOISE

The POC was asked about any loud, persistent noises that caused the staff concern, and reported none. The forklift is new, and is reported to be very quiet.

Nat Guard armory
Heber Springs, Arkansas

12 May 2015

HVAC SYSTEM

The state contracts out the maintenance of the HVAC system, including changing the monthly filters.

TABLE 1 (LEAD WIPE TEST RESULTS)

SAMPLE LOCATION	Surveyor's Field No	RESULT $\mu\text{g}/\text{ft}^2$
Drill Hall	JPR500	BRL
Drill Hall	JPR501	BRL
Kitchen Storage	JPR502	BRL
Drill Hall	JPR503	BRL
Drill Hall (Blank)	JPR504	BRL
Drill Hall	JPR505	BRL
Drill Hall	JPR506	BRL
Drill Hall	JPR507	BRL
Supply Room	JPR508	25
Supply Room	JPR509	BRL
Supply Room	JPR510	BRL
Supply Room	JPR511	BRL
Weapons Vault	JPR512	70
Weapons Vault	JPR513	74
Weapons Vault	JPR514	151
Kitchen	JPR515	BRL
Kitchen	JPR516	BRL
Gym (remodeled IFR bullet trap area)	JPR517	BRL
Gym (remodeled IFR bullet trap area)	JPR518	BRL
Gym (remodeled IFR bullet trap area) Blank	JPR519	BRL
Remote Kitchen Pantry	JPR520	58

Note 1: $\mu\text{g}/\text{ft}^2$ refers to micrograms or one millionth of a gram per sq ft.

Note 2: BRL means Not Detected at the Reporting Limit.

TABLE 2 (ILLUMINATION TEST RESULTS)

LOCATION	LIGHT READING (foot candles)	IES Recommendation (foot candles)
Mens Latrine	45 Avg	5-10
Room 120 Womens Latrine	40 Avg	5-10
Storage closet	15 Avg	10-20
Kitchen	60 Avg	20-50
*Kitchen storeroom (light did not seem to be working)	0	20-50
Converted IFR / Gym	55 Avg	20-30
Weapons Vault	25 Avg	20-50
Supply Room areas	40 Avg	20-50
Supply Room Office	60 Avg	50-100
Drill Hall	50 Avg	10-20
Classroom	55 Avg	20-100
Recruiter office	65 Avg	50-100
*Maint Building (several bulbs/ballasts out)	10 Avg	20-50
Readiness NCO office	80 Avg	50-100
Training NCO office	60 Avg	50-100
1st Sgt Office	65 Avg	50-100
Commander Office	60 Avg	50-100

*Deficient Areas. Please note comments describing faults.

RECOMMENDATIONS

- Use the report to help in correcting all deficiencies noted.
- Recommend to clean the supply room, weapons vault, and remote kitchen pantry storage area floors using the wet method described in NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges. (RAC 2)
- Continue to ensure that weapon maintenance and cleaning is performed outside the armory, and that good personal hygiene is practiced by washing hands and tables after handling weapons and ammunition. (RAC3)
- Correct discrepancies that may have been discovered in the review of the MSDS inventory. Ensure to perform semi-annual inventories and updates of all MSDS's on all chemicals in the facility. Ensure all hazardous chemicals are stored in appropriate locations. Establish an inventory roll up sheet to manage the chemical inventory, and update the MSDS when new materials arrive and old ones are replaced. Ensure that troops have knowledge of the location of the MSDS books, and are enrolled in annual Hazard Communication training. (RAC3)
- Replace the light fixture bulbs and/or ballasts in areas with illumination levels below IES recommendations. (RAC3)

REFERENCES

- Guide to Occupational Exposure 2000, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- American National Standards Institute (ANSI). /Illuminating Engineering Society (IES), Industrial Lighting 1991.
- Title 29, Code of Federal Regulations (CFR). 1999, revision, Part 1910. Occupational Safety and Health Standards
- AR 40-5, Preventative Medicine, 15 October 1990.
- AR 385-10, The Army Safety Program, 23 May 1988.
- NG PAM 420-15 , Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges
- AR 385-16, National Guard Pamphlet, Safety Guidelines for Converting Indoor Firing Ranges to Other uses.
- TB MED 503, The Army Industrial Hygiene Program, February 1985.
- Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- Title 29 CFR, Part 1910. 1200, The Hazard Communication Standard.
- DG 415-1, Design Guide for Armories

Non-Responsive



APPENDIX A

Lab Test Results

Analytical Environmental Services, Inc

Date: 11-Sep-15

Lab Order:	1509367	LEAD ON WIPES (N7082) N7082
Client:	National Guard Bureau Region-South IH	
Project:	Heber Springs AR Armory	
Matrix:	Wipe	
Date Received:	9/3/2015 4:30:00 PM	

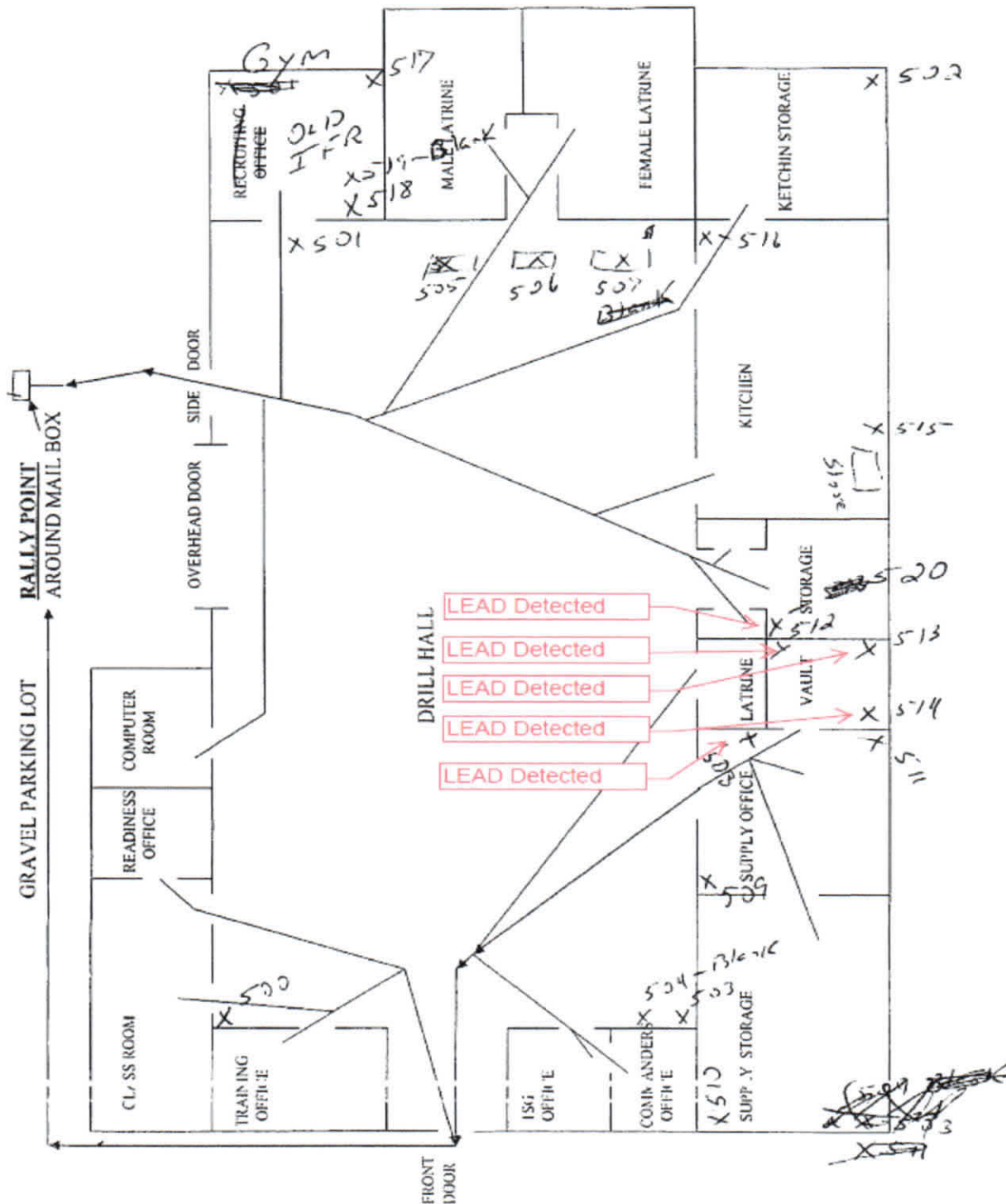
Laboratory ID	Client Sample ID	Result	Units	Reporting Limit	DF	Qual	Date Collected	Date Analyzed	Analyst
1509367-001A	JPR 500 - DRILL HALL	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-002A	JPR 501 - DRILL HALL	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-003A	JPR 502 - KITCHEN STORAGE	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-004A	JPR 503 - DRILL HALL	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-005A	JPR 504 - BLANK - DRILL HALL	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-006A	JPR 505 - DRILL HALL	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-007A	JPR 506 - DRILL HALL	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-008A	JPR 507 - DRILL HALL	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-009A	JPR 508 - SUPPLY RM	25	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-010A	JPR 509 - SUPPLY RM	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-011A	JPR 510 - SUPPLY RM	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-012A	JPR 511 - SUPPLY RM	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-013A	JPR 512 - WEAPONS VAULT	70	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-014A	JPR 513 - WEAPONS VAULT	74	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-015A	JPR 514 - WEAPONS VAULT	151	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-016A	JPR 515 - KITCHEN	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-017A	JPR 516 - KITCHEN	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-018A	JPR 517 - GYM (OLD IFR)	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-019A	JPR 518 - GYM (OLD IFR)	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-020A	R 519 - GYM (OLD IFR) BLAN	BRL	ug ft2	20	1		05/12/2015	09/08/2015	CC
1509367-021A	520 - REMOTE KITCHEN PAN	58	ug ft2	20	1		05/12/2015	09/09/2015	CC

Qualifiers: BRL = Not Detected at the Reporting Limit
R = Analyte detected in the associated Method Blank
Results are blank corrected where applicable.

DF = Dilution Factor

Page 4 of 5

APPENDIX B
Drawing of Sampled Areas
Red samples indicate Lead



APPENDIX C

Photographs of Areas Sampled for Lead in Dust

JPR513 Weapons Vault



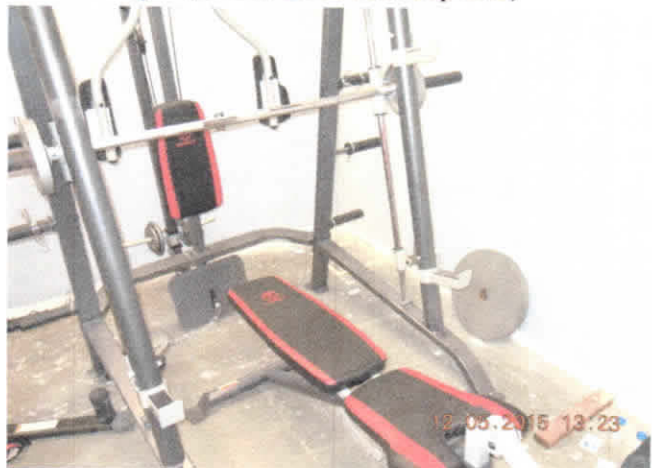
JPR514 Weapons Vault



JPR508 Supply Room



JPR517 Gym (former IFR bullet trap area)



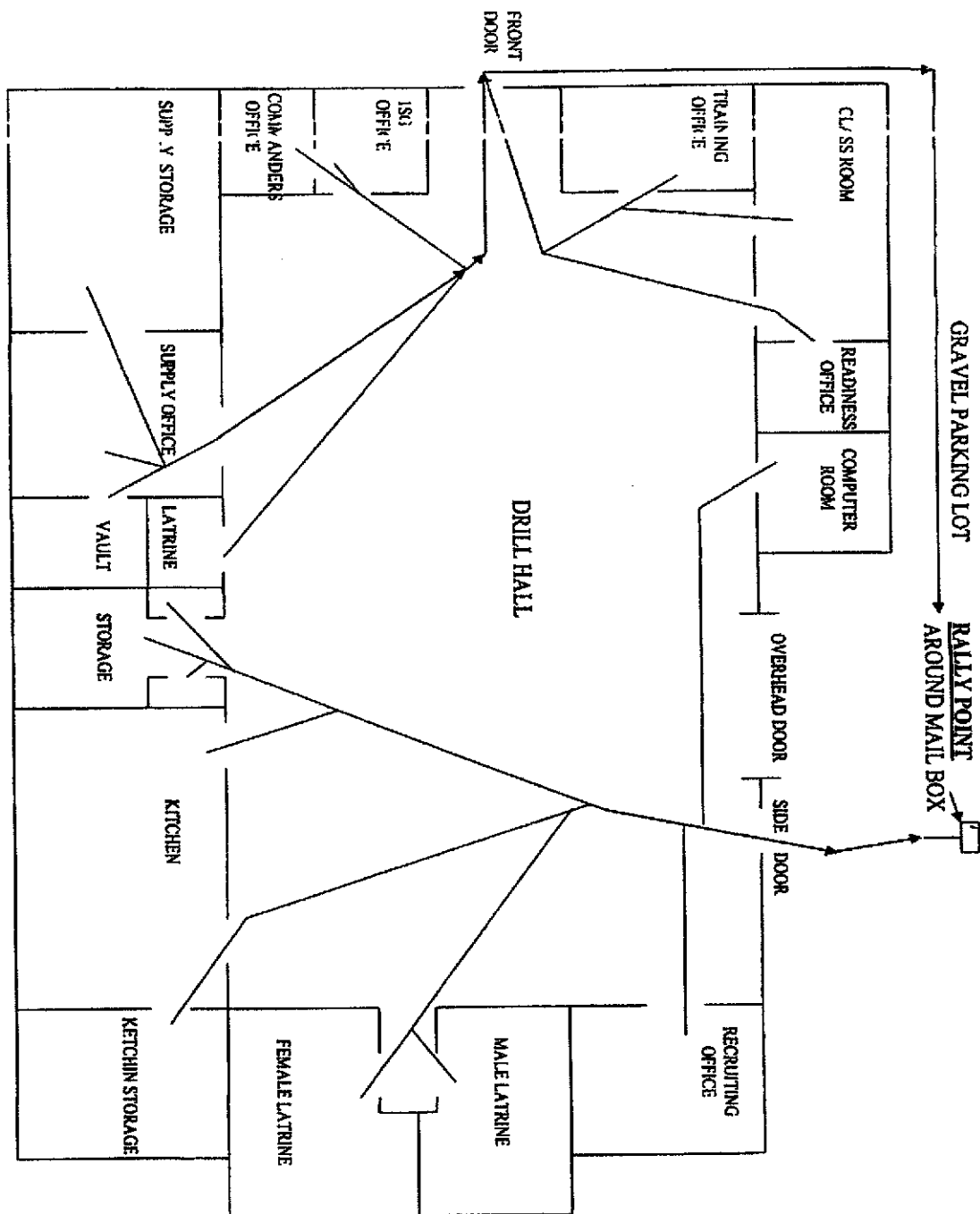
JPR520 Remote Kitchen Pantry Storage



JPR505-507 Tables in Drill Hall



APPENDIX D DRAWING OF FACILITY



APPENDIX E PHOTOS OF FACILITY

Bldg Front



Bldg Rear View



Former FMS Bldg



Motor Pool



Storage



Storage



Flammable/Hazardous Chemicals FL01



Flammable/Hazardous Chemicals FL02



POL



Drill Hall



Gym/Remodeled IFR backstop ceiling



Remote Kitchen Pantry



APPENDIX F HHIM Forms

HEALTH HAZARD INFORMATION SYSTEM
*SEE PRIVACY ACT STATEMENT ON REVERSE.
(For use of this form, see HHIM User's Instructions.)

SECTION 1. DEMOGRAPHIC DATA

a. ARLOC 050000 b. INSTALLATION Heber Springs, AR c. BLDG/RM NUMBER Main 001
d. LOCATION/CODE Admin, AA e. OPERATION/CODE Admin, ADD f. DESCRIPTION
General Admin functions - Computer work, phone calls, filing,
occasional heavy lifting
g. MACOM/CODE Nat Guard NG h. SUBMACOM/CODE Other, XX i. SUPERVISOR Cpt. **Non-Responsive**
j. TELEPHONE/AUTOVON NUMBER 501 212 7143 k. RAC 3 l. FREQUENCY (Hrs Per Day)
m. NO CIV(S) 0 n. NO MIL 3 o. NO CONTRACTOR(S) 0 p. NO LOG(S) 1 q. NO OTHER 0

SECTION 2. IH STAFFING DATA

a. LAB HOODS _____ b. VAPOR DEGREASERS _____ c. MAINTENANCE BAYS _____ d. SPRAY BOOTHS _____
e. OPEN SURFACE TANKS _____ f. VENTILATION UNITS _____

SECTION 3. SURVEY DATA

a. SURVEY DATE 12 May 2015

b. EVALUATOR INITIALS **Non-Responsive**

c. CONTROLS PRESENT	d. EVALUATION	e. UNIT CODE	f. CONTROLS REQUIRED	g. STATUS
Lighting Office	50+ Avg.	FC	50-100	Adequate
Lighting Storage	20+ Avg.	FC	20-50	Adequate
Lighting Hallway	10+ Avg.	FC	10-20	Adequate

SECTION 4. PERSONAL PROTECTIVE EQUIPMENT (R=REQUIRED; A=AVAILABLE)

1. RESPIRATOR	MANUFACTURER	NIOSH TC NO	R/A
DISPOSABLE			
FACE AIR PURIFYING			
FACE AIR PURIFYING			
FULL FACE AIR PURIFYING			
POWERED AIR PURIFYING			
AIRLINE			
SELF-CONTAINED			
ABRASIVE BLASTING HOOD			

2. GLOVES	R/A	3. EYES/FACE	R/A	4. HEARING	R/A	5. BODY	R/A	6. HEAD/FOOT	R/A
ACID	/	CHEMICAL/SPLASH	/	MUFFS	/	APRONS	/	HARD HATS	/
WIL	/	SAFETY/IMPACT	/	EARPLUGS	/	COVERALLS	/	IMPERMEABLE BOOTS	/
SOLVENTS	/	CHEMICAL/SAFETY	/	CANAL CAPS	/	FULL BODY SUIT	/	SAFETY CONDUCT SHOES	/
WET SURFACES	/	FULL FACE SHIELD	/	HELMETS	/	SAFETY BELT/HARNES	/	SAFETY/NONCONDUCTIVE SHOES	/
COLD SURFACES	/	WELDING HELMET	/			HEAT REFLECT VEST/SUIT	/		
INBC AGENTS	/								

SECTION 4. HAZARD INVENTORY DATA

CAS CODE	d. HAZARD DESCRIPTION	e. PAC w/ EPC	f. MEDICAL SURVEILLANCE RECOMMENDED (YES or NO)
PO-LIFTING	Heavy Lifting	3	NO
PO-VDT	Eye-Hand Strain-Extended Computer Work	3	NO
PO-STRESS	Weekly PT Training	3	NO
PO-EYE HAZA	Eye Hazards related to poor lighting	3	NO

SECTION 5. SAMPLING DATA

a. HAZARD	b. SAMPLE TYPE	c. RESULTS	d.
Lead in Dust	Wipe	See Report	

SECTION 6. PERSONNEL DATA

a. LAST NAME	b. FIRST NAME	c. MI	d. SEX	e. SSN
Non-Responsive			M	XXX-XX-Non-Responsive
			M	XXX-XX-
			M	XXX-XX-

SECTION 7. COMMENTS (Add blank sheet of paper if necessary)

PRIVACY ACT STATEMENT

Title 5 U.S. Code, Section 552a; Executive Order 9397 authorizes the use of your Social Security Number as a identification of this information is to identify and monitor data relating each DA civilian employee exposed to a hazardous workplace. This information is to provide historical of exposure for any given worker.

Disclosure of your Social Security Number is not mandatory; however, nondisclosure of

Signature

Non-Responsive

HEALTH HAZARD INFORMATION MODULE FIELD SURVEY

*SEE PRIVACY ACT STATEMENT ON REVERSE.
(For use of this form, see IHIM User's Instructions.)

SECTION 1. DEMOGRAPHIC DATA

a. ARLC 150000 b. INSTALLATION Heber Springs, AR c. BLDG/RM NUMBER Main 001
d. LOCATION/CODE Supply Area SA e. OPERATION/CODE Warehouse, WAH f. DESCRIPTION
Managing Section Equipment, MSDS Inventory, Armory Supplies, Weapons Inventory,
Tasks involving heavy lifting, falling objects, pushing, pulling
g. MACOM/CODE Nat Guard NG h. SUBMACOM/CODE Other 1 XX i. SUPERVISOR Cpt **Non-Responsive**
j. TELEPHONE/AUTOVON NUMBER 501 212 7143 k. RAC 3 l. FREQUENCY (Hrs Per Day) 8
m. NO CIV(S) 0 n. NO MIL 3 o. NO CONTRACTOR(S) 0 p. NO LOC(S) 1 q. NO OTHER 0

SECTION 2. IH STAFFING DATA

a. LAB HOODS _____ b. VAPOR DEGREASERS _____ c. MAINTENANCE BAYS _____ d. SPRAY BOOTHS _____
e. OPEN SURFACE TANKS _____ f. VENTILATION UNITS _____

SECTION 3. SURVEY DATA

a. SURVEY DATE 12 May 2015 b. EVALUATOR (INITIALS) **Non-Responsive**

c. CONTROLS PRESENT	d. EVALUATION	e. UNIT CODE	f. CONTROLS REQUIRED	g. STATUS
Lighting Office	50+ Avg.	FC	50-100	Adequate
Lighting Storage	20+ Avg.	FC	20-50	Adequate
Lighting Vault	10+ Avg.	FC	10-20	Adequate

h. PERSONAL PROTECTIVE EQUIPMENT (H=REQUIRED; A=AVAILABLE)

1. RESPIRATOR	MANUFACTURER	NIOSH TC NO	R/A
DISPOSABLE			
FACE AIR PURIFYING			
FACE AIR PURIFYING			
FULL FACE AIR PURIFYING			
POWERED AIR PURIFYING			
AIRLINE			
SELF-CONTAINED			
ABRASIVE BLASTING HOOD			

2. GLOVES	R/A	3. EYES/FACE	R/A	4. HEARING	R/A	5. BODY	R/A	6. HEAD/FOOT	R/A
ACID	/	CHEMICAL/SPLASH	/	MUFFS	/	APRONS	/	HARD HATS	/
OIL	/	SAFETY/IMPACT	/	EARPLUGS	/	COVERALLS	/	IMPERMEABLE BOOTS	/
SOLVENTS	/	CHEMICAL/SAFETY	/	CANAL CAPS	/	FULL BODY SUIT	/	SAFETY CONDUCT SHOES	/
WET SURFACES	/	FULL FACE SHIELD	/	HELMETS	/	SAFETY BELT/HARNES	/	SAFETY/NONCONDUCTIVE SHOES	/
COLD SURFACES	/	WELDING HELMET	/			HEAT REFLECT VEST/SUIT	/		
NBC AGENTS	/								

SECTION 4. HAZARD INVENTORY DATA

a. CAS CODE	b. HAZARD DESCRIPTION	c. PAC OF EPC	d. MEDICAL SURVEILLANCE RECOMMENDED (YES or NO)
7439-92-1	Lead Particulates	3	No
PO-Lifting	Heavy Lifting	3	No
PO-Falling	Falling Objects	3	No

12 May 2015

SECTION 5. SAMPLING DATA

A. HAZARD	B. SAMPLE TYPE	C. RESULTS	D.
Lead in Dust	Wipe	See Report	

SECTION 6. PERSONNEL DATA

A. LAST NAME	B. FIRST NAME	C. MI	D. SEX	E. SSN
Non-Responsive			M	XXX-XX-
			M	XXX-XX-
			M	XXX-XX-

SECTION 7. COMMENTS (Add blank sheet of paper if necessary)

• PRIVACY ACT STATEMENT

Title 5 U.S. Code, Section 301; Executive Order 9397 authorizes the use of your Social Security Number as a identification of this information is to identify and monitor data relating each LIA civilian employee exposed to a hazardous workplace. This information is to provide histories of exposure for any given worker.

Disclosure of your Social Security Number is not mandatory; however, nondisclosure

Signature

Non-Responsive

DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349

NGB-AVN-SI

March 5, 2003

MEMORANDUM FOR: The Adjutant General of Arkansas, ATTN : COL
Non-Responsive Safety & Occupational Health Manager,
Camp Robinson North Little Rock, AR 72118-2200.

SUBJECT: Transmittal of Hope Indoor Firing Range, Magnolia
Indoor Firing Range and Mena Indoor Firing Range wipe sample
results.

1. References.

- a. 385-10, Army Safety Program
- b. National Guard Regulation, AR 385-15, Policy,
Responsibilities, and Procedures for
Inspection/Evaluation and use of ARNG Indoor Firing
Ranges, Draft March 2000
- c. Army National Guard Guidelines for Housekeeping,
Rehabilitation and Conversion of Indoor Firing Ranges,
Draft NGB Pam 385-15
- d. OSHA Standards 29 CFR (Code of Federal Regulations),
1910.1025, Lead Standard
- e. OSHA Standards 29 CFR (Code of Federal Regulations),
1926.62, Construction Standard

2. General. The sample results from samples taken at the Hope
Indoor Firing Range, Magnolia Indoor Firing Range and Mena
Indoor Firing Range, AR by SFC **Non-Responsive** are enclosed.

3. Findings.

a. A review of the sampling results show at least one
sample in each range with high concentrations of lead dust
present at the time of the survey. The high levels of the
wipe sampling require further decontamination of the firing
range and equipment in the Hope Indoor Firing Range, Magnolia
Indoor Firing Range and Mena Indoor Firing Range.

range and equipment in the Hope Indoor Firing Range, Magnolia Indoor Firing Range and Mena Indoor Firing Range.

4. Recommendations.

- a. Continue decontamination process until clearance sample meet the required standard.
- b. Closely follow all recommendations in Ref. 1. b. when decontaminating ranges. After decontamination perform a complete re-sampling following the same protocol.
- c. Provide scheduled cleaning and maintenance to those firing ranges new, old or retrofitted to preclude the accumulation of lead dust.
- d. Follow the provisions of reference 1.e above for any construction or re-modeling project for any firing range to be renovated for other use.

4. If additional information is needed about the industrial hygiene survey or lead wipe sample results, please contact Mr. **Non-Responsive** Regional Industrial Hygienist, NGB-AVN-SI, 1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

ENCL.
as



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

January 24, 2003

Non-Responsive

National Guard Bureau Region-South IH
510 Plaza Drive
Suite 1530
Atlanta, GA 30349

TEL: (404) 559-4174

FAX (404) 559-4175

RE: ARARNG-Hope AR

Order No.: 0301461

Dear

Non-Responsive

Analytical Environmental Servs, Inc. received 22 samples on 1/18/03 12:30:00 PM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative. AES' certifications are as follows:

-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water, effective 07/01/02-06/30/03.

-AIHA Certification number 505 for analysis of Air, Paint Chips, Soil and Dust Wipes, effective until 03/01/03.

These results relate only to the items tested. This report may only be reproduced in full and with written permission from the laboratory.

Attached report contains 8 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Non-Responsive

Project Manager

0301461

BULK SAMPLE DATA

For use of this form see USAEHA TG 141; the proponent is HSBH-LO.

Return Address (complete address including Zip Code)		Point of Contact (name/AUTOVON)		
National Guard ATTN: ARNG - HS (MR. FULLER) P.O. Box 7265		SFC Non-Responsive 962-5095/501-212-5095		
Sampled Installation 30375-0965	Project Number	ARLOC		
ARARNG - Hope, AR				
Samples Collected By	Date Collected	Date Shipped		
SFC Non-Responsive	1-9-03	1-14-03		
Description of Operation		Location (BLDG/AREA)		
LEAD SAMPLING OF INDOOR FIRING RANGE		Closed IFR		
Associated Complaints (be specific)				
Associated Air Samples if yes, list sample numbers				
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Label Information				
Trace Name	Lot	Manufacturer		
Address		MSDS Attached		
		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Analysis Desired				
LEAD				
Lab Use Only	Sample No.	Constituents	Results	Remarks
001A	1	Top left Wall		
002A	2	Middle left Wall		
003A	3	Bottom Left Wall		
004A	4	Top Left Bullet Stop End		
005A	5	Middle Bullet Stop End		
006A	6	Bottom Right Bullet Stop End		
007A	7	Top Right Wall		
Comments to Lab: Ventilation system inadequate upon initial inspection. This IFR never used for firing weapons.				
Lab Use Only				
Analyst (signature)	Reviewed By (signature)	Date Received	Date Reported	
Procedures performed	Comments:			

AEHA Form 8-8 1 Oct 94

0301461

BULK SAMPLE DATA

For use of this form use USAEHA TO 141; the proponent is HSBG-LG.

Return Address (complete address including Zip Code)		Point of Contact (name/AUTOVON)		
National Guard ATTN: ARNG - HS (MR. FULLER) P.O. Box 17965				
Sampled Installation ARARNG-HQ 100, AR	Project Number	ARLOC		
30315-0965				
Samples Collected By	Date Collected	Date Shipped		
	1-9-03	1-14-03		
Description of Operation LEAD SAMPLING OF FIRING RANGE		Location (BLOC/AREA)		
Associated Complaints (be specific)				
Associated Air Samples if yes, list sample numbers				
<input type="checkbox"/> Yes <input type="checkbox"/> No				
Label Information				
Trade Name	NSN	Manufacturer		
Address	MSDS Attached			
	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Analysis Desired				
LEAD				
Lab Use Only	Sample No.	Constituents	Results	Remarks
008A	8	Middle Right Wall		
009A	9	Bottom Right Wall		
010A	10	Bottom Rear Wall		
011A	11	Middle rear Wall		
012A	12	Top Rear Wall		
013A	13	Floor Right Bullet Stop		
014A	14	Floor Center		
Comments to Lab:				
Lab Use Only				
Analyst (signature)	Reviewed by (signature)	Date Received	Date Reported	
Procedures Performed	Comments:			

AEHA Form 8-R Oct 04

BEST AVAILABLE COPY

RECEIVED
Non-Responsive

Record #J-15-0085 (AR)
by National Guard Bureau
Page 234 of 709

0301461

BULK SAMPLE DATA

For use of this form see USAEHA TG 141; the proponent is ESHB-LQ.

Return Address (complete address including Zip Code)

National Guard
ATTN: ARNG - MS (MR. FULLER)
P.O. Box 17965

Point of Contact (name/AUTOVON)

Sampled Installation 90316-0065

Project Number

ARLOC

ARARNG - Hope, AR

Samples Collected By

Date Collected

Date Shipped

1-9-03

1-14-03

Description of Operation

LEAD SAMPLING OF FIRING RANGE

Location (BDDG/AREA)

Associated Complaints (be specific)

Associated Air Samples

If yes, list sample numbers

☐ Yes☐ No**Label Information**

Trace Name

MSL

Manufacturer

Address

MSDS Attached

☐ Yes☐ No

Analysis Desired

LEAD

Lab Use Only	Sample No.	Constituents	Results	Remarks
015A	15	Floor Left Rear Wall		
016A	16	Ceiling Left Bullet Stop		
017A	17	Ceiling Center		
018A	18	Ceiling Right Rear Wall		
019A	19	Box Top		
020A	20	Table Top		
021A	21	Blank		

Comments to Lab:

Lab Use Only

Analyst (Signature)

Reviewed by (Signature)

Date Received

Date Reported

Procedures Performed

Comments:

RECEIVED**Non-Responsive**

11/18/03 12:30

0301461

BULK SAMPLE DATA

For use of this form see USAEHA TG 141; the proponent is HSHB-LO.

Return Address (complete address including Zip Code)		Point of Contact (name/AUTOYON)	
National Guard ATTN: ARNG - HS (MR. FULLER) P.O. Box 17965			
Sampled Instance ARARNG - Hope, AR	Project Number	ARLOC	
Samples Collected By	Date Collected 1-9-03	Date Shipped 1-14-03	
Description of Operation LEAD SAMPLING OF FIRING RANGE		Location (BLDG/AREA)	
Associated Complaints (be specific)			
Associated Air Samples <input type="checkbox"/> Yes <input type="checkbox"/> No			
Label Information			
Trade Name	NSN	Manufacturer	
Address		MSDS Attached <input type="checkbox"/> Yes <input type="checkbox"/> No	
Analysis Desired LEAD			
Lab Use Only	Sample No.	Constituents	Results
over	22	Blank	
	23		
	24		
	25		
	26		
	27		
	28		
Comments to Lab:			
Lab Use Only			
Analyst / Inspector	Reviewed By	Date Received	Date Reported
Procedures Performed	Comments:		

AESA Form 8-R, 1 Oct 94

Replaces AES-4 Form 8, 1 Oct 90 which is obsolete.

Pg 4
BEST AVAILABLE COPY

RECEIVED

Non-Responsive

11/8/03 12:30

15-0085 (AR)

FAX TRANSMISSION

From.....: ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3785 Presidential Parkway
Atlanta, GA 30340

To.....: National Guard Bureau

Attention...: Non-Responsive

Following are the laboratory reports relating to your project.

NOTICE OF CONFIDENTIALITY

The information contained in this facsimile message may be legally privileged and is confidential information intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, you are hereby notified that any use, dissemination, distribution, or copy of this facsimile message is strictly prohibited. If you have received this facsimile message in error, please notify A.E.S. Customer Service by telephone at (770)457-8177 and return the facsimile message to us at the address above via the US Postal Service.

Thank You.

Analytical Environmental Servs, Inc.

Date: 3/5/03

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT:	National Guard Bureau Region-South IH	Lab Order:	0301461
Project:	ARARNG-Hope AR	Date Received:	1/18/03 12:30:00
Project No:	ARARNG-Hope	Matrix:	Wipe
PO No:		Analyst:	MM

Laboratory ID	Client Sample ID	Results	Units	MDL	DF	Date Collected	Date Analyzed
0301461-001A	1	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-002A	2	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-003A	3	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-004A	4	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-005A	5	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-006A	6	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-007A	7	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-008A	8	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-009A	9	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-010A	10	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-011A	11	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-012A	12	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-013A	13	41.0	µg, Total	2.83	1	1/9/03	1/21/03
0301461-014A	14	33.0	µg, Total	2.83	1	1/9/03	1/21/03
0301461-015A	15	21.0	µg, Total	2.83	1	1/9/03	1/21/03
0301461-016A	16	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-017A	17	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-018A	18	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-019A	19	BRL	µg, Total	2.83	1	1/9/03	1/21/03
0301461-020A	20	541	µg, Total	2.83	1	1/9/03	1/21/03
0301461-021A	21	21.0	µg, Total	2.83	1	1/9/03	1/21/03
0301461-022A	22	BRL	µg, Total	2.83	1	1/9/03	1/21/03

Qualifiers: MDL - Method Detection Limit
ND - Not Detected at the Reporting Limit

DF - Dilution Factor

Analytical Environmental Services, Inc.

Sample Receipt Checklist

Client GA NGB Date and Time 1/18/03 12:30
 Work Order Number 0301461 Received by Non-Responsive
 Checklist completed by Non-Responsive 1/18/03 Reviewed by Non-Responsive 1/18/03
Date Date Initials Date

Carrier name: FedEx ☐ UPS ☐ Courier ☐ Client ☐ US Mail ☒ Other ☐

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐
 Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒
 Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
 Chain of custody present? Yes ☒ No ☐
 Chain of custody signed when relinquished and received? Yes ☒ No ☐
 Chain of custody agrees with sample labels? Yes ☐ No ☐
 Samples in proper container/bottle? Yes ☒ No ☐
 Sample containers intact? Yes ☒ No ☐
 Sufficient sample volume for indicated test? Yes ☒ No ☐
 All samples received within holding time? Yes ☒ No ☐
 Was TAT marked on the COC? Yes ☒ No ☐
 Proceed with Standard TAT as per project history? Yes ☐ No ☐ Not Applicable ☒
 Container/Temp Blank temperature in compliance? Yes ☒ No ☐
 Cooler #1 Ambient Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler #5 ☐ Cooler #6 ☐
 Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐
 Water - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒
 Adjusted? ☐ Checked by ☐

Any No and/or NA (not applicable) response must be detailed in the comments section below:

Client contacted ☐ Date contacted: ☐ Person contacted ☐

Contacted by: ☐ Regarding ☐

Comments:

Corrective Action

DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349

NGB-AVN-SI

April 2, 2003

MEMORANDUM FOR: The Adjutant General of Arkansas, ATTN : COL
Non-Responsive Safety & Occupational Health Manager,
Camp Robinson North Little Rock, AR 72118-2200.

SUBJECT: **Hot Springs, AR Indoor Firing**
Range wipe sample results.

1. References.

- a. 385-10, Army Safety Program
- b. National Guard Regulation, AR 385-15, Policy, Responsibilities, and Procedures for Inspection/Evaluation and use of ARNG Indoor Firing Ranges, Draft March 2000
- c. Army National Guard Guidelines for Housekeeping, Rehabilitation and Conversion of Indoor Firing Ranges, Draft NGB Pam 385-15
- d. OSHA Standards 29 CFR (Code of Federal Regulations), 1910.1025, Lead Standard
- e. OSHA Standards 29 CFR (Code of Federal Regulations), 1926.62, Construction Standard

2. General. The sample results from samples taken at the Indoor Firing Ranges in West Helena, AR and Hot Springs, AR by SFC **Non-Responsive** are enclosed.

3. Findings. A review of the sampling results show high concentrations of lead dust present at the time of the survey. The high levels of the wipe sampling require further decontamination of the firing range and equipment in West

Helena, AR and Hot Springs, AR. See the attached enclosures for the swipe sample results.

4. Recommendations.

a. Use the sample results as a guide when determining which ranges and what items stored in the ranges must be cleaned.

b. Closely follow all recommendations in Ref. 1. b. when decontaminating ranges. After decontamination perform a complete re-sampling following the same protocol.

c. Provide scheduled cleaning and maintenance to those firing ranges new, old or retrofitted to preclude the accumulation encountered in the present study.

d. Follow the provisions of reference 1.e above for any construction or re-modeling project for Building 225 in Fort Allen, or any firing range to be renovated for other use..

5. If additional information is needed about the industrial hygiene survey or lead wipe sample results, please contact Mr.

Non-Responsive Regional Industrial Hygienist, NGB-AVN-SI,
1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

ENCL.
as



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

March 13, 2003

Non-Responsive

National Guard Bureau Region-South IH
510 Plaza Drive
Suite 1530
Atlanta, GA 30349
TEL: (404) 559-4174
FAX (404) 559-4175

RE: Hot Springs Armory, AR

Order No.: 0303211

Dear Non-Responsive

Analytical Environmental Servs, Inc. received 35 samples on 3/7/2003 12:00:00 PM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative. AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water, effective 07/01/02-06/30/03.
- AIHA Certification number 505 for analysis of Air, Paint Chips, Soil and Dust Wipes, effective until 03/01/03.

These results relate only to the items tested. This report may only be reproduced in full and contains 10 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Non-Responsive

Project Manager

0303211

BULK SAMPLE DATA

For use of this form see USAFRA TF 141; the proponent is HSBG-10.

Return Address (complete address including Zip Code) National Guard ATTN: ANG-418 AIR FULLER P.O. Box 7785		Point of Contact (Name) (AUTOYON) SFC Non-Responsive DOW 962-5095 / 501-212-5095		
Sampled Instrumentation 3038-0965	Project Number	ARLOC		
Hot Springs Academy, AR				
Samples Collected By SFC Non-Responsive	Date Collected 18 Feb 03	Date Shipped 28 Feb 03		
Description of Operation LEAD SAMPLING OF INDOOR FIRING RANGE		Location (BLDG/AREA) Closed IFR		
Associated Complaints (be specific):				
Associated Air Samples if yes, list sample numbers <input type="checkbox"/> Yes <input type="checkbox"/> No				
Label Information				
Trade Name	Lot	Manufacturer		
Address		MSDS Attached <input type="checkbox"/> Yes <input type="checkbox"/> No		
Analysis Desired LEAD				
Lab Use Only	Sample No.	Constituents	Results	Remarks
	1	Top left Wall		
	2	Middle left Wall		
	3	Bottom Left Wall		
	4	Top Left Bullet Stop End		
	5	Middle Bullet Stop End		
	6	Bottom Right Bullet Stop End		
	7	Top Right Wall		
Comments to Lab:				
Lab Use Only				
Analyst (Signature)	Reviewed by (Signature)	Date Received	Date Reported	
Procedures performed	Comments:	RECEIVED Non-Responsive		

AFRA Form 8-8 1 Oct 94

0303217

BULK SAMPLE DATA*For use of this form use USAFHS TO 141; the proponent is HSHB-LO.***Return Address** (complete address including Zip Code)National Guard
ATTN: ARNG - MS (MR FULLER)
P.O. Box 7265**Point of Contact** (name/AUTOVON)**Sampled Instrument** 3035-0965**Project Number****ARLOC**

Hot Springs AR

Samples Collected By**Date Collected****Date Shipped****Description of Operation**

LEAD SAMPLING OF FIRING RANGE

Location (BLDG/AREA)**Associated Complaints** (be specific)**Associated Air Samples**

if yes, list sample numbers

☐ Yes ☐ No**Label Information****Trade Name**

NEN

Manufacturer**Address****MSDS Attached**☐ Yes ☐ No**Analysis Desired**

LEAD

Lab Use Only	Sample No.	Constituents	Results	Remarks
	8	Middle Right Wall		
	9	Bottom Right Wall		
	10	Bottom Rear Wall		
	11	Middle rear Wall		
	12	Top Rear Wall		
	13	Floor Right Bullet Stop		
	14	Floor Center		

Comments to Lab:**Lab Use Only****Analyst/Inspector****Reviewed by** (signature)**Date Received****Date Reported****Procedures Performed****Comments:**

0303211

BULK SAMPLE DATA*For use of this form see: USAFEE-TG 141; the proponent is HSHB-LQ.*

Return Address (complete address including Zip Code) National Guard ATTN: ARNG-HS (MR. FULLER) P.O. Box 17285		Point of Contact (name/AUTOVON)		
Sampled Instance (ARNG 9035-0065) Hot Springs, AR	Project Number	ARLOC		
Samples Collected By	Date Collected	Date Shipped		
Description of Operation LEAD SAMPLING OF FIRING RANGE		Location (BEGG/AREA)		
Associated Complaints (be specific)				
Associated Air Samples <input type="checkbox"/> Yes <input type="checkbox"/> No <i>if yes, list sample numbers</i>				
Label Information				
Trace items	ASH	Manufacturer		
Address		MSDS Attached <input type="checkbox"/> Yes <input type="checkbox"/> No		
Analysis Desired LEAD				
Lab Use Only	Sample No.	Constituents	Results	Remarks
	15	Floor Left Rear Wall		
	16	Ceiling Left Bullet Stop		
	17	Ceiling Center		
	18	Ceiling Right Rear Wall		
	19	Maint. Office W. Wall		
	20	Maint. Office Desk		
	21	Watercan Rack Top		
Comments to Lab:				
Lab Use Only				
ANALYST (initials)	Reviewed by (initials)	COTE Received	SITE REPORTED	
Procedures Performed		Comments:		

0303211

BULK SAMPLE DATA*For use of this form see USAEHA TO 141; the proponent is HSHB-CO.*

Return Address (complete address including Zip Code)		Point of Contact (name/AUTOVON)							
National Guard ATTN: ARNG-16 (MR. FULLER) P.O. Box 17965									
Sampled Installation (DA Form 3035-0385)	Project Number	ARLOC							
Hbt Springs, AR		<table border="1"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>							
Samples Collected By	Date Collected	Date Shipped							
Description of Operation LEAD SAMPLING OF FIRING RANGE		Location (BLDG/AREA)							
Associated Complaints (be specific)									
Associated Air Samples If yes, list sample numbers									
<input type="checkbox"/> Yes <input type="checkbox"/> No									
Label Information									
Trade Name	NSN	Manufacturer							
Address		MSDS Attached							
		<input type="checkbox"/> Yes <input type="checkbox"/> No							
Analysis Desired LEAD									
Lab Use Only	Sample No.	Constituents	Results	Remarks					
	22	Canvas Tent (Cage D)							
	23	Wire Locker NC21 V3 6							
	24	Wooden Shelf in Cage B							
	25	Stay Mast 15 for A192							
	26	Authorized Personnel sign cage maint. case							
	27	Chalk Board							
	28	Metal Shelf Cage A							
Comments to Lab:									
Lab Use Only									
Analyst/Inspector	Reviewed by (signature)	Date Received	Date Reported						
Procedures Performed	Comments:								

BULK SAMPLE DATA

For use of this form see USAEHA TG 141; the proponent is HSHB-LD.

Return Address (complete address including Zip Code)		Point of Contact (name/AUTOVON)		
National Guard ATTN: ARNG - HQ SGT. FULLER P.O. Box 17965				
Sampled Instrument (DA 3035-0965)	Project Number	ARLOC		
Hot Springs, AR				
Samples Collected By	Date Collected	Date Shipped		
Description of Operation LEAD SAMPLING OF FIRING RANGE		Location (BLDG/AREA)		
Associated Complaints (be specific)				
Associated Air Samples if yes, list sample numbers				
<input type="checkbox"/> Yes <input type="checkbox"/> No				
Label Information				
Trade Name	MSN	Manufacturer		
Address		MSDS Attached <input type="checkbox"/> Yes <input type="checkbox"/> No		
Analysis Desired LEAD				
Lab Use Only	Sample No.	Constituents	Results	Remarks
	29	FLOZ Door		
	30	Top of refrigerator in motor pool		
	31	Top of workbench F		
	32	Blank 1		
	33	Blank 2		
	34	Blank 3		
	35	Blank 4		
Comments to Lab:				
Lab Use Only				
Analyst (initials)	Reviewed By (initials)	Date Received	Data Reported	
Procedures Performed	Comments:			

Analytical Environmental Services, Inc.

Sample Receipt Checklist

Client GA NGB Date and Time 3/7/03 12:00
 Work Order Number 0303211 Received by Non-Responsive
 Checklist completed Non-Responsive 3/7/03 Reviewed by Non-Responsive 3/7/03
 Date Date

Carrier name: FedEx ☐ UPS ☐ Courier ☐ Client ☐ US Mail ☒ Other ☐

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐
 Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒
 Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
 Chain of custody present? Yes ☒ No ☐
 Chain of custody signed when relinquished and received? Yes ☐ No ☐
 Chain of custody agrees with sample labels? Yes ☒ No ☐
 Samples in proper container/bottle? Yes ☒ No ☐
 Sample containers intact? Yes ☒ No ☐
 Sufficient sample volume for indicated test? Yes ☒ No ☐
 All samples received within holding time? Yes ☒ No ☐
 Was TAT marked on the COC? Yes ☐ No ☒
 Proceed with Standard TAT as per project history? Yes ☒ No ☐ Not Applicable ☐
 Container/Temp Blank temperature in compliance? Yes ☒ No ☐
 Cooler #1 ambient Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler #5 ☐ Cooler #6 ☐
 Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐
 Water - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒
 Adjusted? ☐ Checked by ☐

Any No and/or NA (not applicable) response must be detailed in the comments section below:

Client contacted ☐ Date contacted: ☐ Person contacted ☐

Contacted by: ☐ Regarding ☐

Comments:

Corrective Action

 **Analytical Environmental Servs, Inc.**
Date: 3/13/2003

TOTAL LEAD IN WIPE SAMPLES N7082

CLIENT: National Guard Bureau Region-South IH
Project: Hot Springs Armory, AR
Project No: Hot Springs Arm
PO No:

Lab Order: 0303211
Date Received: 3/7/2003 12:00:0
Matrix: Wipe
Analyst: MM

Laboratory ID	Client Sample ID	Results	Units	MDL	DF	Date Collected	Date Analyzed
0303211-001A	1	64.0	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-002A	2	24.0	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-003A	3	191	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-004A	4	BRL	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-005A	5	8080	µg, Total	22.6	7.99	2/28/2003	3/10/2003
0303211-006A	6	583	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-007A	7	107	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-008A	8	50.0	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-009A	9	BRL	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-010A	10	27.0	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-011A	11	40.0	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-012A	12	25.0	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-013A	13	214	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-014A	14	20.0	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-015A	15	161	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-016A	16	26.0	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-017A	17	BRL	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-018A	18	BRL	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-019A	19	BRL	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-020A	20	BRL	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-021A	21	110	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-022A	22	637	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-023A	23	29.0	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-024A	24	59.0	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-025A	25	80.0	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-026A	26	BRL	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-027A	27	303	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-028A	28	217	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-029A	29	BRL	µg, Total	2.83	1	2/28/2003	3/10/2003

Qualifiers: MDL - Method Detection Limit
 ND - Not Detected at the Reporting Limit

DF - Dilution Factor

 **Analytical Environmental Servs, Inc.**
Date: 3/13/2003

TOTAL LEAD IN WIPE SAMPLES N7082

CLIENT: National Guard Bureau Region-South IH
Project: Hot Springs Armory, AR
Project No: Hot Springs Arm
PO No:

Lab Order: 0303211
Date Received: 3/7/2003 12:00:0
Matrix: Wipe
Analyst: MM

Laboratory ID	Client Sample ID	Results	Units	MDL	DF	Date Collected	Date Analyzed
0303211-030A	30	49.0	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-031A	31	192	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-032A	32	BRL	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-033A	33	BRL	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-034A	34	BRL	µg, Total	2.83	1	2/28/2003	3/10/2003
0303211-035A	35	BRL	µg, Total	2.83	1	2/28/2003	3/10/2003

Qualifiers:

MDL - Method Detection Limit
 ND - Not Detected at the Reporting Limit

DF - Dilution Factor



BEST AVAILABLE COPY
DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349

NGB-ARS-IHSE (40-5f)

April 4, 2006

MEMORANDUM FOR: Adjutant General AR ARNG, ATTN: MAJ **Non-Responsive** State
Occupational Health Office, Camp Robinson North Little Rock, AR 72118-2200.

Thru: LTC **Non-Responsive** Deputy Chief Surgeon, DET 4 MED JTFHQ, PO BOX 011 BLDG 6401
RMTC, NLR, AR 72199-9600

SUBJECT: Transmittal of the Survey Reports for Jonesboro Armory, Paragould Armory, Rector Armory and
Walnut Ridge Armory in AR.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.
- b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.
- f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, 10 December 1998, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2003, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.

April 4, 2006

NGB-ARS-IHSE (40-5f)

SUBJECT: Transmittal of Industrial Hygiene Report, Field Maintenance Shop (FMS) No.1, Jonesboro, Arkansas, February 3, 2006.

- j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.
 - k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.
 - l. Industrial Hygiene Survey Report, Industrial Hygiene Technician, Colorado Springs, CO. 80915.
2. General.
- a. At the request of MAJ **Non-Responsive** AR ARNG Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling at the FMS No.1, Jonesboro, Arkansas 23 January 2006.
 - b. The surveys were conducted by **Non-Responsive** of Industrial Hygiene Technician, 1503 Zaiger Dr., Colorado Springs, CO. 80915
3. Findings. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed. Additionally one noise dosimetry notification letter was generated based on the data collected during the survey. Operations of very short duration were not sampled due to the requirements of the sampling method. If the operation changes or if the length of the operation is increased, contact this office to schedule sampling if it is deemed needed then. (See ENCL 1).
4. Recommendations.
- a. Follow the guidance given in reference 1.1. as good IH practices, requesting industrial hygiene (IH) services where needed. The recommendations that follow are based on the survey findings as reported.
 1. Continue to train employees in the Federal Hazardous Communication Program. Ensure that the welding rod MSDS's are included in the binder and on the inventory list. Also, inventory the MSDS's on a semi-annual basis. **(RAC 3)**
 2. Due to the large cubic inch displacement diesel engines (379-855 CID range) which are serviced in this maintenance facility, a work request should be submitted requesting that a new exhaust system be installed which is capable of providing at least 2200 CFM at the terminal end of the exhaust duct. Consideration should be given to both the high exhaust temperatures and the fact that many of the serviced engines are turbo charged when selecting branch/duct construction materials. Reduction/elimination of sharp 90-degree angles in the exhaust branch/ducts will also greatly increase its overall effectiveness. Continue to open bay doors, turn on the general ventilation exhaust system and use local exhaust ventilation hoods while the vehicles are running inside the motor pool. Attached as enclosure 10 are copies of engineering design guidelines/plates, which should help the design of an effective system. **(RAC 2)**
 3. Lighting in the motor pool (bays 1-4) should be upgraded to 100 foot candles (50-100 FC nominal). Continue to keep the bay doors open to increase the illumination levels. NOTE: Ventilation upgrades throughout the facility maintenance bays could limit the amount of available

NGB-ARS-IHSE (40-5f)

April 4, 2006

SUBJECT: Transmittal of Industrial Hygiene Report, Field Maintenance Shop (FMS) No.1, Jonesboro, Arkansas, February 3, 2006.

lighting in critical work areas unless consideration is given to exhaust branch/duct placement. Lighting levels in those critical work areas (under vehicle hoods, wheel cylinder areas, undercarriages and etc.) should be at least 100 FC's (50-100 FC nominal range). To provide adequate lighting while working underneath vehicles continue to use the fluorescent droplights. A brighter color on the walls and ceiling would also enhance the illumination levels in the motor pool. **(RAC 3)**

4. Eye wash/shower stations must be flushed weekly for at least 3 minutes to rid of the harmful bacteria *acanthamoeba*. Also, continue to keep a weekly register on the date and times the flushing occurred. Get new eyewash bottle solutions in the battery room and add water to the 5 gallon portable eyewash container and flush weekly. A 16 gallon portable gravity fed eyewash (see encl.11) would be the best solution in that a weekly 1 minute flushing would suffice and replacement of the chemical solution and water would be every 4 months. **(RAC 3)**
5. Ensure that all personal protective equipment (i.e. respirators, goggles, face shields, and gloves) are cleaned with soap and water after use and properly stored. Replace rubber gloves due to deterioration. **(RAC 3)**
6. Consider using a transformer for the three phase motor on the portable 50 ton lift. The transformer would increase or decrease the voltage which is directly proportional to the amperage. The phase converter, which was initially going to be installed, could do both but usually at a more than 10 % loss. Also, the phase converter is more expensive and less efficient than the transformer. **(RAC 3)**
7. Continue all employees in the Hearing Conservation Program and make sure that the workers have an annual audiogram. A DD Form 2214 (noise survey) was performed for impact noise sources such as pneumatic wrenches, drills, and hammers (see encl.4 for results). Also, strictly enforce hearing protection during engine run times and when using pneumatic power tools. **(RAC 3)**
8. Submit a request for a new updated carbon monoxide detector in the motor pool area. The Nighthawk CO monitor is recommended. The manufacture recommends that the Nighthawk carbon monoxide detector be checked once per week. The Nighthawk should be replaced with either model no. 900-0056 (110 volt) or model 900-0076 (110 volt outlet plus battery). The manufacture suggested replacing the unit every 5 to 6 years. Ensure that the CO detector is calibrated annually. **(RAC 3)**
9. Replace the filter in the break room's AC unit. This will help in circulating cool air to the area. Add a grease filter to the bottom of the kitchen stove exhaust fan. **(RAC 3)**
10. Due to possible ice contamination from the vehicle exhaust and welding fumes, consider moving the ice machine (ice is considered a food) to the break area. **(RAC 2)**
11. The battery charger should be located in the battery room and not the POL bulk storage room due the electrical fire hazard. Contact the safety office for further guidance. The switch for the

NGB-ARS-IHSE (40-5f)

April 4, 2006

SUBJECT: Transmittal of Industrial Hygiene Report, Field Maintenance Shop (FMS) No.1, Jonesboro, Arkansas, February 3, 2006.

mechanical exhaust fan and the battery charger should be interconnected. This action will ensure its operation when personnel are most likely to be present and contaminants are being generated. Although not a regulatory requirement, this action is beneficial in maintaining exposures at the lowest practical level. The battery room lighting should supply a uniform 50 FC in all servicing/charging areas as recommended by reference 1i. (RAC 3)

b. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY2006. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2007 IHIP.

c. Have all HHIM data entered into the HHIM computer module.

d. Use the report to help in correcting all deficiencies noted.

e. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.

f. Contact the State Occupational Health Nurse, MAJ **Non-Responsive** for any medical Surveillance that may be needed.

k. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. The present report addressed to the local facility commanders was divided in such a way that personal data can be detached and kept by the OHM or blocked when forwarding these reports to other entities within the appropriate offices of AR ARNG. If additional information is needed please contact Mr. **Non-Responsive** **Non-Responsive** Regional Industrial Hygienist, NGB-AVN-SI, COMM. (404) 559-4174 OR 1 (800) 326-0262.

Non-Responsive

Regional Industrial Hygienist

CF: NGB-ARS-IHSE

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

MAJ **Non-Responsive** State Occupational Health Office, Camp Robinson North Little Rock, AR 72118-2200.

ENCL.

as

BEST AVAILABLE COPY
Industrial Hygiene Report
For
Arkansas National Guard
(ARARNG)
At
Jonesboro Armory
1921 Aggie Road
Jonesboro, Arkansas 72401-2499



Prepared for:
Department of the Army and Air Force
National Guard Bureau
Regional Industrial Hygiene Office
Region South
510 Plaza Drive, Suite 1530
College Park, Georgia 30349
By
Non-Responsive
DBA: Minckler & Associates
24 January 2006

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February 6, 2006

MEMORANDUM FOR: Arkansas Army National Guard, Attn: CPT Michael Henderson, Battalion Commander, HQ 875th Engineer Battalion, 1921 Aggie Road, Jonesboro, Arkansas 72401-2499

SUBJECT: Industrial Hygiene Consultation and Health Hazard Information Module (HHIM) Survey, Jonesboro Armory, Army National Guard, Jonesboro, Arkansas

1. REFERENCES: See Enclosure 8
2. BACKGROUND: At the request of Mr. **Non-Responsive** National Guard Bureau Regional Industrial Hygienist, Atlanta, Georgia, an Industrial Hygiene Consultation and Health Hazard Information Module Field Survey were performed at the Jonesboro Armory, Army National Guard, Jonesboro, Arkansas on January 24, 2006. The POC was SFC **Non-Responsive** at 870-910-7012. His address was Jonesboro Armory, 1921 Aggie Road, Jonesboro, Arkansas 72401-2499. The primary mission of the engineer battalion was to build roads, bridges, buildings, and demolition. Presently, Arkansas State University was leasing the armory to the 875th Engineer Battalion and the indoor firing range to ROTC. Only the armory was surveyed. Mr. **Non-Responsive** assisted in the survey. The purpose of the survey was to perform lead wipe samples; a noise survey, a ventilation survey, an Illuminations survey, and complete HHIM field survey forms on all industrial operations at the facility (see encl 1 for completed HHIM Survey Form).
3. INSTRUMENTATION: The following survey instrumentation was provided by the contractor and was used to obtain lead wipe dust samples and illumination measurements. All other instrumentation was operated according to manufacture recommendations.
 - a) Reed LM-81LX, Light Meter, S/N: Q225589, calibrated: 11/15/2005
 - b) Ghost Lead Dust Wipes, Manufactured: December 1, 2003, Expiration: 06/06
 - c) TSI, Model 8386, SN: 00100166
4. Findings:
 - a) Headquarters 875th Engineer Battalion:
 - i) Approximately 150 M-Day soldiers were assigned to HHC and headquarters battalion. The battalion was responsible for HHC, A, B, & C Companies in the area of personnel (S-1), intelligence (S-2), training (S-3), and logistics (S-4). HHC (Headquarters and Headquarters Company) was responsible for support functions, ground maintenance, refueling, and ammo handling.
 - b) HHC Company and Supply:
 - i) Administrative duties included pay, promotions, schools, family support, assignments, and supplies. The supply area was responsible for maintaining TA 50, and miscellaneous field type equipment.

- ii) The area was broken down into class 3 and 5 items, Headquarters service equipment, computer repair storage, and NBC equipment.
- iii) One light bulb was burned out in room 109.
- c) A. Company Administration and Supply:
 - i) Administrative duties included pay, promotions, schools, family support, assignments, and supplies. Approximately 96 M-Day soldiers were assigned to the unit. The supply area was responsible for maintaining TA 50, and miscellaneous field type equipment.
 - ii) One bulb was burned out in Room 123. Illumination levels ranged from 12 to 52 FC's in the supply section and 15 to 56 in the vault.
- d) General Area Armory Information:
 - i) Material Safety Data Sheets (MSDS) were located in the facility. A HAZCOM SOP was included in the report. All employees must be initially trained in the Federal Hazardous Communication Program IAW 1910.1200 (see encl 2 for a partial listing of hazardous chemicals/materials at the facility).
 - ii) Fifteen lead dust wipe samples were taken, using a 10 inch by 10 inch template. Eight samples were above the federal standard of $40\mu\text{g}/\text{ft}^2$. One sample was above the Army National Guard standard of $200\mu\text{g}/\text{ft}^2$. Pictures of the lead sample wipes were taken (see encl.9, photo's M00406 to M01806). The analytical lead result sheet included the sampled locations and corrected results. Also, the sample submission sheets were enclosed in the report (see enclosure 3). The following table notes where the samples were taken, the surveyor's field number, and the lead results:

Location:	Surveyor's Field No:	Results:
Southeast Vault No.5 Floor	M00406	54 $\mu\text{g}/\text{ft}^2$
Southeast Vault No.3 Floor	M00506	160 $\mu\text{g}/\text{ft}^2$
South Vault No.4 Floor	M00606	230 $\mu\text{g}/\text{ft}^2$
Southwest Vault No.1 Floor	M00706	140 $\mu\text{g}/\text{ft}^2$
Northwest Vault No.2 Floor	M00806	130 $\mu\text{g}/\text{ft}^2$
Kitchen Floor	M00906	<14 $\mu\text{g}/\text{ft}^2$
NBC Room Floor	M01006	52 $\mu\text{g}/\text{ft}^2$
South End Drill Hall Floor	M01106	23 $\mu\text{g}/\text{ft}^2$
HHC Supply Room Floor	M01206	91 $\mu\text{g}/\text{ft}^2$
HQ Supply Room Administrative Floor	M01306	<14 $\mu\text{g}/\text{ft}^2$
Drill Hall Floor	M01406	<14 $\mu\text{g}/\text{ft}^2$
Trophy Case, West Hallway	M01506	72 $\mu\text{g}/\text{ft}^2$
West End Floor, Drill Hall	M01606	<14 $\mu\text{g}/\text{ft}^2$
Classroom, 2 nd Floor, Room 208, Podium	M01706	<14 $\mu\text{g}/\text{ft}^2$
Room 117, Underneath Chair	M01806	<14 $\mu\text{g}/\text{ft}^2$

Note 1: $\mu\text{g}/\text{ft}^2$ refers to micrograms or one millionth of a gram per square foot

Note 2: BDL means below detection level

- iii) Drill Hall: Conducting drill and ceremonies in the large hall was its main purpose (see encl.9, photo 1). Two ceiling lamps were out. Illumination levels ranged from 29 to 99 FC's.
- iv) Indoor Firing Range: The indoor firing range was the property of the Universities ROTC program. No survey was performed in the area.
- v) Furnace/General Mechanical Ventilation: The furnace filters were clogged (see encl.9, photo 2). Two exhaust fans were on the drill hall wall (see encl.9, photo 3).
- vi) The following table identifies area deficiencies:

AREA	DEFICIENCIES
Kitchen	Two bulbs were out
1 st Floor Men's Restroom, Rm 123	One bulb was out.
Drill Hall	Two ceiling lamps were burned out
Meddac Office, Rm 109	One bulb was out.

- vii) Due to the low noise levels (administrative areas) there was no requirement for a Hearing Conservation Program. The only requirement would be when the M-Day troops were firing their weapons. M-Day and permanent party soldiers had earplugs.
- viii) A listing of the 875th Engineer Battalion personnel was attached as encl. 4
- ix) A design drawing of the armory was attached as encl. 5.

ILLUMINATION SURVEY RESULTS:

- a) Illumination Levels: The following additional illumination level readings were taken during the survey and are reported below in foot candles (FC's).

AREA/LOCATION	FOOT CANDLES (FC)
Drill Hall Left Side (garage doors closed)	29-122
Drill Hall Middle (garage doors closed)	33-50
Drill Hall Right Side (garage doors closed)	30-55
Battalion Conference Area	74-130
Battalion Office, Room 104	22-52
Battalion Office, Room 105	32-37
Battalion Office, Room 103D	100-149
Battalion Offices, Rooms 102A & 102B	42-72
North Hallway	25-45
HHC Storage Supply, Room 106B	20-62
Vault No.2	27-41
HHC Commo, Room 108	7-17
HHC Transportation, Room 107	13-26
West End Hallway	14-35
HQ Office, Room 110A	3-14
HQ Equipment Area, Room 111	11-34
HHC Meddac, Room 109	6-26
Kitchen/Mess Area	28-45
HHC Supply, Room 112	21-51
HHC Office, Room 112A	25-51
HHC Orderly Room 113	65-135
HHC Offices, Rooms 113A & 113B	51-165
Vault No.1	46-136
Mess Storage, Room 115	11-44
NBC Area, Room 116	12-30
HQ Office, Room 116A	11-22
HQ Supply and Storage, Room 117	21-63
Vault No.4	16-19
S-4, Storage, Room 118B	16-67
S-4, Storage, Room 118A	23-73
S-4, Hallway, Area 118	16-26
Vault No.5	8-26
Co. A Orderly Room No.119	50-167
Co. A, Office No.119A	34-36
Vault No.3	20-29
Co. A, Office No.120	40-93

As indicated in the IES Lighting Handbook, Application Volume 1987, Offices: 20-50 FC's, Supply and Publication Areas: 20-50 FC's, Assembly 20-50 FC's, Restrooms: 5-10 FC's, Classrooms: 50-100 FC's, Kitchen: 20-50 FC's, FC's, Library: 50-100 FC's, Storage Rooms: 10-20 FC's, Mail Room: 20-50 FC's.

Platoon Storage, Rooms 125 & 126	11-112
Co. A, Office No.120A	69-137
Co. A, Storage, Room No.120B	49-92
Co. A, Storage & Supply, Room 121	12-52
Co. A, Office No.122A	15-56
Co. A, NBC Room No.124	18-61
Restrooms, Room 123 & 122	22-32
East Hallway	14-58
Recruiter's Office	88-122
2 nd Floor Classroom No.208	26-37
2 nd Floor Unit Library	17-39

As indicated in the IES Lighting Handbook, Application Volume 1987, Offices: 20-50 FC's, Supply and Publication Areas: 20-50 FC's, Assembly 20-50 FC's, Restrooms: 5-10 FC's, Classrooms: 50-100 FC's, Kitchen: 20-50 FC's, FC's, Library: 50-100 FC's, Storage Rooms: 10-20 FC's, Mail Room: 20-50 FC's.

6. RECOMMENDATIONS: See Enclosure 6

7. TECHNICAL ASSISTANCE::

POC for further assistance concerning this evaluation is **Non-Responsive**

Non-Responsive

Industrial Hygiene Technician

CF:

Office of the Adjutant General, Arkansas Army National Guard,
ATTN: TAG-DZ-SO (MAJ **Non-Responsive**)
Bldg. #3000, Camp Robinson,
North Little Rock, AR 72199-9600

HEALTH HAZARD INFORMATION MODULE FIELD SURVEY

Enclosure 1

BEST AVAILABLE COPY
SEE PRIVACY ACT STATEMENT ON REVERSE
(For use of this form, see FICDC User's Instructions)

SECTION 1.

DEMOGRAPHIC DATA

ARLOC 05000 INSTALLATION ARK NAT. GUARD C. BLDG/RM NUMBER JONESBORO ARMORY
 LOCATION/ZONE CODE AD OPERATION/ZONE CODE ADD 1. SAH C. DESCRIPTION 875TH BATTALION
HQ, Headquarters & HEADQUARTERS CO, AND A. CO CONDUCTED TRAINING, ADMINISTRATION DUTIES,
SCHOOLS, AND PROMOTIONS FOR 246 M-DAY SOLDIERS.
 MACOM/ZONE CODE NG SUBMACOM/ZONE CODE XX L. SUPERVISOR SFC Non-Responsive
 TELEPHONE/AUTOVON NUMBER (870) 910-17026 R. RACI 3 E. FREQUENCY (Per Day) _____
 NO. CIVILIAN _____ NO. MILITARY 10 NO. CONTRACTOR(S) _____ NO. LOCALS _____ NO. OTHER _____

SECTION 2.

IH STAFFING DATA

L. LAB HOODS 0 VAPOR DEGREASERS 0 C. MAINTENANCE BAYS 0 D. SPRAY BOOTHS 0
 OPEN SURFACE TANKS 0 L. VENTILATION UNITS 2

SECTION 3.

SURVEY DATA

SURVEY DATE 1-24-2006 EVALUATOR INITIALS ILM

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS
GMV	ADEQUATE	GMV	GMV	ACCOM
OTH (DRILL HALL)	29-122 FC ADEQUATE	FTC	50 FTC (20-50 nominal range)	ACCOM
OTH (MESS AREA)	28-45 ADEQUATE	FTC	50 FTC (20-50 nominal range)	ACCOM

PERSONAL PROTECTIVE EQUIPMENT (N-REQUIRED; A-AVAILABLE)

1. RESPIRATOR

DISPOSABLE

☒ FACE AIR PURIFYING

☒ FACE AIR PURIFYING

FULL FACE AIR PURIFYING

POWERED AIR PURIFYING

AIRLINE

SELF-CONTAINED

ABRASIVE BLASTING HOOD

MANUFACTURER

MOOSH TC NO

R/A

2. GLOVES	R/A	3. EYES/FACE	R/A	4. HEARING	R/A	5. BODY	R/A	6. HEAD/FOOT	R/A
ACID	/	CHEMICAL/SPLASH	/	MUFFS	/	APRONS	/	HARD HATS	/
OH	/	SAFETY/IMPACT	/	EARPLUGS	X/X	COVERALLS	/	IMPERMEABLE BOOTS	/
SOLVENTS	/	CHEMICAL/SAFETY	/	CANAL CAPS	/	FULL BODY SUIT	/	SAFETY CONDUCT SHOES	/
HOT SURFACES	/	FULL FACE SHIELD	/	HELMETS	/	SAFETY BELT/HARNES	/	SAFETY/NONCONDUCTIVE SHOES	/
COLD SURFACES	/	WELDING HELMET	/			HEAT REFLECT VEST/SUIT	/		
NBC AGENTS	/					BDU'S	X/X		

SECTION 4.

HAZARD INVENTORY DATA

A. CAS CODE	B. HAZARD DESCRIPTION	C. PAC W/ EPC	D. MEDICAL SURVEILLANCE RECOMMENDED (YES OR NO)
7439-92-1	LEAD, INORGANIC DUSTS & FUMES, AS PB	2B	NO

SECTION 5 PERSONNEL

A. LAST NAME	B. FIRST NAME	C. MI	D. SSN	E. CATEGORY
Non-Responsive				M TRAINING OFFICE AGR
				M BN OPS NCO "
				M ASST BN OPS NCO "
				M BN SUPPLY SGT "
				M RNCO "
				M TRNG NCO "
				M SUPPLY NCO "
				F UNIT PSNCO "
				M RNCO "
				M TRNG NCO "
				M SUPPLY NCO "

SECTION 7

COMMENTS (add blank sheet of paper if necessary)

→ 875 ENGINEERS

- THE JONESBORO ARMORY CONSISTED OF BATTALION HQ, HHC 875TH ENGINEER A COMPANY 875TH ENGINEERS. A TOTAL OF 246 M-DAY SOLDIERS WERE ASSIGNED TO THE UNITS.
- THE ARKANSAS STATE UNIVER. LEASED THE ARMORY AND INDOOR RANGE TO AGR.
- 15 LEAD WIPE SAMPLES WERE TAKEN; NO SAMPLES TAKEN FROM INDOOR RANGE.
- ACTIVITIES AT THE ARMORY WAS PER REQUEST MUST GO THRU AGR PHYSICAL PLANT.
- MAIN FUNCTION OF 875TH ENGINEERS WAS BUILDING ROADS, BUILDINGS, BRIDGES AND DEMOLITION.
- ROTC WAS ALSO IN ARMORY; HOWEVER, THEY DIDN'T FALL UNDER AGR.
- FURNACE FILTERS NEEDED CHANGED, DUE TO CLOGGING.

FOIA ACT STATEMENT

Title 5 U.S. Code, Section 552; Executive Order 13526 authorizes the use of your Social Security Number as a identification number. The purpose of this information is to identify and monitor data relating each VA civilian employee exposed to a hazardous workplace of operation. The purpose of this information is to provide histories of exposure for any given worker.

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FOIA Requested Record #J-15-0085 (AR)

Released by National Guard Bureau

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Enclosure 2

Print Inventory

Print Inventory Cancel

Unit	Storage	Month	Submitted
Jonesboro / HQ /HHC 875th ENGR BN	fl-01	12/2005	12/8/2005 1:02:00 PM

SLN	Item	NSN	Manu.	MSDSID	Quantity	Ctn. Size	SL HCC	Date Updated
A01	Black Enamel Paint	8010-00-848-9272	So-Sure		0	11 oz		12/8/2005
A02	Fire Red Spray Paint	0000-00-002-0005	Wal-Mart		2	11 oz		12/8/2005
A03	PERFECT DUSTER	7930-01-411-9794	PERFECT DATA CORPORATION		2	10 oz		12/8/2005
A05	Red SprayPaint Banner	0000-00-000-2108	Krylon Sherwin-Will		0	12 oz		12/8/2005
A07	Cat Yellow Paint	0000-00-000-4200	M oline Paint Co.		0	12 oz		12/8/2005
B01	Insect Repellent	6840-01-284-3982	Minnesota Mining & MFG		33	2 oz		12/8/2005
B02	Isopropyl Alcohol	6810-01-382-2904	Shell Chemical LP		16	1 oz		12/8/2005
C01	InsecticideAero, D-Phen	6840-01-067-6674	Airosol CoInc		21	12 oz		12/8/2005
D02	Adhesive, Tent Patchin	8040-00-264-3848	TACC Intern'l Cor		5	4 oz		12/8/2005
D05	CLP Cleaner Lub, Preserv	9150-01-102-1473	Royal Lubricant In		139	.5 oz		12/8/2005
E01	BLEACH	0000-00-000-2326	ASSOCIATE WAREHOUSE		2	1 gallon		12/8/2005
E02	GLASSMATE	7930-00-184-9423	LAST GROUP INTERPRIZE		2	1 gallon		12/8/2005

E04	Gun Conditioner	9150-01-102-1473	Kleen-Bore	1	1 gallon	12/8/2005
E05	CLP	9150-01-053-6688	CSD INC Conroe, TX	2	1 gallon	12/8/2005
E06	SIMPLE GREEN	7930	SUNSHINE ENVIROMENTAL INTELL	1	1 gallon	12/8/2005
E07	KITCHEN MATE	7930-00-880-4454	SKILLCRAFT	3	1 gallon	12/8/2005

BEST AVAILABLE COPY

Print Inventory

Print Inventory

Cancel

JAN 11 2006

Non-Responsive

Unit	Storage	Month	Submitted
Jonesboro / CO A 875 ENGR BN	FL-01	1/2006	1/11/2006 12:54:00 PM

SLN	Item	NSN	Manu.	MSDSID	Quantity	Ctn. Size	SL	HCC	Date Updated
B1	MINERAL SPIRITS		PARKS		1	1 quart			1/11/2006
B2	SPRAY PAINT, WHITE	20009	COLORPLACE		2	12 oz			1/11/2006
B3	PRIMER, GRAY AEROSOL		VALPAR		1	12 OZ bt			1/11/2006
B5	SPRAY PAINT, BLACK	20004	COLORPLACE		12	12 oz			1/11/2006
B7	GLASS CLEANER	7930-00-664-6910	LHB INDUSTRIES		7	8 oz			1/11/2006
C1	WD-40	9150-01-101-3727	WD-40 CORPORATION		1	1 gallon			1/11/2006
C2	RUST TOUGH		LHB INDUSTRIES		2	12 oz			1/11/2006
C3	REGATTA RED PAINT	06461	VALSPAR		1	12 OZ bt			1/11/2006
C4	PERFECTDUSTER, CANNED AIR		PERFECTDATA		3	12 OZ bt			1/11/2006
C5	CLP, WEAPON OIL	9105-01-053-6688	ROYCO		2	gallon			1/11/2006
C6	WEAPONS OIL ARTIC	9150-00-292-9689	BRAY OIL COMPANY		1	1 quart			1/11/2006
C7	CANVAS PRESERVATIVE	8030-00-644-4944	MIDLAND CHICAGO CORP		1	1 gallon			1/11/2006

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D1	PINE OIL	6840-00-584-3129	LIGHTHOUSE	2	gallon	1/11/2006
D2	SCOURING POWDER	7930-01-294-1115	CAPITOL SOAP PRODUCTS LLC.	12	14 oz	1/11/2006
D2A	SCOURING POWDER	7930-00-721-8592	FITZPATRICK BROS. INC.	20	21 oz	1/11/2006
E1	DEEP WOODS OFF	6840-01-309-3890	SC JOHNSON AND SON	97	6 oz	1/11/2006

**DATA
CHEM**
LABORATORIES, INC.TEST REPORT
Page 1 of 2
1/27/06

Submitted To: **Non-Responsive**
Non-Responsive & Associates
1503 Zaiger Drive
Colorado Springs, CO 80915

Reference Data:	Lead
Client Sample No.:	M00406 through M01906
P.O. No.:	Not Available
Sample Location:	Jonesboro Armory
Sample Type:	Ghost Wipe
Method Reference:	3050B/6010B
DCL Set ID No.:	06-S-0323
DCL Sample ID No.:	06-01686 through 06-01701
Sample Receipt Date:	1/26/2006
Preparation Date:	01/26/06
Analysis Date:	01/26/06

The samples were prepared in accordance with EPA method 3050B. Sample condition was acceptable upon receipt except where noted. The samples were then analyzed in accordance with EPA method 6010B using a Perkin Elmer 3000XL (ICP) purged spectrometer.

The results are provided in the enclosed data table. Results relate only to the items tested and are not blank corrected unless indicated in the data table.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Non-Responsive

Analyst

CINCINNATI OFFICE
4388 GLENDALE-MILFORD ROAD
CINCINNATI, OHIO 45242-3706
513 733-5336, FAX 513 733-5347

Non-Responsive

Reviewer

WEST COAST OFFICE
11 SANTA YORMA COURT
NOVATO, CALIFORNIA 94945
800 280-8071, FAX 415 893-9469

Results Lead

Client #	DCL #	Total Area (ft ²)	µg/Wipe	µg/ft ²
M00406	06-01686	0.69	37.	54.
M00506	06-01687	0.69	110.	160.
M00606	06-01688	0.69	160.	230.
M00706	06-01689	0.69	100.	140.
M00806	06-01690	0.69	90.	130.
M00906	06-01691	0.69	ND	<14.
M01006	06-01692	0.69	36.	52.
M01106	06-01693	0.69	16.	23.
M01206	06-01694	0.69	63.	91.
M01306	06-01695	0.69	ND	<14.
M01406	06-01696	0.69	ND	<14.
M01506	06-01697	0.69	50.	72.
M01606	06-01698	0.69	ND	<14.
M01706	06-01699	0.69	ND	<14.
M01806	06-01700	0.69	ND	<14.
M01906	06-01701	0	ND	-
	Prep Blank		ND	
% Recovery	LCS 1		91.	
% Recovery	LCS 2		91.	
RPL			10.	

ND = not detected at or above the reporting limit (RPL).

LCS = laboratory control sample.

Non-Responsive

Analyst

Non-Responsive

Reviewer



**DATA
CHEM**
LABORATORIES, INC.

ANALYTICAL REQUEST FORM

☒ **REGULAR** Status (5 working days from receipt)

☐ **RUSH** Status Required - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____

DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES

Date 1-24-06 **Non-Responsive**

Company Name _____ & Associates

Address 1503 ZAIGER DRIVE

Colorado Springs, Colo 80915

City _____ **Non-Responsive** Zip _____

Person to Contact _____

Telephone (719) 510-9517

Fax Telephone (509) 757-4846

Billing Address (if different from above) _____

MR _____ **Non-Responsive**

ARMY NATIONAL GUARD, College Park

REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Media Type	Sample Volume (Liters)	ANALYSES REQUESTED - Use Method Number if Known
	M00406	Ghost wipe	10"x10"	LEAD; Southeast vault floor: V5
	M00506	"	"	" ; Southeast vault floor: V3
	M00606	"	"	" ; South vault floor: V6 4
	M00706	"	"	" ; Southwest vault floor: V1
	M00806	"	"	" ; Northwest vault floor: V2
	M00906	"	"	" ; Kitchen floor
	M00006	"	"	" ; NBC Room floor
	M01106	"	"	" ; South end drill hall floor
	M01206	"	"	" ; HHC supply rm floor
	M01306	"	"	" ; HQ supply rm admin floor
	M01406	"	"	" ; Drill hall floor
	M01506	"	"	" ; Trophy case, west hallway
	M01606	"	"	" ; West end floor, drill hall

CHAIN **Non-Responsive**

Relinquish (Signature) <u>_____</u>	Date / Time <u>1-24-06 4:50 pm</u>	Received by: (Signature) <u>_____</u>	Date / Time <u>_____</u>
Relinquish (Signature) <u>_____</u>	Date / Time <u>_____</u>	Received by: (Signature) <u>_____</u>	Date / Time <u>_____</u>

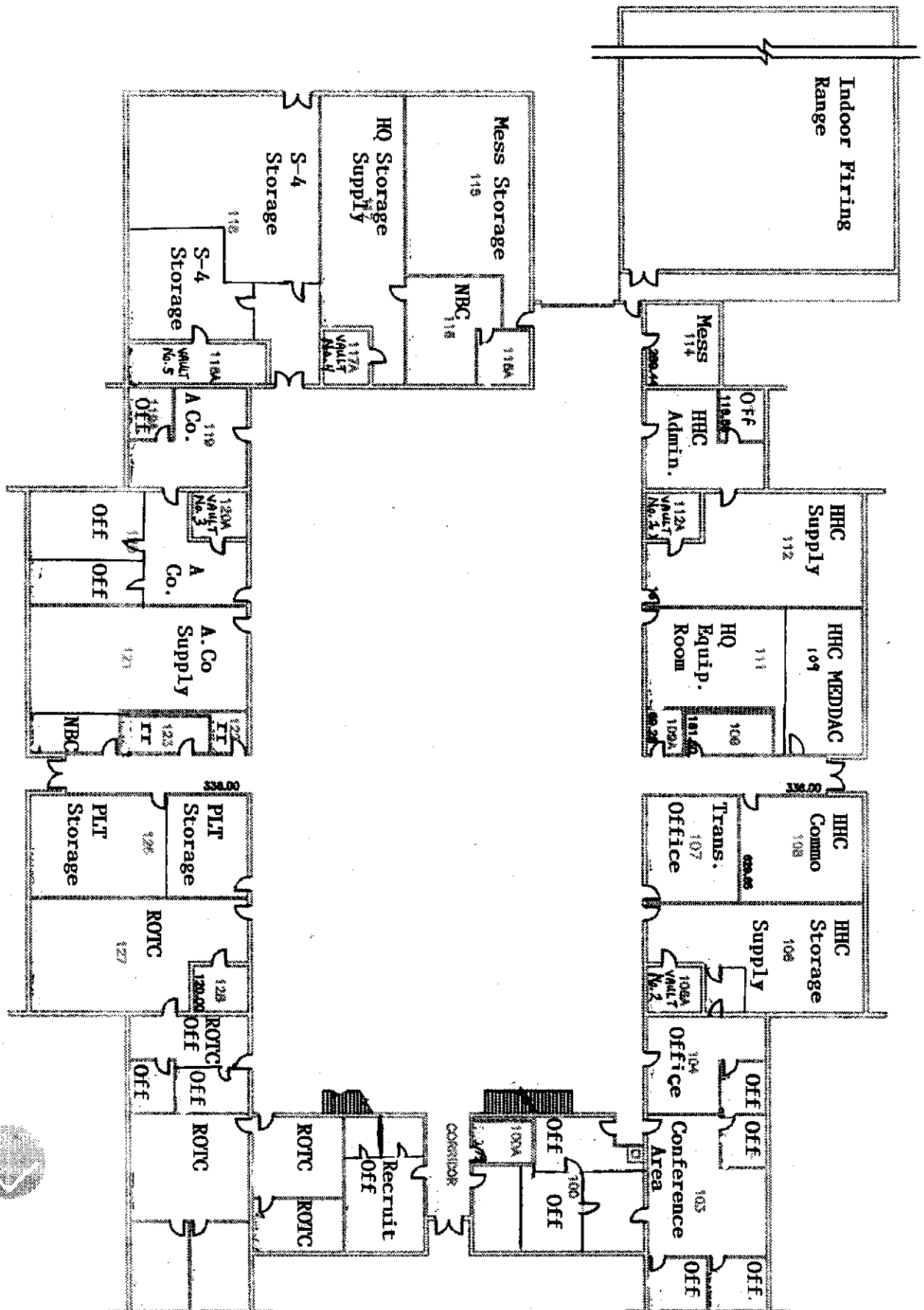
4388 Glendale Milford Road / Cincinnati, OH 45242 • 800-458-1493 or 513-733-5336 / Fax: 513-733-5347

DISTRIBUTION: WHITE - LABORATORY COPY CANARY - CUSTOMER COPY

FOIA Requested Record #J-15-0085 (AR)
Released by National Guard Bureau
Page 271 of 709

PHONE ROSTER

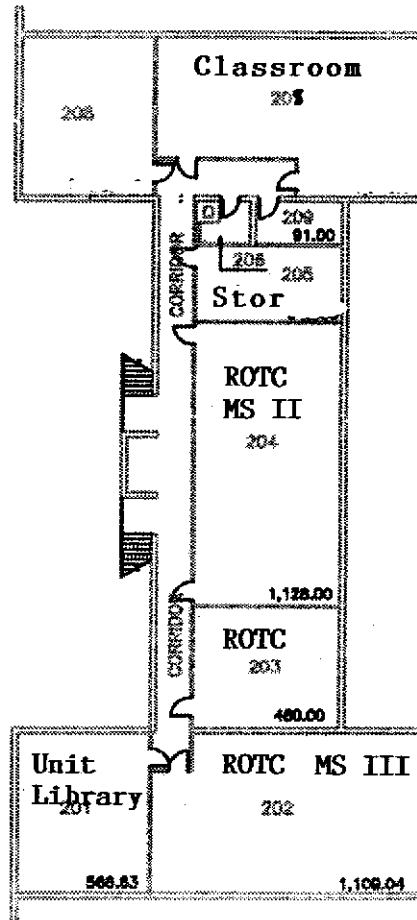
[illegible]



ARMORY BUILDING & RIFLE RANGE NO. 016
ARKANSAS STATE UNIVERSITY

FIRST FLOOR PLAN SCALE: 1" = 30'-0"

DATE: 6-14-2001
TIME: 2149



SECOND FLOOR PLAN SCALE: 1" = 30'-0"

Enclosure 6

Recommendations:

- a) Conduct semi-annual inventories and update MSDS's on all chemicals in the facility. **(RAC 3)**
- b) Replace the lamps/bulbs in the drill hall, the mess hall, men's restroom and the Meddac office. Also, insure that all facility light covers are wiped down and cleaned to increase illumination levels. **(RAC 3)**
- c) Due to the lead dust wipe results, it is recommended that the vault floors, NBC Room's Floor, and the janitor's shelves be thoroughly wiped down and or wet mopped with an industrial cleaner using tri-phosphates, Mr. Kleen or Spic-n-Span. For additional lead cleaning measures, see enclosure 7. **(RAC 3)**
- d) Posted a sign at the front entrance stating: "DANGER LEAD, RANGE OPERATIONS SUSPENDED. ACCESS BY PERMISSION OF COMMANDER/READINESS NCO ONLY. NO CHILDREN OR PREGANENT WOMEN." **(RAC 3)**
- e) Change out furnace filters monthly. **(RAC 3)**
- f) Perform monthly checks on fire extinguishers. Each month, ensure that the devices are turn upside down and tapped with a rubber mallet to loosen any material at the bottom. **(RAC 3)**
- g) If work practices change, a new assessment should be made on the controls in place.

6. Armory Cleanup.

6.1 High Test Result.

6.1.1 If the public utilizes your facility and the results came back above 40 ug/ft² you are responsible for cleaning this area and adjoining areas to meet the 40 ug/ft² or less.

6.1.1.1 Unless you can guarantee no children under the age of 7 will come into your facility.

6.1.1.2 Unless your state public health has other guidance, e.g., post signage to warn personnel who are pregnant or of child bearing age, or under the age of 7 y/o.

6.1.1.3 Signs stating "No smoking, drinking or eating, application of make-up without washing of hands prior to activity."

6.2 Cleaning of Building. Before proceeding into the cleanup mode, first, discuss with your Environmental office what procedures they would recommend and then coordinate your efforts with local agencies, if warranted.

6.2.1 The building, and dusty materials and equipment in it should be cleaned one time to reach the dust lead levels appropriate for the function of this facility, e.g., used by full-time personnel only, utilized by adults or children 7 y/o, or ~~order~~ children only, or utilized by pregnant individuals and/or children under the age of 7. NOTE: This type cleaning implies that this is not a facility that has an active Indoor Firing Range. For facilities with active ranges, these facilities should be monitored with wipe samples taken over the drill floor area by the Range Custodian quarterly, to ascertain the level of lead is at the required level for your particular facility and situation.

6.2.1.1 This cleanup can be accomplished using a HEPA vacuum (a very tedious and long operation) and then by utilizing a wet method with "Spic n Span" or something equivalent to this detergent - -using wet rags to wipe down surfaces and mops soaked in this solution to do floor area. NOTE: Personal protective gloves, rubber boots or protective disposable shoe/boot covers should be used during this procedure and personnel's

clothing should be washed separately from their families, if they have young children at home. Personnel should wash their hands after performing this operation to assure lead contaminants are not ingested.

6.2.1.2 Frequent changing out of the water used is vital. Disposal of this hazardous waste water and rags/mop heads, Personal Protective Equipment (PPE), etc., should be coordinated with your Environmental office.

6.2.2 Clean all ductwork where lead was found. EPA has a protocol specifically for replacing or cleaning lead in dust form in HVAC systems. EPA Office of Pollution Prevention and Toxics, "*Reducing Lead Hazards When Remodeling Your Home*" www.epa.gov/opptintr/lead/rrpamph.pdf.

6.2.3 Continue to enforce good housekeeping and hygiene practices. These measures make good sense to minimize exposures to any toxic chemicals in the workplace.

6.2.4 Provide lead awareness training to the general workforce and any occupants of your facility.

NOTE: Before you start any new procedures or practices be aware of the local city and state regulations in your area.

ARMORY**CLEANUP & FOLLOW-UP HOUSEKEEPING
RECOMMENDATIONS****Materials Needed:**

1. Cloth Mop head (s) & Mop head holder(s) with handle.
2. Mop bucket (s) with wringer.
3. Clean cotton rags and sponges.
4. Disposable gloves
5. Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water.
6. Disposable overshoes or rubber boots. Personnel conducting cleaning operations should not take clothes, boots, etc., home for laundering.
7. HEPA vacuum
8. Six (6) mill plastic bags to dispose of waste.
9. Waste water containers.

Disposal of Waste Water and Cleaning Materials:

1. **NOTE:** Consult with Local Army National Guard Environmental Office prior to taking any collection, disposal or wiping activities commence. Each state and territory may have additional regulatory guidance on collection, storage and disposal of wastewater.
2. Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: thorough cleaning of mop heads may be sufficient enough to reuse on future Armory cleanups but check with local Environmental Office.
3. Disposable gloves should be treated as hazardous waste.
4. Soiled cotton rags should be treated as hazardous waste.
5. Wash water contaminated with Lead can be collected and allowed to slowly evaporate leaving Lead deposits/sludge that may be collected in plastic containers, placed in metal drums, and stored for future delivery to an authorized hazardous waste disposal site.

- a. Drums shall be properly labeled to identify contents In-Accordance With (IAW) Federal, State and local regulatory guidance.
- b. Disposal of containerized waste shall be coordinated IAW State hazardous waste program requirements.
- c. The Environmental Office shall coordinate removal and disposal of all containerized hazardous waste through established waste streams.

Post-Cleanup Precautionary Measures:

1. Thoroughly wash hands with soap and water.
2. Rinse off rubber boots with soap and water, capturing wastewater for collection into established waste stream. If personnel choose to use over shoes for protection, dispose of overshoes into waste stream. **NOTE: This recommendation is for initial clean up activities and PPE requirements may be reduced after it has been determined non-hazardous levels have been achieved.**
3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted

Initial Armory Cleanup:

1. Use a vacuum cleaner equipped with a HEPA exhaust filter. HEPA vacuum all surfaces in the room (ceiling, walls trim, and floors). Start with the ceiling and work down, moving toward the entry door. **Completely clean each room before moving on.**
2. Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

3. Wet wipe, with cotton rags or sponge, any horizontal, diagonal or vertical surfaces up six (6) feet from floor surfaces using hot water and "Spic-n-Span" or an equivalent product.
 - a. Rinse out cleaning cloths thoroughly and frequently.
 - b. Change out cleaning water as necessary.

NOTE: If walls to be cleaned show signs of deterioration, e.g., chipping or crumbling paint, in which wiping, scrubbing, or disrupting might potentially increase or spread contamination, then this portion of the clean up should be avoided.

4. Now prepare water and detergent (e.g. Spic N Span, Mr. Clean, Pine Sol) for the mopping phase, according to manufactures recommendations, which should be found on the products label for general clean up.
 - a. Change out water frequently (when water appears dirty)
 - b. Rinse out mop heads frequently to prevent contamination of dirty water.
5. Cover entire drill floor surface with above prescribed water and detergent.
6. Final rinse should be with clean water only - -after mop heads have been cleaned.

Recommended Follow-up Housekeeping Practices *after Clearance sampling of cleaned area is performed by certified personnel:*

1. Floor cleaning and dusting should be accomplished using the wet method described in Initial Armory Cleanup SOP.

Note: Only exception to these wet cleaning procedures would be the use of a chemically treated dust floor mop. This can be used for follow-up armory cleaning by sweeping of large particles of dirt and paper.

- a. Pre-treated (chemically treated) dust floor mop will limit dust particles from being disbursed into the surround atmosphere.

- b. If treated dust mop is used - -Do Not Shake Mop head - - have mop head laundered after use. Always keep used dust mop heads in sealed double plastic bags when stored at armory/facility. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
2. Frequency of Cleanup- Armories will vary, according to usage and how often they should be cleaned. The following general cleaning schedule is provided:
 - a. Only full-time technicians and traditional soldiers using facility during the month. (*Cleaned Monthly*)
 - b. Occasional activities taking place during the month, e.g., 1-2 classes or volleyball games, etc. (*Cleaned 2x's Monthly*)
 - c. Used regularly by soldiers or outside agencies/personnel. (*Cleaned Regularly - -at least Weekly*)

NOTE: Armories with adjoining Indoor Firing Ranges (IFR) should be cleaned more than weekly, again depending on use of Armory and IFR.

NOTE: Clearance sampling/testing is to be accomplished by certified personnel after these cleanup procedures are followed. If the area is an average Armory, occupied by adults only, for which you are cleaning and is not a **Converted IFR space**, you may continue to utilize the Armory space before the officials re-test this space. Please notify your Safety and/or Occupational Health personnel of the completion of this cleaning regime and they will notify the proper officials of the sampling/testing requirements needed.

If work is contracted out, a third party should do the clearance sampling.

Young children and females who are pregnant, there should be posted signs on all facilities, warning of the potential danger of exposure to lead dust.

Enclosure 8**REFERENCES:**

- a) Title 29, Code of Federal Regulations (CFR) Part 1910, Occupational Safety and Health Administration (OSHA).
- b) ARNG PAM 385-16, Guidelines for Converting Indoor Firing Ranges to Other Uses, 31 January 1994.
- c) NGR 385-15, Policy and Responsibilities for Inspection/Evaluation and Use of National Guard Indoor Firing Ranges.
- d) Army Regulation (AR) 40-5, 15 October 1990, Medical Service, Preventive.
- e) AR 11-34, 15 February 1990, The Army Respiratory Program.
- f) AR 385-10, 23 May 1988, Army Safety Program.
- g) FC-Reg. 385-2, 1 July 1999, Ionizing and Nonionizing Radiation Protection Program
- h) Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- i) Technical Bulletin Medical (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program.
- j) Technical Bulletin Medical (TB MED) 530, 1 January 1991, Food Service Sanitation
- k) National Guard Regulation (NGR) 385-10, 20 December 1989, Army National Guard Safety and Occupational Health Program.
- l) Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- m) IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.

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Enclosure 9



Photo No.1



Photo No.2



Photo No.3



Photo No.4



Photo No.5



Photo No.6



Photo No.7



Photo No.8

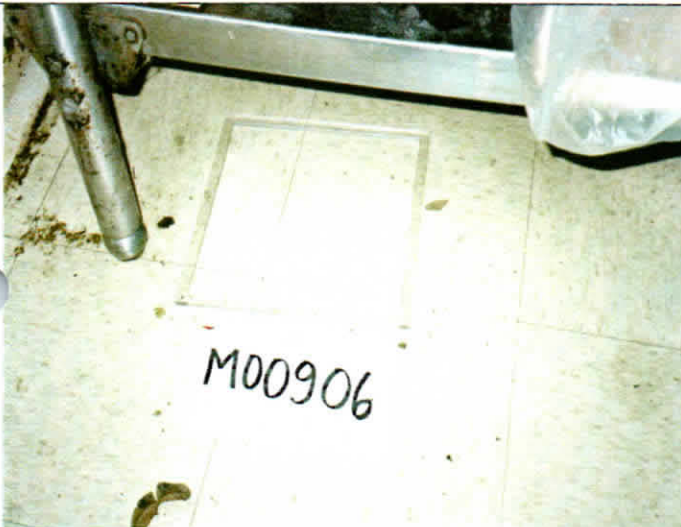


Photo No.9



Photo No.10



Photo No.11



Photo No.12



Photo No.13



Photo No.14



Photo No.15



Photo No.16



Photo No.17



Photo No.18

**DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349**

NGB-AVN-SI

December 19, 2003

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG, ATTN.: State Safety and Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

SUBJECT: Transmittal of the Survey Reports for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory, in Arkansas.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.
- b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.
- f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, 10 December 1998, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2001, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.

NGB-AVN-SI

SUBJECT: Transmittal of the Survey Reports for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory, in Arkansas.

j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.

k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.

l. Report Survey dated 8 October 2003, Industrial Hygiene Survey, Mr. [Non-Responsive] [Non-Responsive] New Orleans, LA.

2. General.

- a. At the request of the AR ARNG Safety and Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling of the for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory in Arkansas.
- b. The surveys were conducted by Mr. [Non-Responsive] 5400 Milne Blvd, New Orleans, LA.

3. Findings. All Health Hazard information is on the survey findings of the report. (See enclosure 1)

4. Recommendations.

- a. Follow all recommendations made in reference 1.l., requesting industrial hygiene (IH) services where needed to complete the recommendations.
- b. Control water infiltration in the armory and/or replace or repair damaged surfaces or components (ceiling and floor tiles). Building conditions that present IAQ concerns or problems not only exacerbates normally minor health issues but also tend to promote or accelerate building deterioration.
- c. The recommendations given in the comment section and data collected will serve as a baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY-04. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY-04 IHIP.
- d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present survey, especially if this will help eliminate health hazards and reduce medical surveillance cost.

NGB-AVN-SI

SUBJECT: Transmittal of the Survey Reports for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory, in Arkansas.

- e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
 - f. Give special consideration to cleaning light fixtures, increasing the wattage and painting walls a lighter color when upgrading the lighting in the facility.
5. If additional information is needed about the industrial hygiene survey or air sample results, please contact Mr. **Non-Responsive** Regional Industrial Hygienist, NGB-AVN-SI, 1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

NBG-AVN-SH

State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl
as

BASELINE INDUSTRIAL HYGIENE SURVEY FOR:

**HHD 875th Engineer Battalion
and
Company A 875th Eng Battalion
JONESBORO, AR
Conducted: 8 October 2003**

ATTN: Captain **Non-Responsive**
1921 Aggie Road
Jonesboro, AR 72401

PREPARED BY:

Non-Responsive
5400 Milne Blvd.
New Orleans, LA 70124-1826
(504) 488-6489

CONTENTS

- 1. INTRODUCTION**
- 2. INSTRUMENTATION**
- 3. FINDINGS**
- 4. RECOMMENDATIONS**
- 5. REFERENCES**

Attachment 1: Schematic of the Armory

Attachment 2: Photographs of the facility

Attachment 3: Laboratory Reports: Lead Swipes

Attachment 4: HHIM Field Survey Form(s)

1. INTRODUCTION

At the request of the National Guard Bureau South Region Industrial Hygiene Office, **Non-Responsive** performed a Baseline Industrial Hygiene Survey at the Army National Guard Jonesboro, AR Armory. The purpose of the survey was to establish a baseline to evaluate health hazards, identify controls present in the work site, collect lead swipe samples from the renovated/inactive or closed Indoor Firing Ranges (IFR), perform an illumination survey and make recommendations regarding health hazards associated with the work at the Jonesboro, AR Armory.

The building was completed in 1957 with approximately 46,300 square feet and houses HQ & HHD and Co A 875th Engineer Battalion. The building is shared with the Arkansas State University ROTC who own and operate the IFR. The IFR is located in a separated building with its own ventilation system. No lead samples were taken in the IFR as it is still operational. However, numerous samples were taken in the assembly hall to determine if and how much contamination is being tracked into the armory.

There are eight FTS personnel in HHC a A Company and a total of 252 service members assigned to the two units. At this time, A Company is deployed leaving 4 FTS and 154 assigned.

The full-time personnel are assigned to perform administrative duties Monday thru Friday from 0730 to 1600. The facility contains administrative areas, an assembly hall, IFR, classrooms, supply room, kitchen, weapons vault, dispatch and retention offices, break area, latrines and locker rooms. A schematic can be found at Attachment 1.

The facility was visually examined and personnel consulted to assess potential hazards present. Lead samples were taken in the drill hall where weapons are cleaned two to three times a year. An illumination survey was performed throughout the facility.

2. INSTRUMENTATION/CALIBRATION

An Extech DLM2 Light Meter, SN # L374324, Calibrated 7/10/03, was used to conduct the illumination survey. It was operated according to the manufacturer's recommendations.

3. FINDINGS

ILLUMINATION

Light readings were taken in various locations throughout the facility with emphasis at desks and/or work stations. The results were compared to guidelines recommended by the Illuminating Engineering Society (IES) and NGB Design Guide 415-1. The results of the survey are shown in Table 1.

Table 1 – Light Readings

Location	Light Reading (foot candles)	IES Recommendation (foot candles)
Bn CO's Office	60.1	50-100
Bn Admin Area	80.5	50-100
S1 Admin Area	3 Readings – Avg 63.07	50-100
S1 NCO Office	104.2	50-100
S3 Admin Area	19.9	50-100
S3 Officer	36.7	50-100
S4 Officer	78.9	50-100
S4 NCO	158/5	50-100
S4 Admin Area	66.2	50-100
Transportation Office	38.0	50-100
Commo Section	2 Readings – Avg 52.5	50-100
Medical Section	2 Readings – Avg 46.9	50-100
HHC Construction Section	34.7	50-100
HHC Orderly Room	2 Readings – Avg 82.2	50-100
CO's Office	185.9	50-100
1SGT Office	201	50-100

Location	Light Reading (foot candles)	IES Recommendation (foot candles)
Equip Section	2 Readings – Avg 68.2	50-100
NBC Storage	25.7	20
HHC Dining	63.0	30
Bn Supply	3 Readings – Avg 27.5*	20*
Co A Admin Area	2 Readings – Avg 77.65	50-100
Co A 1SGT	87.1	50-100
Co A Cdr	51.6	50-100
Co A Supply Room	77.9	20
Assembly Hall	3 Readings – Avg 52	30
Recruiter's Office	2 Readings – Avg 141.35	50-100

A reading of 36.2 Foot Candles at the desk should be 50-100.

ADMINISTRATION

Personnel perform administrative duties that consist of reading, handling and generating paper work. Computer use comprises two to six hours of the work day. This continuous use of computers can lead to eye strain and/or hand/wrist and shoulder soreness.

MOTOR POOL

Only operator maintenance, Prevention Maintenance Checks and Services (PMCS) is performed at the armory. No repair service is performed. When repairs are needed the vehicles are taken to the OMS shop.

ASSEMBLY HALL

The assembly hall is located in the center of the building. It is used primarily as an assembly area. Weapons are cleaned two to three times a year near an open bay door.

LEAD CONTAMINATION

Arkansas State University operates an IFR in a separate building. The IFR has its own ventilation system.

TABLE 2

SAMPLE NUMBER	SAMPLE LOCATION	RESULTS
JBO Blank	Assembly Hall	<10 ug/sq ft
JBO 1	Exit from IFR	35 ug/sq ft
JBO 2	Assembly Hall @ entrance to the Admin Area	35 ug/sq ft
JBO 3	Floor in front of vending machines	11 ug/sq ft
JBO 4	Assembly hall floor	11 ug/sq ft
JBO 5	Assembly hall floor	<10 ug/sq ft
JBO 6	Assembly hall floor	<10 ug/sq ft
JBO 7	Assembly hall floor	<10 ug/sq ft
JBO 8	Assembly hall floor	<10 ug/sq ft
JBO 9	Assembly hall floor	<10 ug/sq ft
JBO 10	HHC Vault #1	11 ug/sq ft
JBO 11	HHC Vault #2	42 ug/sq ft
JBO 12	A Co Vault	28 ug/sq ft

Results of one of the 12 samples taken were greater than the EPA recommended 40 ug/sq ft.

WEAPONS VAULT

The Jonesboro, AR Armory has three weapons storage vaults located in the Supply Rooms. Accountability and weapons issuing are performed in these areas. There are no weapons cleaned in these areas.

HAZCOM

MSDSs were available for chemicals used.

ERGONOMICS

Many workstations were not set up to provide neutral postures and appropriate ergonomically correct positions. Consideration should be given to providing all those full-time employees who spend the majority of their time working at a computer terminal ergonomic training to increase awareness of preventive measures. This training should include the importance of proper posture, recommended exercises, and proper set-up of workstations.

SAFETY AND HEALTH

No findings.

4. RECOMMENDATIONS

ILLUMINATION:

Upgrade lighting as required. Lighting can be upgraded in the following ways:

- Replace blown or broken lighting.
- Paint walls a lighter color.
- Clean existing light fixtures.
- Rearrange furniture to make better use of available lighting.
- Provide supplemental lighting.

LEAD SAMPLES

Clean surfaces with sample results <40ug/sq ft following good hygiene and housekeeping practices.

HAZCOM

Personnel exposed to chemicals should receive initial and annual HAZCOM training.

ERGONOMICS

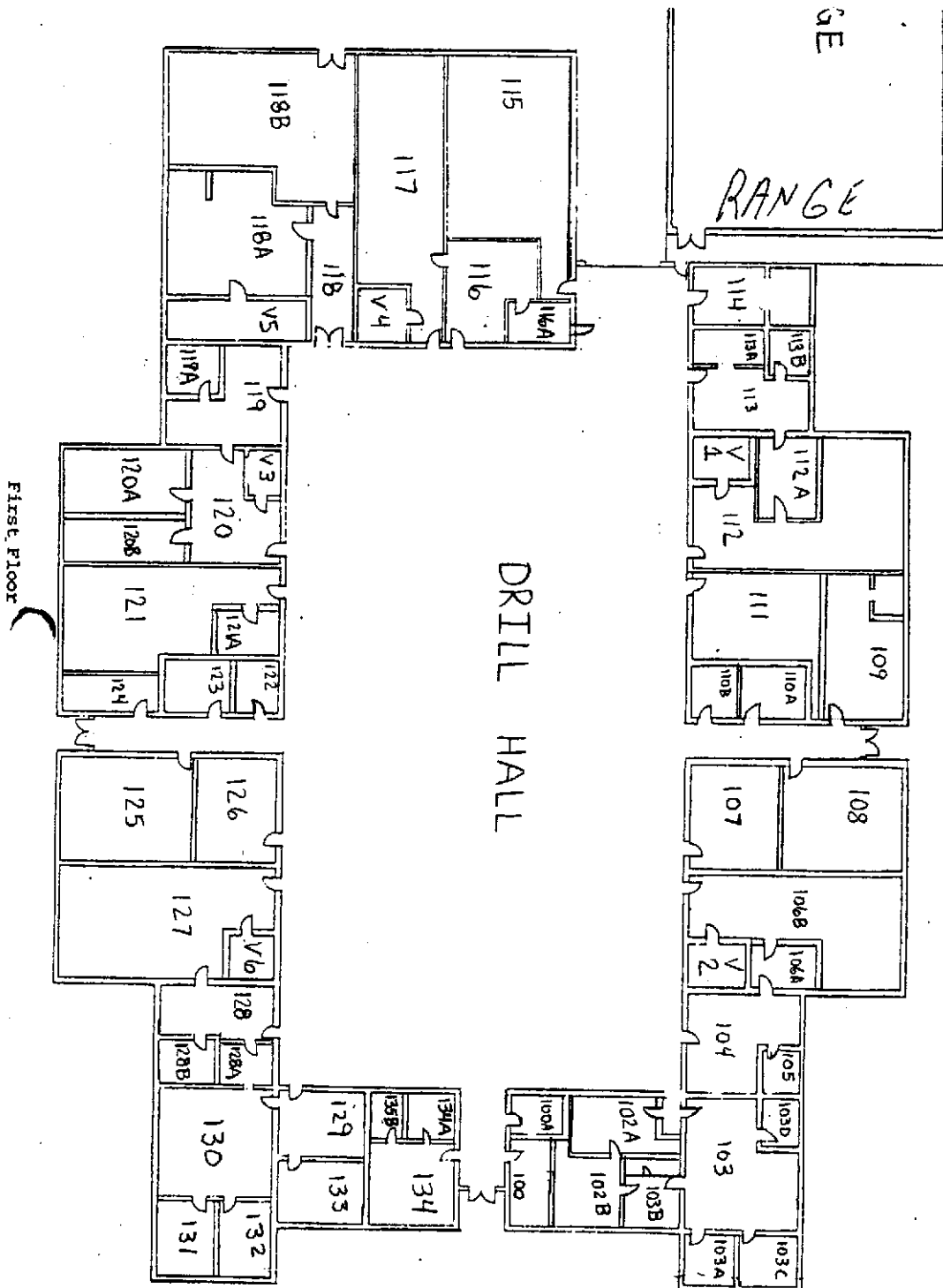
Complete an ergonomics survey on all work stations and conduct ergonomic training for employees who spend the majority of their time working at a computer terminal.

SAFETY AND HEALTH

No recommendations.

5. REFERENCES

- Guide to Occupational Exposure 2000, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- American National Standards Institute (ANSI), Illuminating Engineering Society (IES), Industrial Lighting 1991.
- National Institute for Occupational Safety and Health (NIOSH), (76-130), Technical Information, Lead Exposure and Design Considerations for Indoor Firing Ranges GPO, 1975.
- Title 29, Code of Federal Regulations (CFR). 1999 revision, Part 1910. Occupational Safety and Health Standards
- AR 40-5, Preventative Medicine, 15 October 1990.
- AR 385-10, The Army Safety Program,
- National Safety Council, Fundamentals of Industrial Hygiene, 4th Edition, 1996.
- NGB Pamphlet 385-16, Safety Guidelines for Converting Indoor Firing Ranges to Other Uses.
- TB Med 503, The Army Industrial Hygiene Program, February 1985.
- Department of the Army Pamphlet 40-501, August 1991, Hearing Conservation.
- Title 29 CFR, Part 1910.1200, The Hazard Communication Standard.
- NGB Design Guide 415-1
- 40 CFR, Part 745.220-238, Lead Standard



Arkansas National Guard Armory
Arkansas State University
Jonesboro, Arkansas

Jonesboro

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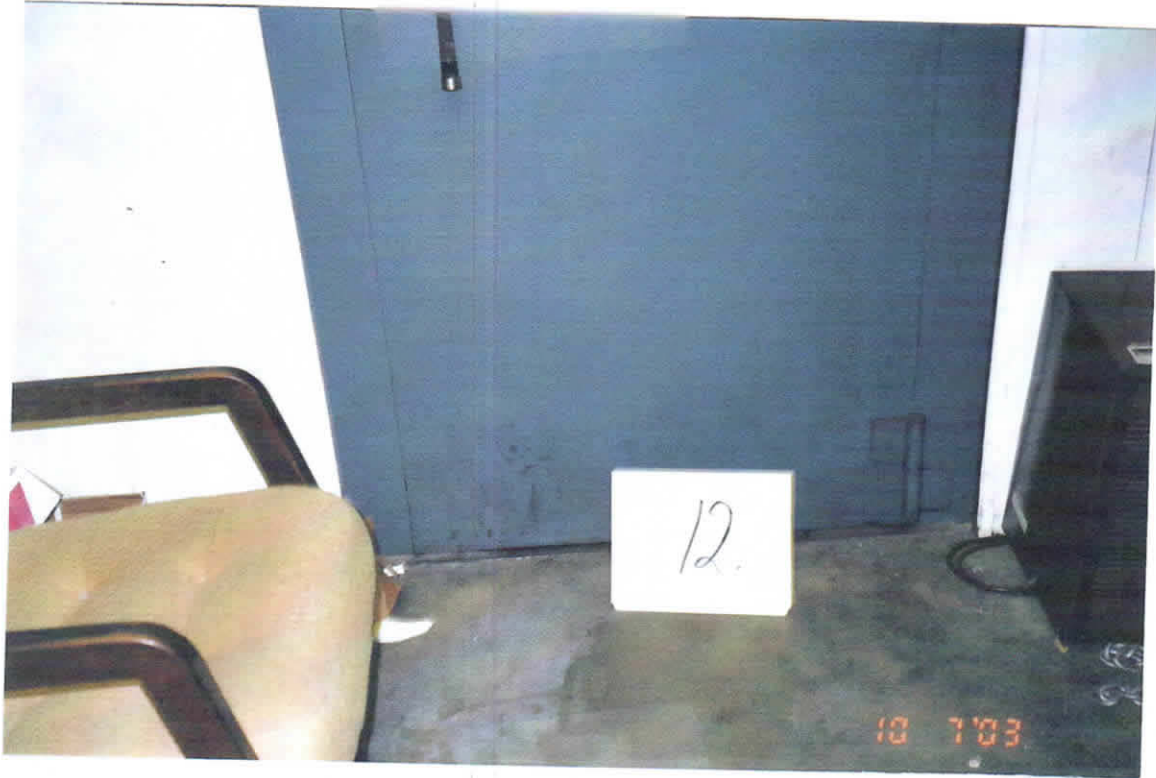













3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-9551 Email: @emsl.com

EMSL

Attn: 

nc.

5400 Milne Blvd. (Cell Phone 504-578-6017)
New Orleans, LA 70124

Fax: (504) 488-6489

Phone: (504) 488-6489

Project: JBO

Customer ID: TOMO77

Customer PO:

Received: 12/05/03 12:07 PM

EMSL Order: 200313987

EMSL Project ID:

Lead in Wipes by Flame AAS (SW 846, 7420)

Client Sample Description	Lab ID	Analyzed	Area Sampled	Lead Concentration
JBO Blank	0001	12/9/03	n/a	<10.0 µg/wipe
JBO 1	0002	12/9/03	144 in ²	35.0 µg/ft ²
JBO 2	0003	12/9/03	144 in ²	35.0 µg/ft ²
JBO 3	0004	12/9/03	144 in ²	11.0 µg/ft ²
JBO 4	0005	12/9/03	144 in ²	11.0 µg/ft ²
JBO 5	0006	12/9/03	144 in ²	<10.0 µg/ft ²
JBO 6	0007	12/9/03	144 in ²	<10.0 µg/ft ²
JBO 7	0008	12/9/03	144 in ²	<10.0 µg/ft ²
JBO 8	0009	12/9/03	144 in ²	<10.0 µg/ft ²
JBO 9	0010	12/9/03	144 in ²	<10.0 µg/ft ²
JBO 10	0011	12/9/03	144 in ²	11.0 µg/ft ²
JBO 11	0012	12/9/03	144 in ²	42.0 µg/ft ²
JBO 12	0013	12/9/03	144 in ²	28.0 µg/ft ²

Non-Responsive


Laboratory Director
or other approved signatory

The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA, unless specifically indicated otherwise in the comment section.

ACCREDITATIONS: NJ-NELAP: 04653, AIHA Environmental Lead Laboratory Approval Program: 100194

Data Printed: 12/9/03 9:28:40 AM

e* = evaluator's recommendation or agreement

Reminders: ergonomics • dermatitis • physical agents • flammable storage
EYE (permanent) _____ • EYE (portable) _____ • SHW • GMV • LEV

ACO ADM OSA DSN LAB LCK
RAD ECB EPL RHS SPR

HHIMS Industrial Hygiene Survey Form

Back page

CAS code

POHNOISECO	P	O	L	I	S	H	T	I	N
POFOOTHAZ	P	O	F	O	O	T	H	A	Z
POFLYPROJ	P	O	F	L	Y	P	R	O	J
POEYEHAAZ	P	O	E	Y	E	H	A	A	Z
POFLAMHAZ	P	O	F	L	A	M	H	A	Z
POLIFTING	P	O	L	I	F	T	I	N	G
POSHARPOB	P	O	S	H	A	R	P	O	B
POHOTOBJE	P	O	H	O	T	O	B	J	E
POELSHOCK	P	O	E	L	S	H	O	C	K
COLUBEOL	C	O	L	U	B	E	O	L	

PAC

2	2								
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EPC

2	2								
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Hazard Description

*Lead/Lead oxide dusts
Extended Computer Use*

Social Security Number or Unique Identifier

Last Name (20 characters max)

First Name (20 characters max)

MI

--	--	--	--	--	--	--	--	--	--

Sex

--	--	--	--	--	--	--	--	--	--

Category

Personnel data provided by the facility is attached to this form

Comments

Operation described is *Administrative Work with extended computer use*

Insert Privacy Act Statement



This operation was explained to the evaluators, but was not actually observed.

There is a noise data sheet attached to this form



There is a ventilation data sheet attached to this form



(Comments continued on attached)



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**DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349**

ARNG-CSG

July 6, 2013

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG: ATTN: LTC **Non-Responsive**
Executive Officer, MAJ **Non-Responsive** and SFC **Non-Responsive** A217th BSB FIRES
BDE, Arkansas Army National Guard, William L. Bush Readiness Center, 705 W.
Pridemore, Lincoln, AR 72744 .

Thru: LTC **Non-Responsive** AR ARNG Deputy State Surgeon, BLDG 15309 BOX 09, Camp
Robinson, NLR, AR 72199-9600.

SUBJECT: Industrial Hygiene Survey of AR ARNG Lincoln Armory, Lincoln, Arkansas.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program.
- b. Army Regulation (AR) 40-5, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program.
- f. DA PAM 40-503, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2011, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. USAEHA TG-141, January 2007, Guidelines for Air Sampling and Bulk sample Collection.
- k. Title 29, Code of Federal Regulations (CFR), 2011 rev., part 1910, Occupational Safety and Health Standards.

2. General. At the request of the AR ARNG Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys

ARNG-CSG

July 6, 2013

SUBJECT: Industrial Hygiene Survey of AR ARNG Lincoln Armory, Lincoln, Arkansas.
and industrial hygiene sampling at the AR ARNG ARNG Lincoln Armory, Lincoln, Arkansas.

3. Findings. The information that follows is based on the findings of the survey performed. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed (See ENCL 1). Operations of very short duration were not sampled due to the requirements of the sampling method. If the operation changes or if the length of the operation is increased, contact this office to schedule sampling if it is deemed needed.
4. Recommendations. Follow the recommendations made in the enclosed report, requesting industrial hygiene (IH) services where needed to complete the recommendations.
 - a. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY2013. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2014 IHIP.
 - b. Have all HHIM data entered into the HHIM computer module.
 - c. Use the report to help in correcting all deficiencies noted.
 - d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.
 - e. Contact the State Occupational Health Office for any medical Surveillance that may be needed.
 - f. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
5. The present report addressed to the local facility commanders was divided in such a way that personal data can be detached and kept by the OHM or blocked when forwarding these reports to other entities within the appropriate offices of AR ARNG. If additional information is needed please contact Mr. **Non-Responsive** Regional Industrial Hygienist, (404) 559-4174 OR 1 (800) 326-0262.

Non-Responsive

Regional Industrial Hygienist

CF:

State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.
State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl
as

Initial Baseline Industrial Hygiene Survey
5 March, 2013
William L. Bush Readiness Center
705 W. Pridemore
Lincoln, AR 72744



Prepared For:
Dept of the Army and Air Force
National Guard Bureau
Regional Industrial Hygiene Office
Region South
510 Plaza Drive, Suite 1530
College Park, Georgia 30349
By
Non-Responsive
DBA: Pinnacle IH

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Appendix C – Photographs of Areas Sampled for Lead in dust	
Appendix D – Drawings of Facility	
Appendix E – Photographs of Facility	
Appendix F – HHIM Forms	

EXECUTIVE SUMMARY:

An Initial Baseline Industrial Hygiene Survey was conducted at the William L. Bush Readiness Center, in Lincoln, Arkansas on 5 March, 2013, as part of the Arkansas Army National Guard Occupational Health Program, to identify potential health hazards in the workplace. The survey consisted of conducting lead wipe samples from the weapons vault and general areas of the facility, illumination survey, noise evaluation, review of the MSDS inventory, interviews with personnel assigned to this facility on a daily basis, and a walkthrough of the building, to evaluate the general condition as it relates to indoor air quality.

TOPIC	SUMMARY OF FINDINGS	RECOMMENDATIONS
Lead Dust in Weapons Vault	Two lead wipe samples detected low levels of lead in dust on the vault floor.	Recommend to clean the weapons racks and floor in this vault per NG PAM 420-15. See Recommendations.
Lead Dust in drill hall storage room. (former IFR backstop area)	One lead wipe sample detected low levels of lead in storage room where tables and chairs are kept.	Recommend to seal the concrete floor in this room per NG PAM 420-15. See Recommendations.
MSDS Inventory	A review of the MSDS inventory was performed. Discrepancies were noted by SFC Non-Responsive	Ensure that MSDS inventory discrepancies are corrected.

William L. Bush Readiness Center
Lincoln, Arkansas

5 March, 2013

MEMORANDUM FOR: LTC [Non-Responsive] Executive Officer, MAJ [Non-Responsive] and SFC [Non-Responsive] A217th BSB FIRES BDE, Arkansas Army National Guard, William L. Bush Readiness Center, 705 W. Pridemore, Lincoln, AR 72744

SUBJECT: Industrial Hygiene Survey for the Lincoln armory

INTRODUCTION

At the request of Mr [Non-Responsive] with the National Guard Bureau South Region Industrial Hygiene Office, a Baseline Industrial Hygiene Survey was performed by [Non-Responsive] at the William L. Bush Readiness Center, on 5 March, 2013. The purpose of this survey was to evaluate any Health Hazards that may be present at the facility. The POC for this survey was SFC [Non-Responsive] [Non-Responsive]

The armory was reportedly built in approximately 1962. The outside areas were neat, dry, clean, and in good repair. There are two other buildings on the property, in addition to the armory. One building reportedly was the "original" armory, and is presently used for maintenance and storage. The other building has cages for storing section equipment. It was reported that the unit's mission is related to fuel distribution, water distribution, ammo distribution, and warehousing. SFC [Non-Responsive] stated that most of the section equipment is stored at Fort Chaffee, where the monthly Mday drills are held. There are 75 Mday troops assigned to the Lincoln armory. The motor pool is behind a fence in the rear of the bldg. It was reported that the vehicles on-site are for winter-response purposes, and would be brought to Chaffee in the spring. All vehicle maintenance is performed at Chaffee. There is no POL storage on-site.

Inside the armory there is a drill hall, kitchen, weapons vault, supply room, latrines, storage closets, locker room, weight/fitness room, conference room, and office areas. There is also a backstop area from the original IFR that juts out of the back of the armory. It has been used as a storage room for several decades. See details in the IFR section below. It was reported that there are three full time personnel that perform admin functions primarily, and with the exception of SFC [Non-Responsive] seldom work more than eight hours per day in a typical work week. SFC [Non-Responsive] reportedly works approx 50 hours per week, but stated no health issues related to his work schedule during the interview.

METHODOLOGY

The following instruments and testing methods were used during this survey:

- Exttech Light Meter (meets calibration requirements)
 - Illumination readings were taken from all work areas, approximately four feet from the floor, and compared to IES (Illuminating Engineering Society) and ANSI RP7-1991 recommendations.
- Quest Sound Level Meter (SLM), model 2200. S/N KOL070044.
 - Calibration Certificate 281229KOL070044.
 - SLM was set to Slow on the A-scale. Range setting was 60-120dba.
- Ghost Wipes (To test for the presence of Lead in dust)
 - Unscented "baby wipes" were used to sample one square foot areas in the weapons vaults and supply rooms, and maintenance bays. The samples were sealed, and sent to an AIHA accredited laboratory for analysis.
- The survey of the facility included photographs of the building and areas of interest, a walkthrough of the facility, and informal discussions with the POC, SFC [REDACTED] Non-Responsive

SURVEY FINDINGS

BUILDING CONDITION

The building is reported as structurally sound, with no roof leaks or chronic issues. The light building maintenance and cleaning duties are handled by local employees. All areas were neat and clean at the time of the inspection. The full time personnel in this facility reported no issues with excessive noise, eye strain, muscle strain, or back strain. The only noticeable noise in the entire facility was from the IT rack in the Orderly Room. The DB level at the rack measured very low, in the 65dba range. No further testing was required. No ergonomic issues were reported. Lighting and ventilation was excellent overall. There were no visible signs of moisture damage to ceiling tiles, walls, or floors. Bathrooms were neat and clean. No mold or mildew damage was observed. Conference rooms were neat and clean. The kitchen is rarely used, and is in good repair. The hood is inspected semi-annually. Personnel advised that there was some remodeling in 2010 that added latrines in a standard Men/Women configuration. As part of this project, a new water line was run from the street, and a sewage pump was installed. No problems were reported with the new latrines.

MSDS

The Material Safety Data Sheet inventory for this unit was managed by a person who is no longer assigned to this unit. It was reported that the inventory was current when he left last November, and that he trained a primary and backup person on MSDS management. Currently the training officer is primary for environmental and MSDS duties. SFC [Non-Responsive] stated that there is an HR requisition out for a replacement. An on-site inventory of all MSDS sheets against the contents of their associated cabinets was performed during the survey. There is no POL building at the armory.

LEAD WIPE SURVEY

It was reported that weapons are fired annually, with both the initial and final cleanings being performed at Ft. Chaffee typically. It was also stated that on the rare occasions when the final weapon cleaning was performed at the armory, it was performed in the drill hall, on tables. It was also stated that the tables were wiped down after the weapons cleaning was completed. The floors in the drill hall are reportedly mopped weekly. SFC [Non-Responsive] stated that the drill hall is used by the public approximately two times per year for various activities. The EPA standard for lead in dust per square foot (40 CFR 745) specifies limits of 40 micrograms of lead in dust in areas where children, pregnant women or people of child-bearing age occupy the area. This standard is applicable to the drill hall. Lab results for lead wipe sampling revealed levels of lead below the reporting limit. (BLR) See Table.

The National Guard Bureau recommends a limit not to exceed 200 micrograms of lead in dust per square foot for work areas that require abatement. The weapons vault is an area where this applies. The vaults should not present lead in dust contamination since weapons should be cleaned before returning them to their racks. Two samples in the weapons vault tested positive for lead, but were well below the NGB limit of 200 micrograms. It is recommended to use the wet cleaning method described in NG PAM 420-15 to clean the vault floor. Continue to ensure that weapons are not cleaned in the weapons vault and drill hall areas. See Table.

IFR

It was estimated that the firing range was last used around 1970. The building was not used as an armory at that time, and reportedly has been remodeled extensively since then. Only the bullet trap area of the former firing range remains. The backstop has been removed, and it has reportedly been used as a storage room for at least the last 20 years. SFC [Non-Responsive] stated that the walls and ceiling were painted last in 2010. The floor is not sealed. Lead wipe samples were taken in several areas of the storage room. One sample on the back of the floor tested positive for lead. The National Guard Bureau limit of 200 micrograms of lead in dust per square foot is the applicable standard for this storage closet. It is recommended that the floor be cleaned and sealed per NG PAM 420-15 guidelines. See references below.

ILLUMINATION SURVEY

Results of the survey showed light measurements meeting or exceeding IES (Illuminating Engineering Society) and ANSI RP7-1991 guidelines throughout most areas of the facility. Refer to Table 2 for survey results.

DRILL HALL

Monthly Mday drills are conducted at Ft. Chaffee typically. It was reported that once a year there is a Family Day/Mday drill event in the drill hall. The drill hall appeared to be in good condition. There were large stand-alone fans for cooling and several heaters mounted near the ceiling. Illumination exceeded requirements.

SUPPLY ROOMS

The supply room contained wood cabinets for storage, and work tables. The contents of the cabinets were inspected and no flammable or hazardous materials were observed. One table was designated for use by the supply sergeant, with a PC, monitor, and peripherals. Lighting for the supply sergeant table met requirements.

A/C SYSTEM

The central HVAC system was located in the Supply Room, and is maintained by a contract company. Filters are changed regularly by the Readiness Officer. The current system was installed in 1998, and reportedly has been reliable, with no chronic issues. A repair by the contract company was performed during the survey.

TABLE 1 (LEAD WIPE TEST RESULTS)

SAMPLE LOCATION	Surveyor's Field No	RESULT $\mu\text{g}/\text{ft}^2$
Drill Hall Floor	JPR106	BRL
Drill Hall Floor	JPR107	BRL
Drill Hall Floor	JPR108	BRL
Drill Hall Floor	JPR109	BRL
Supply Room	JPR110	BRL
Supply Room	JPR111	BRL
Supply Room	JPR112	BRL
Weapons Vault Entrance	JPR113	BRL
Weapons Vault Floor	JPR114	66
Weapons Vault Floor	JPR115	92
Weapons Vault - Blank	JPR116	BRL
Supply Room on top of blue SiteSafe box	JPR117	BRL
Weapons Vault on top of gun rack	JPR118	BRL
Weapons Vault on top of gun rack	JPR119	BRL
Kitchen	JPR120	BRL
Kitchen	JPR121	BRL
Kitchen	JPR122	BRL
Former IFR Backstop/Storage closet - floor, entrance	JPR123	BRL
Former IFR Backstop/Storage closet - back wall, left	JPR124	BRL
Former IFR Backstop/Storage closet (Blank)	JPR125	BRL
Former IFR Backstop/Storage closet - floor, near back wall, center	JPR126	56
Former IFR Backstop/Storage closet - ceiling	JPR127	BRL
Former IFR Backstop/Storage closet - ceiling	JPR128	BRL
Former IFR Backstop/Storage closet - back wall, right.	JPR129	BRL

Note 1: $\mu\text{g}/\text{ft}^2$ refers to micrograms or one millionth of a gram per sq ft.

Note 2: BRL means Below the Reporting Limit

TABLE 2 (ILLUMINATION TEST RESULTS)

LOCATION	LIGHT READING (foot candles)	IES Recommendation (foot candles)
Readiness NCO * (two light fixtures may be bad)	35 Avg	50-100
Admin Spec office	120 Avg	50-100
1st Sgt Office (not used)	90 Avg	50-100
Recruiter Office	85 Avg	50-100
Supply Room	35 Avg	20-50
Supply Sgt Desk area	55 Avg	50-100
Vault	60 Avg	20-50
Latrine	40 Avg	5-10
Storage/ Water Heater closet	20 Avg	10-20
Kitchen	100 Avg	20-50
Gym	50 Avg	10-20
Training Officer / Library	65 Avg	50-100
Conference Room	62 Avg	20-70
Drill Hall	44 Avg	20-50
Old Armory bldg (used for storage now)	10 Avg	10-20
Latrine in old Armory bldg	60	5-10
Storage Bldg	50 Avg	10-20

*Deficient Areas. Please note comments describing faults.

RECOMMENDATIONS

- Use the report to help in correcting all lighting deficiencies noted.
- Recommend to clean gun racks and the floor in the weapons vault, using the “wet” method described in NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges. (RAC 2)
- Per NG PAM 420-15, prepare the floor of the original IFR backstop, and apply a permanent sealer. Lead was detected in one sample taken from the floor. See Table. (RAC 2)
- Continue to ensure that weapon maintenance and cleaning is performed in a well-ventilated area, away from common areas. Ensure that floors and/or tables are cleaned using appropriate methods, if exposed to weapons cleaning. Practice good personal hygiene by washing hands after handling and cleaning weapons and ammunition. Ensure that weapons racks are also cleaned before placing them back in the vault. (RAC3)
- Correct discrepancies in MSDS inventory. Ensure to perform semi-annual inventories and updates of all MSDS’s on all chemicals in the facility. Ensure all hazardous chemicals are stored in appropriate locations. Establish an inventory roll up sheet to manage the chemical inventory, and update the MSDS when new materials arrive and old ones are replaced. Ensure that troops have knowledge of the location of the MSDS books, and are enrolled in annual Hazard Communication training. (RAC3)
- Replace the light fixture bulbs and/or ballasts in areas with illumination levels below IES recommendations. (RAC3)

REFERENCES

- Guide to Occupational Exposure 2000, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- American National Standards Institute (ANSI). Illuminating Engineering Society (IES), Industrial Lighting 1991.
- Title 29, Code of Federal Regulations (CFR). 1999, revision, Part 1910. Occupational Safety and Health Standards
- AR 40-5, Preventative Medicine, 15 October 1990.
- AR 385-10, The Army Safety Program, 23 May 1988.
- NGR 385-15, Inspection, Evaluation and Operation of ARNG Indoor Firing Ranges
- NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges
- AR 385-16, National Guard Pamphlet, Safety Guidelines for Converting Indoor Firing Ranges to Other uses.
- TB MED 503, The Army Industrial Hygiene Program, February 1985.
- Title 29 CFR, Part 1910. 1200, The Hazard Communication Standard.
- DG 415-1, Design Guide for Armories

Non-Responsive



APPENDIX A - LAB TEST RESULTS

Analytical Environmental Services, Inc

Date: 25-Mar-13

Lab Order: 1303D52
 Client: Pinnacle IH
 Project: Lincoln, AR Armory
 Matrix: Wipe
 Date Received: 3-14-2013 4:45:00 PM

LEAD ON WIPES (N9100/7082)
 N7082

Laboratory ID	Client Sample ID	Result	Units	Reporting Limit	DF	Qual	Date Collected	Date Analyzed	Analyst
1303D52-001A	JPR106-Drill Hall	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-002A	JPR107-Drill Hall	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-003A	JPR108-Drill Hall	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-004A	JPR109-Drill Hall	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-005A	JPR110-Supply Rm	BRL	µg/ft ²	180	1		03-05-2013	03-21-2013	TA
1303D52-006A	JPR111-Supply Rm	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-007A	JPR112-Supply Rm	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-008A	JPR113-Weapons Vault	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-009A	JPR114-Weapons Vault	66	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-010A	JPR115-Weapons Vault	92	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-011A	JPR116-Blank Vault	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-012A	JPR117-Weapons Vault	BRL	µg/ft ²	180	1		03-05-2013	03-21-2013	TA
1303D52-013A	JPR118-Weapons Vault	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-014A	JPR119-Weapons Vault	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-015A	JPR120-Kitchen	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-016A	JPR121-Kitchen	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-017A	JPR122-Kitchen	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-018A	JPR123-IFR	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-019A	JPR124-IFR	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-020A	JPR125-Blank	BRL	µg/ft ²	20	1		03-05-2013	03-21-2013	TA
1303D52-021A	JPR126-IFR	56	µg/ft ²	20	1		03-05-2013	03-20-2013	TA
1303D52-022A	JPR127-IFR	BRL	µg/ft ²	20	1		03-05-2013	03-20-2013	TA
1303D52-023A	JPR128-IFR	BRL	µg/ft ²	20	1		03-05-2013	03-20-2013	TA
1303D52-024A	JPR129-IFR	BRL	µg/ft ²	20	1		03-05-2013	03-20-2013	TA

Qualifiers: BRL: Not Detected at the Reporting Limit.

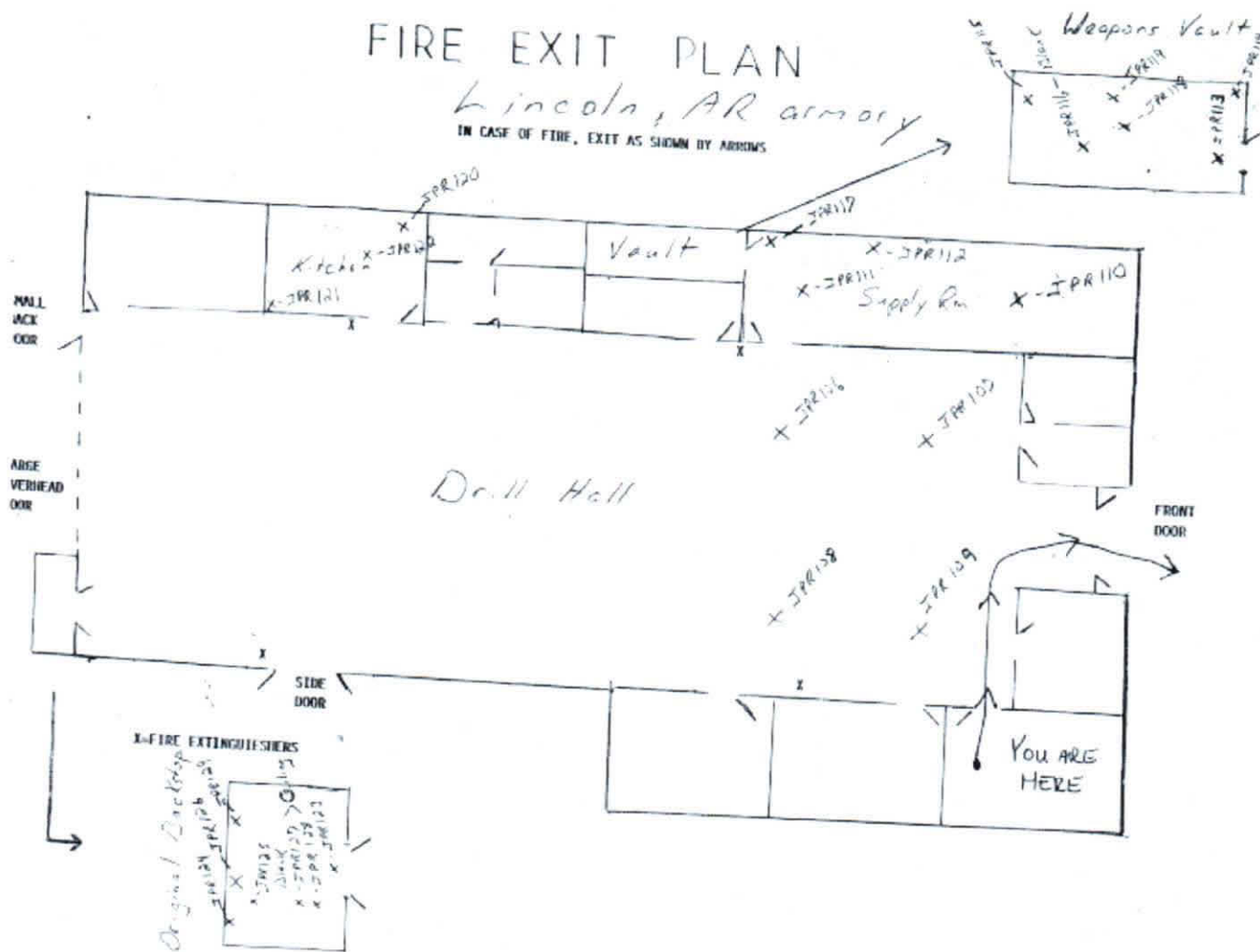
DF: Detection Factor

P: Analyte Detected in Recommended Method Blank

Results are blank, corrected where applicable.

5 March, 2013

FIRE EXIT PLAN
Lincoln, AR armory
IN CASE OF FIRE, EXIT AS SHOWN BY ARROWS



APPENDIX C

Photographs of Areas Sampled for Lead in Dust

JPR106 – JPR109 Drill Hall



JPR113 Weapons Vault



JPR118-JPR119 Weapons Vault Racks



JPR115 Weapons Vault Corner



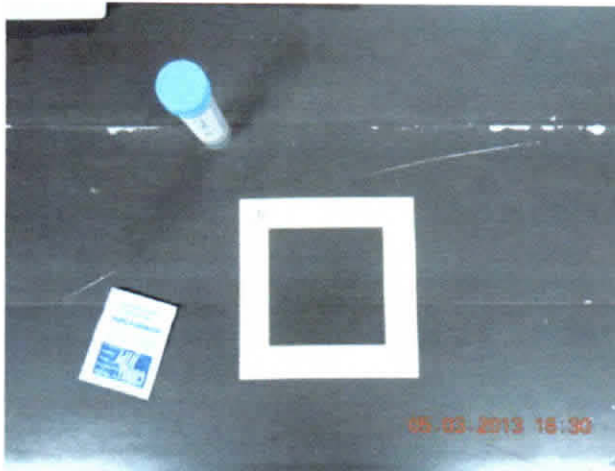
JPR117 Supply Rm



JPR110-JPR112 Supply Rm



JPR110 Supply Rm Table



JPR121 Kitchen



JPR123, JPR124, JPR126 Former IFR backstop



JPR126 Rear floor of former IFR backstop



JPR127, 128 Ceiling of former IFR Backstop



JPR129 Rear wall of former IFR Backstop

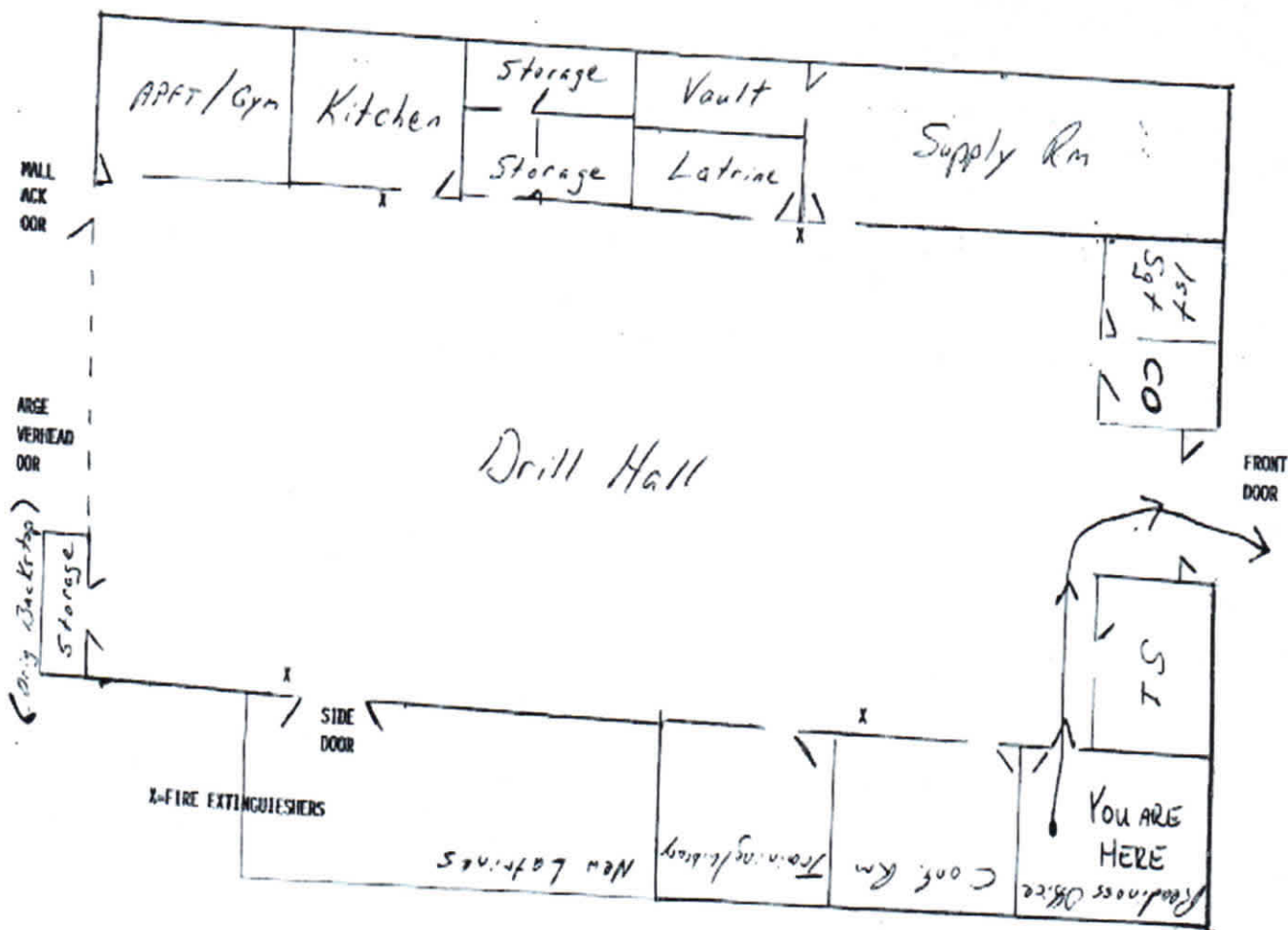


APPENDIX D

DRAWING OF FACILITY

FIRE EXIT PLAN

IN CASE OF FIRE, EXIT AS SHOWN BY ARROWS



APPENDIX E
PHOTOS OF FACILITY

Bldg Front



Bldg Rear View



Former IFR Backstop



Motor Pool



Storage Bldgs in Rear



Storage Bldgs in Rear



5 March, 2013

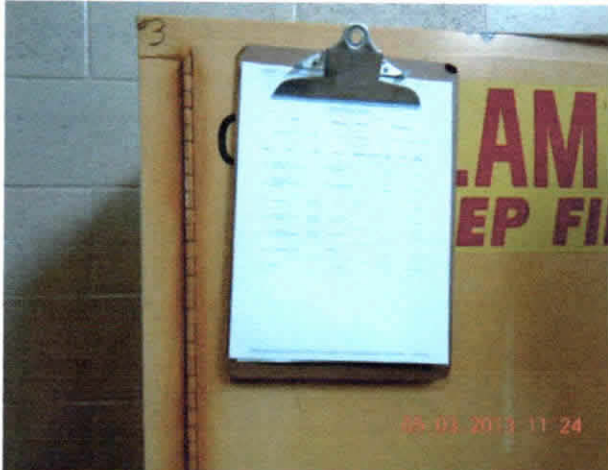
Drill Hall Flammable/Hazardous Chem Cabs



MSDS Documentation on wall



MSDS Monthly Inventory



Storage Bldg Flammable/Hazardous Chem Cabs



I.T. Cabinet



New Water Line For New Latrines



Drill Hall



Kitchen



5 March, 2013

APPENDIX F
HHIM

HEALTH HAZARD INFORMATION MODULE FIELD SURVEY

*SEE PRIVACY ACT STATEMENT ON REVERSE.
(For use of this form, see HHIM User's Instructions.)

SECTION 1. DEMOGRAPHIC DATA

a. APLC 050000 b. INSTALLATION William L. Bush Readiness Center, AR c. BLDG/RM NUMBER Army, RONCO
 d. LOCATION/CODE Polina, RA e. OPERATION/CODE Admin, 100 f. DESCRIPTION General Admin functions such as Computer work, phone calls, paperwork, filing, occasional heavy lifting.
 g. MACOM/CODE Nat Guard, NG h. SUBMACOM/CODE Other, LXA i. SUPERVISOR MAZ Non-Response
 j. TELEPHONE/AUTOVON NUMBER 501 212 2350 k. RAC 4 l. FREQUENCY (Hrs Per Day) 10
 m. NO CIV(S) 0 n. NO MIL 3 o. NO CONTRACTOR(S) 0 p. NO LOC(S) 1 q. NO OTHER 0

SECTION 2. IH STAFFING DATA

a. LAB HOODS _____ b. VAPOR DEGREASERS _____ c. MAINTENANCE BAYS _____ d. SPRAY BOOTHS _____
 e. OPEN SURFACE TANKS _____ f. VENTILATION UNITS _____

SECTION 3. SURVEY DATA

a. SURVEY DATE 5 Mar 2013 b. EVALUATOR (INITIALS) Non-Response

c. CONTROLS PRESENT	d. EVALUATION	e. UNIT CODE	f. CONTROLS REQUIRED	g. STATUS
Lighting Office		FC	50-100	Adequate
Lighting Storage		FC	20-50	Adequate
Lighting Hallway		FC	10-20	Adequate

h. PERSONAL PROTECTIVE EQUIPMENT (R=REQUIRED; A=AVAILABLE)

i. RESPIRATOR	MANUFACTURER	NIOSH TC NO	R/A
DISPOSABLE			1
W FACE AIR PURIFYING			1
V FACE AIR PURIFYING			1
FULL FACE AIR PURIFYING			1
POWERED AIR PURIFYING			1
AIRLINE			1
SELF-CONTAINED			1
ABRASIVE BLASTING HOOD			1

j. GLOVES	R/A	k. EYES/FACE	R/A	l. HEARING	R/A	m. BODY	R/A	n. HEAD/FOOT	R/A
ACID	1	CHEMICAL/SPASH	1	MUFFS	1	APRONS	1	HARD HATS	1
OIL	1	SAFETY/IMPACT	1	EARPLUGS	XIX	COVERALLS	1	IMPERMEABLE BOOTS	1
SOLVENTS	1	CHEMICAL/SAFETY	1	CANAL CAPS	1	FULL BODY SUIT	1	SAFETY CONDUCT SHOES	1
WET SURFACES	1	FULL FACE SHIELD	1	HELMETS	1	SAFETY BELT/HARNES	1	SAFETY/NONCONDUCTIVE SHOES	1
WELD SURFACES	1	WELDING HELMET	1			HEAT REFLECT VEST/SUIT	1		
INOC AGENTS	1								

SECTION 4. HAZARD INVENTORY DATA

a. CAS CODE	b. HAZARD DESCRIPTION	c. PAC OF EPC	d. MEDICAL SURVEILLANCE RECOMMENDED (YES OR NO)
7439-92-1	Lead Particulates	3	No
RO-LIFTING	Heavy Lifting	3	No
RO-VIS	Eye/Head strain - Extended Computer Work	3	No
RO-STRESS	Workload, PT training	3	No
RO-EYE HAZ	Hazards related to poor lighting	3	No

EHA Form 271, 1 MAR 88 (TEST)

(HSHB-MO-IF)

Previous editions of this form are obsolete.

SECTION 5. SAMPLING DATA

SECTION 6. PERSONNEL DATA

SECTION 7.	COMMENTS (Add blank sheet of paper if necessary)

- ① No health issues reported at this facility.
- ② All areas were neat and clean, with good lighting and climate control.
- ③ Facility built in 1962.

Title 42 U.S. Code, Section 301; Executive Order 9397 authorizes the use of your Social Security Number as a identification of this information is to identify and monitor data relating each LIA civilian employer exposed to a hazardous workplace. This information is to provide histories of exposure for any given worker.

Disclosure of your Social Security Number is not mandatory; however, nondisclosure of your Social Security Number may result in a delay in processing your request. **Non-Responsive**

Signature _____



BEST AVAILABLE COPY
DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349

ARNG-CSG-P (40-5f)

February 12, 2011

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG: ATTN: SFC [Non-Responsive]
Troop B 1-151st Calvary Squadron, 100 West University Street, Magnolia, Arkansas 71753.

Thru: LTC [Non-Responsive] Deputy State Surgeon, BLDG 15309 BOX 09, Camp Robinson, NLR,
AR 72199-9600.

SUBJECT: Industrial Hygiene Survey of AR ARNG Magnolia Armory, Magnolia, Arkansas

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1998.
- b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.
- f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, 10 December 1998, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2003, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. USAEHA TG-141, January 2007, Guidelines for Air Sampling and Bulk sample Collection.
- k. Title 29, Code of Federal Regulations (CFR), 2004 rev., part 1910, Occupational Safety and Health Standards.

2. General. At the request of AR ARNG Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling at the AR ARNG Magnolia Armory, Magnolia, AR.

ARNG-CSG-P (40-5f)

February 12, 2011

SUBJECT: Industrial Hygiene Survey of AR ARNG Magnolia Armory, Magnolia, Arkansas

3. Findings. The information that follows is based on the findings of the survey performed. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed (See ENCL 1). Operations of very short duration were not sampled due to the requirements of the sampling method. If the operation changes or if the length of the operation is increased, contact this office to schedule sampling if it is deemed needed.
4. Recommendations. Follow the recommendations made in the enclosed report, requesting industrial hygiene (IH) services where needed to complete the recommendations.
 - a. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY2011. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2012 IHIP.
 - b. Have all HHIM data entered into the HHIM computer module.
 - c. Use the report to help in correcting all deficiencies noted.
 - d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.
 - e. Contact the State Occupational Health Office for any medical Surveillance that may be needed.
 - f. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
5. The present report addressed to the local facility commanders was divided in such a way that personal data can be detached and kept by the OHM or blocked when forwarding these reports to other entities within the appropriate offices of AR ARNG. If additional information is needed please contact Mr. **Non-Responsive** Regional Industrial Hygienist, (404) 559-4174 OR 1 (800) 326-0262.

Non-Responsive

Regional Industrial Hygienist

CF:

State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.
State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl
as

BEST AVAILABLE COPY
Industrial Hygiene Report
For
Arkansas Army National Guard
(AR ARNG)
At
Magnolia Armory
100 West University Street
Magnolia, Arkansas 71753



Prepared for:
National Guard Bureau
Regional Industrial Hygiene Office
Region South
510 Plaza Drive, Suite 1530
College Park, Georgia 30349
By
Non-Responsive
SES Solutions
19 January 2011

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Enclosures:

1. Health Hazard Information Module (HHIM) Survey Form
2. Listing of hazardous chemicals/materials at the facility
3. Analytical Lead Wipe Results
4. Personnel Roster
5. Design Floor Plan
6. Lead Clean Up Procedures
7. References
8. Pictures: 1-24

SESS

January 19, 2011

MEMORANDUM FOR: Arkansas Army National Guard, ATTN: SFC [Non-Responsive] Troop B 1-151st Calvary Squadron, 100 West University Street, Magnolia, Arkansas 71753

SUBJECT: Industrial Hygiene Consultation and Health Hazard Information Module (HHIM) Survey, TRP B 151st CAV SQDN

1. REFERENCES: See Enclosure 7.
2. BACKGROUND: At the request of Mr. [Non-Responsive] National Guard Bureau Regional Industrial Hygienist, Atlanta, Georgia, an Industrial Hygiene Consultation and Health Hazard Information Module Field Survey were performed at the Arkansas National Guard Armory, 100 West University Street, Magnolia, Arkansas 71753 on January 19, 2011. The POC was SFC [Non-Responsive] at (501) 212-7510. The primary mission of Troop B is Calvary Scout. The Armory is currently undergoing major renovation. The purpose of the survey was to perform lead wipe samples; a ventilation survey, an Illuminations Survey, and complete HHIM field survey forms on all industrial operations at the facility (see Encl 1 for completed HHIM Survey Form).
3. INSTRUMENTATION: The following survey instrumentation was provided by the contractor and was used to obtain lead wipe dust samples and illumination measurements. All other instrumentation was operated according to manufacturer recommendations.
 - a) Reed LM-81LX, Light Meter, S/N: Q303521, calibrated: 12/15/2010
 - b) Ghost Lead Dust Wipes, Manufactured: February 2, 2010, Expiration: 08/2013
4. FINDINGS:
 - a) TRP B 1-151st CAV SQDN Company and Supply:
 - i) Administrative duties included pay, promotions, schools, family support, assignments, and supplies. The supply area was broken down into Class 2 items of clothing and equipment. The supply area was also responsible for maintaining some TA 50.
 - ii) Fifty two M-Day soldiers trained at the facility.

SESS

SUBJECT: Industrial Hygiene Consultation and Health Hazard Information Module

b) General Area Armory Information:

- i) Material Safety Data Sheets (MSDS) were located in the facility. All employees must be initially trained in the Federal Hazardous Communication Program IAW 1910.1200 (see Encl 2 for a listing of hazardous chemicals/materials at the facility).
- ii) Twelve lead dust wipe samples were taken, using a 12 inch by 12 inch template. Nine samples were above the federal standard of $40\mu\text{g}/\text{ft}^2$ and three samples were above the National Guard Standard of $200\mu\text{g}/\text{ft}^2$. Pictures of the lead sample wipes were taken (see Encl. 8, photos M025 to M036). Also one asbestos sample was taken and the results determined No Asbestos Detected (ND). The analytical lead result sheet included the sampled locations and corrected results. The following table notes where the samples were taken, the surveyor's field number, and the lead results:

Location:	Surveyor's Field No:	Results:
Drill Hall Floor S.E. Side	M025	94
Drill Hall Floor S.W. Side	M026	120
Drill Hall Floor Center	M027	141
Drill Hall Floor N.E. Side	M028	100
Drill Hall Floor N.W. Side	M029	90
Table Weapons are cleaned on	M030	BRL
Water Fountain in Drill Hall	M031	BRL
Vault Floor	M032	102
Weapons Issue Countertop	M033	29
Old ID Range Left Side Floor	M034	1310
Old ID Range Right Side Floor	M035	1450
Old ID Range FL near Back wall	M036	5630
Blank		33
Insulation on Boiler Room Pipes	#4 (Asbestos Sample)	ND

Note 1: $\mu\text{g}/\text{ft}^2$ refers to micrograms or one millionth of a gram per sq ft.

Note 2: BRL means Not Detected at the Reporting Limit.

- iii) Drill Hall: Conducting classes and drill formations is the main purpose in the hall. (See Encl. 8, photo 14). Illumination levels ranged from 21 to 54 FC's.
- iv) Furnace/General Mechanical Ventilation: Good.

SESS

SUBJECT: Industrial Hygiene Consultation and Health Hazard Information Module

- v) The following table identifies area deficiencies:

AREA	DEFICIENCIES
Supply NCO Off	Water Stain in Ceiling
Old ID Range	8 lights not working
Ice Machine Top	Dirty top with scoop laying on it

- vi) Due to the low noise levels (administrative areas) there was no requirement for a Hearing Conservation Program. The only requirement would be when the M-Day troops were firing their weapons. All M-Day and full-time soldiers had earplugs.
- vii) A listing of TRP B 1-151st CAV SQDN personnel is attached as Encl. 4.
- viii) A design floor plan of the armory is attached as Encl. 5. Illumination levels are listed below in Paragraph 5.

5. ILLUMINATION SURVEY RESULTS:

- a) Illumination Levels: The following additional illumination level readings were taken during the survey and are reported below in foot candles (FC's).

AREA/LOCATION	FOOT CANDLES (FC)
TNG Office	76-99
Admin Office	35-41
Recruiter Office	96-125
Class Room 1	35-50
Class Room 2	48-70
Female Latrine	30-52
Male Latrine	27-65
Vault	40-41
Kitchen	55-63
Locker Room	23-27
Supply	11-21
Drill Hall	21-54
OLD ID Range	2-6
Storage	16-18

SESS

SUBJECT: Industrial Hygiene Consultation and Health Hazard Information Module
As indicated in the IES Lighting Handbook, Application Volume 1987, Offices:
20-50 FC's, Supply and Publication Areas: 20-50 FC's, Assembly 20-50 FC's,
Restrooms: 5-10 FC's, Classrooms: 50-100 FC's, Kitchen: 20-50 FC's, FC's,
Library: 50-100 FC's, Storage Rooms: 10-20 FC's, Mail Room: 20-50 FC's.

6. TECHNICAL ASSISTANCE:

POC for further assistance concerning this evaluation is **Non-Responsive**

Non-Responsive

SES Solutions

7. RECOMMENDATIONS:

- a) Due to the lead dust wipe results, it is recommended that the Drill Hall floor, Vault floor, converted Old Indoor Range floor and weapons issue countertop is cleaned IAW NGB (AR) 385-15 Appendix C. The floors should be thoroughly wiped down and or wet mopped with an industrial cleaner using tri-phosphates, Mr. Clean or Spic-n-Span. For additional lead cleaning measures, see Enclosure 6. **(RAC 2)**
- b) Conduct semi-annual inventories and update MSDS's on all chemicals in the facility and establish an inventory roll up sheet. **(RAC 3)**
- c) Submit a work order to the Facilities Maintenance Office (FMO) to repair the water leak in the Supply NCO Office (see encl. 8, photo 15). **(RAC 3)**
- d) Clean top of ice machine and store ice scoop in clean plastic bag when not in use to reduce contracting bacteria (see encl. 8, photo 16). **(RAC 3).**
- e) Continue to perform monthly checks on fire extinguishers each month, ensure that the devices are checked, recorded, turn upside down and tapped with a rubber mallet to loosen any material at the bottom. Have the local fire department conduct annual inspections of fire extinguishers. **(RAC 3)**
- f) Continue to follow up with FMO to have the electrical lights/wiring in the Old Indoor Range repaired (eight lights not working) (see encl. 8, photo 22). **(RAC 3)**
- g) If work practices change, a new assessment should be made on the controls in Place.

HHIMS Industrial Hygiene Survey Form

Front page

ARLOC		Installation		Building		Room Number	
Location		Operation		Survey Date		Evaluator	
44		ADCO		7/10/11		Macom	
Supervisor		Mr.		Ms.		Submacom	
Supervisor		Rank		Rank		RAC	
Supervisor, or Point of Contact Telephone Number		DSN		Commercial		Frequency (Hz/day)	
						No. CIVs	
Lab Hoods		Vapor Degreasers		Spray Booths		Open Surface Tanks	
Controls Present (If >6, continue in comment(s)(25)		Evaluation (25 characters max)		Unit code		Controls Required (25 characters max)	
OTH		2-6		FTC		20-50FTC	
OTH		11-21		FTC		20-50FTC	
Gloves		Respirator		Manufacturer's Description (10 characters max)		NIOSH TC # or Foreign equivalent (10 characters max)	
acid		airline					
cold surfaces		abrasive blasting hood					
hot surfaces		disposable					
NBC agents		full face air purifying					
oil		1/2 face air purifying					
solvents		powered air purifying					
surgical gloves		1/4 face air purifying					
leather / cotton		self-contained					
other		other					
Eyes and Face		Hearing		Body		Head and Feet	
chemical splash		canal caps		aprons		cold weather boots/hat	
full face shield		>85-108 dBA steady earplugs		cold weather clothing		hard hats	
chem/safety impact		helmets w/ muffs		coveralls		impermeable boots	
safety impact		muffs alone		full body suit		safety shoes (conductive)	
welding helmet		(108-118 inuff/earplug comb		heat reflective		safety (nonconductive)	
sunglasses		muffs and earplugs		vest/suit		other	
welding goggles/glasses		(118 or >) with time limit		safety belt/harness		other	
laser eye protection		other		special purp. clothing		other	
other		other		other		other	

e* = evaluator's recommendation
 or agreement

Reminders: ergonomics - dermatitis - physical agents - flammable storage
 EYE (permanent) _____ EYE (portable) _____ SHW - GMV - LEV

ACO ADM DSA DSN LAB LCK
 RAD ECB EPL RHS SPR WEL

Back page

FOIA Requested Record #J-15-0085 (AR)
Released by National Guard Bureau
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Print Inventory

Print Inventory

Cancel

Unit		Storage	Month	Submitted					
Magnolia / Troop B 1-151 Cav		FLO1-S	11/2010	11/4/2010 2:57:00 PM					
SLN	Item	NSN	Manu.	MSDSID	Quantity	Ctn. Size	SL	HCC	Date Updated
A01	ENAMEL, BROWN	8010003487715	LHB INDUSTRIES		32	10.5 oz			11/4/2010
A02	PRIMER, OXIDE BROWN	8010-00-067-5434	LHB		14	9.75 oz	12		11/4/2010
A03	OD GREEN SPRAY PAINT	8010-00-899-8825	SKILLCRAFT		12	11.5oz	12		11/4/2010
B01	REFRESH AIR FRESHENER	6840-00-721-6055	LHB		2	14 oz	12		11/4/2010
B02	ZEP METER MIST GREEN AP	6840-01-368-4787	ZEP		7	10oz	12		11/4/2010
B03	ZEP MEETER MIST FRENCH V	6840-01-429-5864	ZEP		8	10 oz	12		11/4/2010
B04	ACEPTICARE		AIRKEM PRO PRODUCTS		7	14 oz	12		11/4/2010
B05	HOSPITAL DISINFECTANT	6840-01-410-8860	ZEP		19	24oz	12		11/4/2010
C01	AIR POWER DUSTER	7930-01-398-2473	SKILLCRAFT		23	10 oz	12		11/4/2010
C02	WIN.C. CLEAN.	6850-00-921-2275	LHB IND.		9	16 oz			11/4/2010
C03	SOFT SCRUB	7930-01-356-9206	THE DIAL CORP		7	24oz bt			11/4/2010

D01	PRO LUBE	9150-00-458-0075	LHB	5	12.5 oz	11/4/2010
D02	SOLID FILM LUBRICANT	9150-01-260-2534	SANDSTROM	8	16 oz	11/4/2010
D03	CORROSION PREVENATIVE	8030-01-418-9008	WD40 CO	2	11 oz	11/4/2010
D04	PINE DISINFECTANT CLEANER	6840-01-342-2143	SKILLCRAFT	18	1 liter	11/4/2010
E01	GLASS CLEANER	7930-01-326-8110	SKILCRAFT	29	16 oz	11/4/2010
E02	ALL PURPOSE CLEANER	7930-00-357-7386	SKILCRAFT	28	22 oz	11/4/2010
F01	ALL PURPOSE CLEANER	7930-00-357-7386	SKILCRAFT	36	22 oz	11/4/2010
F02	GREX OFF	7930-01-383-7926	SRAY NINE	11	32 oz	11/4/2010

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Unit			Storage	Month	Submitted				
Magnolia / Troop B 1-151 Cav			FLO2-S	11/2010	11/4/2010 3:00:00 PM				
SLN	Item	NSN	Manu.	MSDSID	Quantity	Ctn. Size	SL	HCC	Date Updated
A01	PERMA WHITE SATTEN		ZINSSER		1	1 gallon			11/4/2010
A02	LATEY SATIN		STERLING PAINT		0	1 gallon			11/4/2010
A03	SIMI GLOSS ENAMEL		SYNEX		1	1 gallon			11/4/2010
A04	SIL. HEAT SINK	6850-00-927-9461			2	5 oz			11/4/2010
A05	SIL. COMP.I/A/W	6850-00-880-7616	G E INC.		2	8 oz			11/4/2010
A06	GASKET SEAL.	TY--6304-	LOCTITE CORP		1	1.69 oz			11/4/2010
A07	FILLIN GLAZE	05977---	3M CORP.		2	32 oz			11/4/2010
B01	CLEANING COMPOUND	6850-00-598-7328	CHEM.COMM.AG		4	KIT			11/4/2010
B02	METHANOL	6810-00-597-3608	AAPER ALCOHOL		1	1 gallon			11/4/2010
B03	ENAMEL, WHITE	W476---	VEST AUTO FINISH		3	1 gallon			11/4/2010
B04	SODIUM BICARBONATE	6810-00-264-6618	LIBERTY CHEMICAL		3	16 oz			11/4/2010

C01	MOGAS/Mixed	---	3	5 gallon	11/4/2010
-----	-------------	-----	---	----------	-----------

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Unit			Storage	Month	Submitted				
Magnolia / Troop B 1-151 Cav			SA01-S	11/2010	11/4/2010 3:02:00 PM				
SLN	Item	NSN	Manu.	MSDSID	Quantity	Ctn. Size	SL	HCC	Date Updated
A01	Hydraulic Trans Fluid	9150-01-353-4799	Petroleum Packers		10	1 quart			11/4/2010
A02	Glass Repair Kits	2090-00-372-6064	Harvey Westbury		2	Kits			11/4/2010
B01	Break Through Solvent	6850-01-378-0679	Indland Tech. Inc.		1	5 gallon			11/4/2010
B02	Anti-Freeze	6850-00-664-1403	CSD Inc.		2	1 gallon			11/4/2010
B03	Four Cycle Oil	TY 22-039	Deere and Company		0	1 quart			11/4/2010
B04	Hydrostatic Fluid	PT-57-0-	Deere and Company		1	1 quart			11/4/2010
B05	ATF	TY-22-035-	Deere and Company		0	1 quart			11/4/2010
C01	Lubricating Oil Engine	9150-01-438-6076	Safety Kleen Corp.		9	1 quart			11/4/2010
C02	Vacant				0				11/4/2010
C03	Degreasing Solvent	6850014742317	Telechem International		1	5 gallon			11/4/2010

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Unit		Storage	Month	Submitted					
Magnolia / Troop B 1-151 Cav		SA02-OH	11/2010	11/4/2010 3:03:00 PM					
SLN	Item	NSN	Manu.	MSDSID	Quantity	Ctn. Size	SL	HCC	Date Updated
A01	CLP	9150-01-102-1473	Royal Lub Co.		12	0.5 oz			11/4/2010
A02	CLP	9150-01-079-6124	Royal Lub Co.		5	4 oz			11/4/2010
A03	CLP	9150-01-053-6688	CSD Inc.		4	1 gallon			11/4/2010
A04	LSA Oil	9150-00-889-3522	CSD Inc.		86	4 oz			11/4/2010
B01	Bleach	6810-00-598-7316	LABBCO INC.		0	1 gallon			11/4/2010
B02	KITCHEN MATE	7930-00-880-4454	SKILCRAFT		13	1 gallon			11/4/2010
B03	ON and ON Floor Finish	7930013812758	Spartan		9	1 gallon			11/4/2010
B04	Hand Sanitizer		MULTI CLEAN		0	1 gallon			11/4/2010
C01	Windex	7930013813499	Drackett		3	32 oz			11/4/2010
C02	Pine Oil	6840005843129	LHB		0	1 gallon			11/4/2010

Analytical Environmental Services, Inc

Date: 31-Jan-11

Lab Order: 1101E97
Client: SES
Project: Magnolia, AR Armory
Matrix: Wipe
Date Received: 1/24/2011 1:30:00 PM

LEAD ON WIPES (N9100/7082)
N7082

Laboratory ID	Client Sample ID	Result	Units	Reporting Limit	DF	Qual	Date Collected	Date Analyzed	Analyst
1101E97-001A	M025	94	ug, Total	20	1		01/19/2011	01/26/2011	JY
1101E97-002A	M026	120	ug, Total	20	1		01/19/2011	01/26/2011	JY
1101E97-003A	M027	141	ug, Total	20	1		01/19/2011	01/26/2011	JY
1101E97-004A	M028	100	ug, Total	20	1		01/19/2011	01/26/2011	JY
1101E97-005A	M029	90	ug, Total	20	1		01/19/2011	01/26/2011	JY
1101E97-006A	M030	BRL	ug, Total	20	1		01/19/2011	01/26/2011	JY
1101E97-007A	M031	BRL	ug, Total	20	1		01/19/2011	01/26/2011	JY
1101E97-008A	M032	102	ug, Total	20	1		01/19/2011	01/26/2011	JY
1101E97-009A	M033	29	ug, Total	20	1		01/19/2011	01/26/2011	JY
1101E97-010A	M034	1310	ug, Total	50	2.52		01/19/2011	01/26/2011	JY
1101E97-011A	M035	1450	ug, Total	55	2.73		01/19/2011	01/26/2011	JY
1101E97-012A	M036	5630	ug, Total	228	11.39		01/19/2011	01/26/2011	JY
1101E97-013A	BLANK	33	ug, Total	20	1		01/19/2011	01/26/2011	JY

Qualifiers: BRL - Not Detected at the Reporting Limit
 B - Analyte detected in the associated Method Blank

DF - Dilution Factor

Results are blank corrected where applicable



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

Bulk Sample Summary Report

Client Name: SES

Project Name: Magnolia, Armory

Project Number:

NVLAQ

Lab ID# 102082-0

AES Job Number: 1101E90

Page 1 of 1

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
#4	1101E90-001A	Insulation On Pipes In Boiler Rm	ND	ND	ND	ND	ND	ND	
Layer: 1									

Note: CH=chrysotile, AM=amosite, CR=crocidolite, AC=actinolite, TR=tremolite, AN=anthophyllite

For comments on the samples, see the individual analysis sheets.

ND = None Detected

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to determine the conclusive asbestos content.

It is certified by the signatures below that the laboratory identified is accredited by the National Institute of Standards and Technology for Polarized Light Microscopy (PLM) analysis under the EPA Interim Asbestos Bulk Sample Quality Assurance Program, Laboratory ID 102082-0. All percentages given are by visually estimated volume. All analyses are performed in accordance with the EPA "Method for the Determination of Asbestos in Bulk Building Materials, EPA/600/R-93/116, July 1993." This report must not be reproduced except in full without the approval of Analytical Environmental Service, Inc. These test results apply only to the samples actually tested.

Microanalyst:

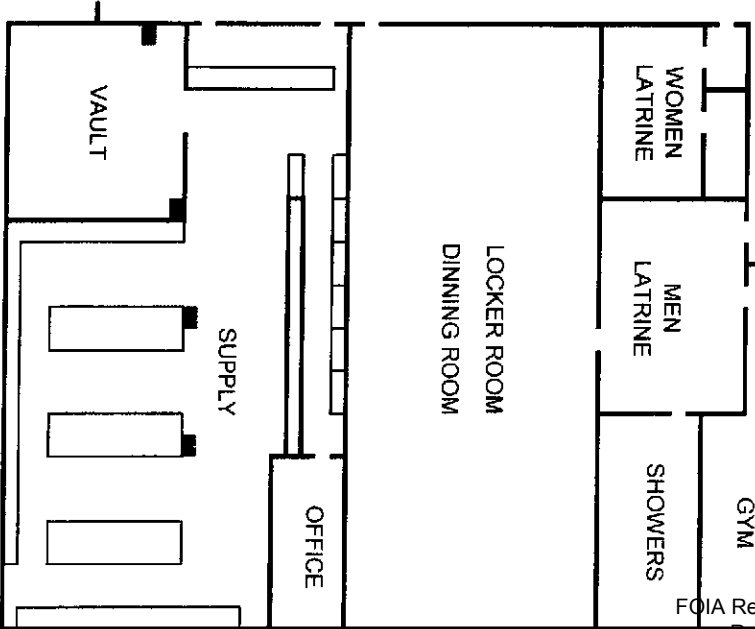
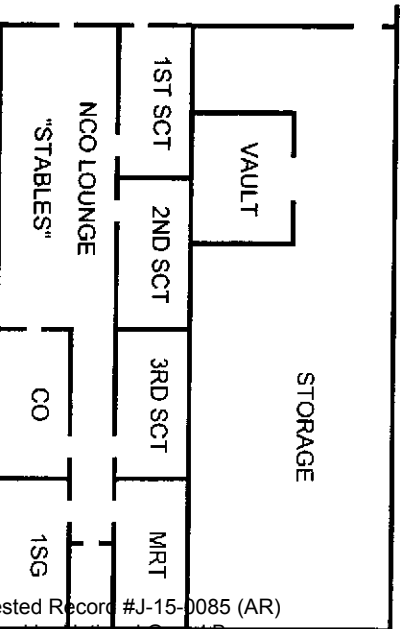
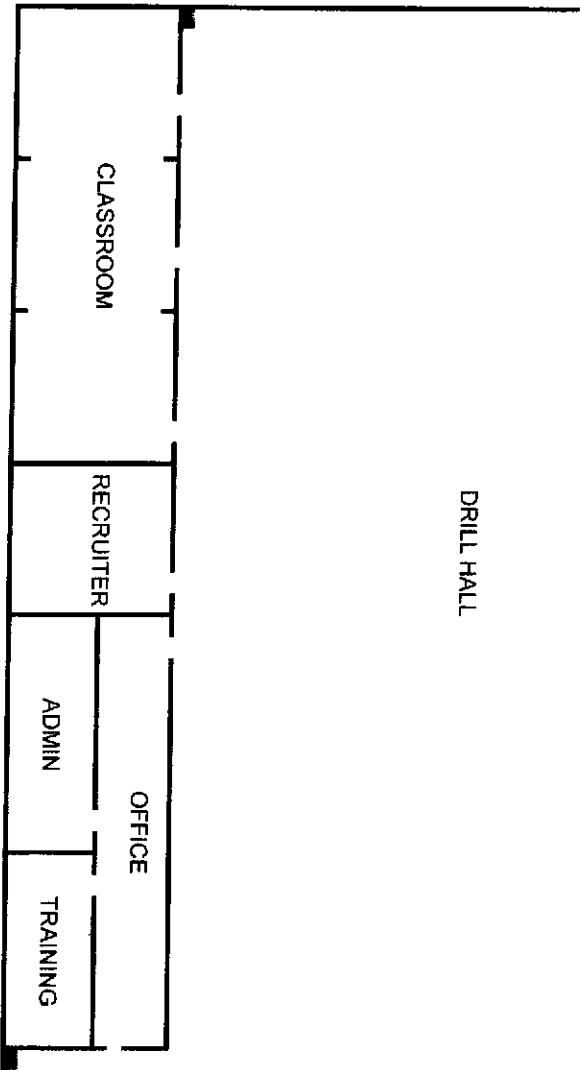
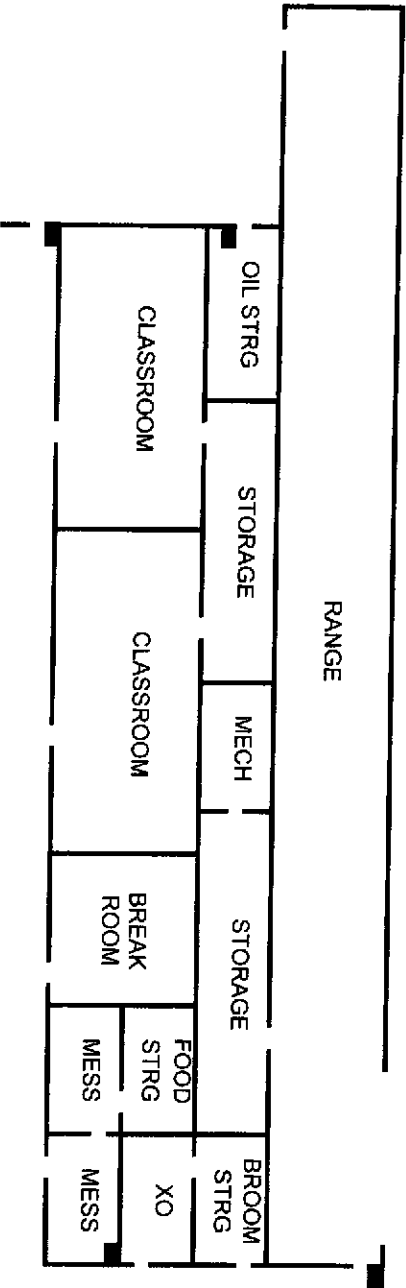
Non-Responsive

QC Analyst:

Non-Responsive

Personnel Roster, Magnolia Arkansas, Armory

SSC	Non-Responsive	Admin/Training NCO
SFC		Readiness NCO
SSG		Supply NCO



FIRE EXTINGUISHER

ENCLOSURE 6

ARMORY CLEANUP REQUIREMENTS

High Test Results

If the public utilizes your facility and the test results for lead came back above 40 $\mu\text{g}/\text{ft}^2$ you are responsible for cleaning this area and adjoining areas to meet the 40 $\mu\text{g}/\text{ft}^2$ or less, unless:

1. You can guarantee that no children under the age of 7 will come into your facility.
2. Your state public health has other guidance, for example, signage is required to warn personnel who are pregnant or of child bearing age, or under the age of 7 years old.
3. Signs stating "No smoking, drinking, eating, or applications of cosmetics without washing of hands prior to activity" are properly installed in your facility.

1. Cleaning of Building.

Before proceeding into the cleanup mode, first discuss with your Environmental Office what procedures are recommended and then coordinate your cleanup efforts with local agencies, if warranted.

- a. The building, as well as the dusty materials and equipment in it, should be cleaned one time to reach the lead dust levels that are appropriate for the function of the facility, for example, facilities used by full-time personnel only, utilized by adults or children 7 years old or older children only, or not utilized by pregnant individuals and/or children under the age of 7. **NOTE: This type of cleaning implies that this is not at a facility that has an active Indoor Firing Range. For facilities with active ranges, these facilities should be monitored with wipe samples taken over the drill floor area by the Range Custodian quarterly, to ascertain that the level of lead is at the required level for your particular facility and situation.**
1. This cleanup can be accomplished using a HEPA vacuum (a very tedious and time-consuming operation) and then by utilizing a wet method with "Spic n Span" or something equivalent to this detergent -- using wet rags to wipe down surfaces and mops soaked in this solution to do the entire floor area. **NOTE: Personal protective gloves, rubber boots, or protective disposable shoe/boot covers should be used during this procedure and personnel who have performed the cleanup should wash their clothing separately from their family's clothing,**

ENCLOSURE 6

especially if they have young children at home. Personnel should wash their hands after performing this operation to assure that lead contaminates are not ingested.

2. Frequent changing out of the water used for cleaning is vital. Disposal of this hazardous waste water and rags/mop heads, Personal Protective Equipment (PPE), etc., should be coordinated with your Environmental office.
- b. Clean all ductwork where lead was found. EPA has a protocol specifically for replacing or cleaning lead in dust form in HVAC systems. EPA Office of Pollution Prevention and Toxics, "*Renovate Right – Important Lead Hazard Information for Families, Child Care Providers and Schools*". <http://www.epa.gov/lead/pubs/rrpamph.pdf>.
- c. Continue to enforce good housekeeping and hygiene practices. These measures make good sense to minimize exposures to any toxic chemicals in the workplace.
- d. Provide lead awareness training to the general workforce and any occupants of your facility.

NOTE: Before you start any new procedures or practices be aware of the local city and state regulations in your area.

ENCLOSURE 6

ARMORY

CLEANUP & FOLLOW-UP HOUSEKEEPING RECOMMENDATIONS

Materials Needed:

1. Cloth Mop head(s) & Mop head holder(s) with handle.
2. Mop bucket(s) with wringer.
3. Clean cotton rags and sponges.
4. Disposable gloves.
5. Large barrel (55 gallon) to store wastewater in after changing out of dirty scrub water.
6. Disposable overshoes or rubber boots. Personnel conducting cleaning operations should not take clothes, boots, etc. home for laundering.
7. HEPA vacuum
8. Six (6) mill plastic bags to dispose of waste.
9. Wastewater containers.

Disposal of Waste Water and Cleaning Materials:

1. **NOTE:** Consult with the Local Army National Guard Environmental Office prior to taking any collection, disposal, or commencement of wiping activities. Each state and territory may have additional regulatory guidance regarding the collection, storage, and disposal of wastewater.
2. Mop heads should be disposed of after initial cleaning, unless otherwise advised by Environmental Office personnel. **NOTE: Thorough cleaning of mop heads may be sufficient enough to permit subsequent reuse on future Armory cleanups, but check with the local Environmental Office before reuse.**
3. Disposable gloves should be treated as hazardous waste material.
4. Soiled cotton rags should be treated as hazardous waste material.
5. Wash water contaminated with lead may be collected and allowed to slowly evaporate leaving lead deposits/sludge that may be collected in plastic containers, placed in metal drums, and stored for future delivery to an authorized hazardous waste disposal site.

ENCLOSURE 6

- a. Drums shall be properly labeled to identify contents in accordance with (IAW) Federal, state, and local regulatory guidance.
- b. Disposal of containerized waste shall be coordinated IAW state hazardous waste program requirements.
- c. The Environmental Office shall coordinate removal and disposal of all containerized hazardous waste through established waste streams.

Post-Cleanup Precautionary Measures:

1. Thoroughly wash hands with soap and water.
2. Rinse off rubber boots with soap and water, capturing wastewater for collection into the established waste stream. If personnel have chosen to use overshoes for protection, dispose of the used overshoes into the established waste stream. **NOTE: This recommendation is for initial cleanup activities; PPE requirements may be reduced after it has been determined that non-hazardous levels of lead have been achieved.**
3. Wash BDU's or personal clothing separately from children's clothes.

IMPORTANT NOTES:

1. **No eating, drinking or application of cosmetics is allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area).**
2. **Avoid blowing, shaking or like actions which could potentially disperse lead dust. Dry sweeping, dusting, wiping, or blowing with compressed air shall not be permitted.**

Initial Armory Cleanup:

1. Use a vacuum cleaner equipped with a HEPA exhaust filter. HEPA vacuum all surfaces in room (ceiling, wall trim, and floors). Start with the ceiling and work down, moving toward the entry door. **Completely clean each room before moving on.**
2. Prepare water and detergent for the wipe down phase, according to manufacturer's recommendations.

ENCLOSURE 6

3. Wet wipe, with cotton rags or sponge, any horizontal, diagonal or vertical surfaces up six (6) feet from floor surfaces using hot water and "Spic-n-Span" or an equivalent product.

NOTE: If walls to be cleaned show signs of deterioration, for example, chipping or crumbling paint in which wiping, scrubbing, or disrupting might potentially increase or spread contamination, then this portion of the cleanup should be avoided.

4. Now prepare water and detergent (for example, Spic n Span, Mr. Clean, Pine Sol) for the mopping phase, according to manufacturer's recommendations, which should be found on the product's label for general clean up.

- a. Change out water and detergent frequently (when water appears dirty)
- b. Rinse out mop heads frequently to prevent contamination of dirty water.

5. Cover entire drill floor surface with above prescribed water and detergent.

6. Final rinse should be with clean water only – after mop heads have been cleaned.

Recommended Follow-up Housekeeping Practices *after Clearance sampling of cleaned area is performed by certified personnel:*

1. Floor cleaning and dusting should be accomplished using the wet cleaning described in Initial Armory Cleanup SOP.

NOTE: The only exception to these wet cleaning procedures is the use of an approved chemically treated dust floor mop. This can be used for follow-up armory cleaning by sweeping of large particles of dirt and paper.

- a. Use of a pre-treated (chemically treated) dust floor mop will prevent lead dust particles from being disbursed into the surrounding atmosphere.
 - b. If a pre-treated dust mop is used – Do Not Shake Mop Head – have mop head laundered after use. **Always keep used dust mop heads in sealed double plastic bags when stored at an armory or facility.** Shaking of a pre-treated mop head may release unwanted contaminants into surrounding atmosphere.
2. Frequency of Cleanup – Armories will vary, according to usage and how often they should be cleaned. The following cleaning schedule is provided:
 - a. Only full-time technicians and traditional soldiers using facility during the month. (Cleaned Monthly.)

ENCLOSURE 6

- b. Occasional activities taking place during the month, for example, 1-2 classes or volleyball games, etc. (Cleaned Twice Monthly.)
- c. Used regularly by soldiers or outside agencies/personnel. (Cleaned Regularly – at least Weekly)

IMPORTANT NOTES:

1. Armories with adjoining Indoor Firing Ranges (IFR) should be cleaned more than weekly, again depending on the use of the Armory and IFR.
2. Clearance sampling/testing is to be accomplished by certified IH personnel after these cleanup procedures are followed. If the area is an average Armory, occupied by adults only, for whom you are cleaning and is not a converted IFR space, you may continue to utilize the Armory space before officials re-test this space. Please notify your Safety and/or Occupational Health personnel of the completion of this cleaning regime and they will notify the proper officials of the sampling/testing requirements needed.
3. If lead cleanup work was contracted out, a third party should do the clearance sampling.
4. If young children and pregnant females are, or may be present, signs shall be posted on all facilities, warning of the potential danger of exposure to lead dust.

References

Army Regulation (AR) 11-34, The Army Respiratory Protection Program.

Army Regulation (AR) 40-5, Preventative Medicine.

Army Regulation (AR) 385-10, The Army Safety Program.

NGR 385-10, Army National Guard Safety and Occupational Health Program.

TB MED 503, The Army Industrial Hygiene Program.

Title 29, Code of Federal Regulations (CFR), 1999, revision, Part 1910, Occupational Safety and Health Standards.

TG 022, US Army Environmental Hygiene Agency (YSAEHA), Industrial Hygiene Evaluation Guide.

TG 141, US Army for Health Promotion and Preventative Medicine (USACHPPM) Industrial Hygiene Air Sampling Guide.

IES Lighting Handbook

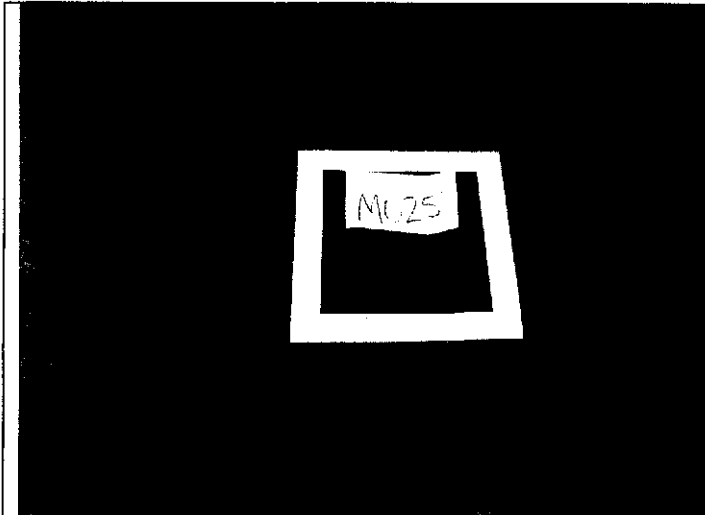


Photo No. 1



Photo No. 2

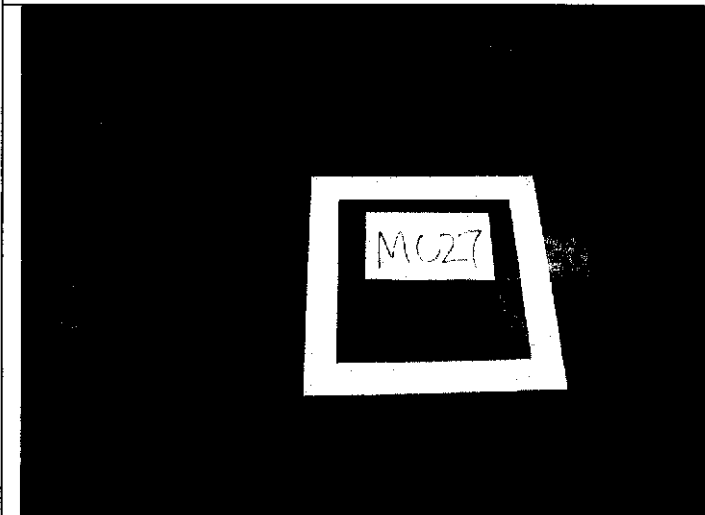


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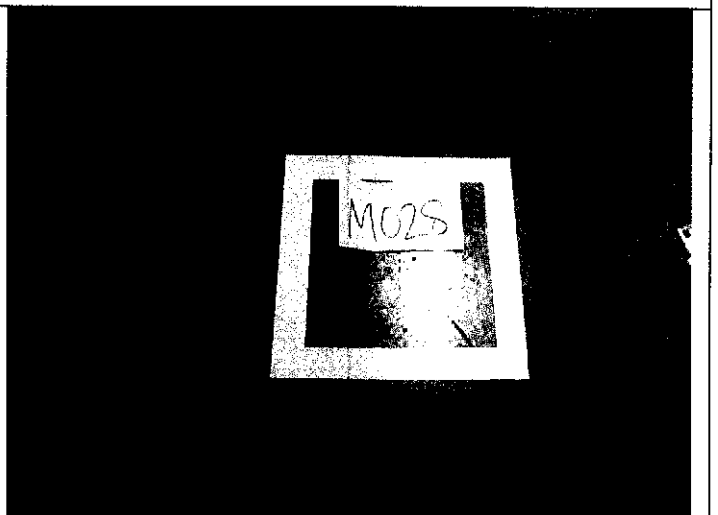


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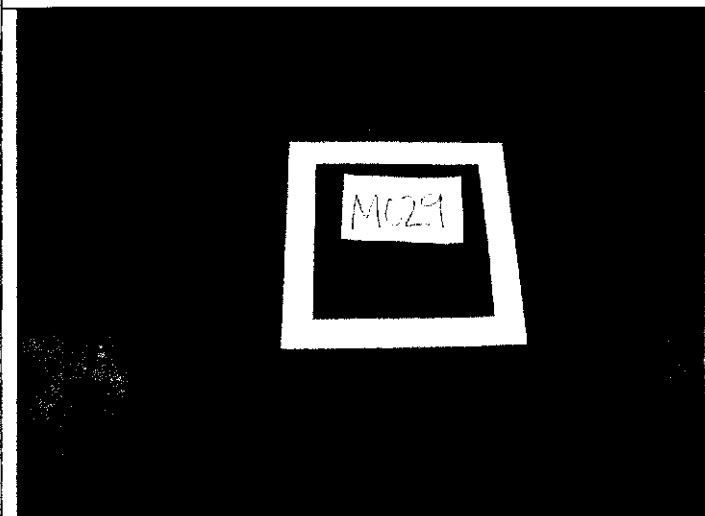


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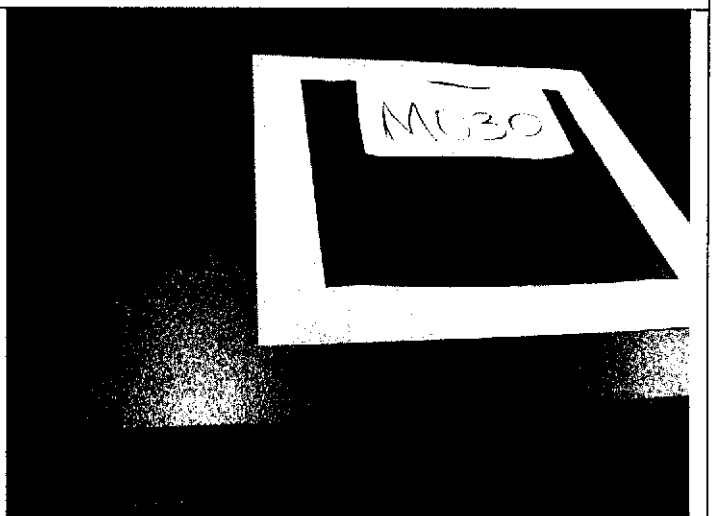


Photo No.6

ENCLOSURE 8

Page 1 of 5



Photo No.7



Photo No.8



Photo No.9



Photo No.10



Photo No.11



Photo No.12

ENCLOSURE 8

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Photo No.13



Photo No.14



Photo No.15

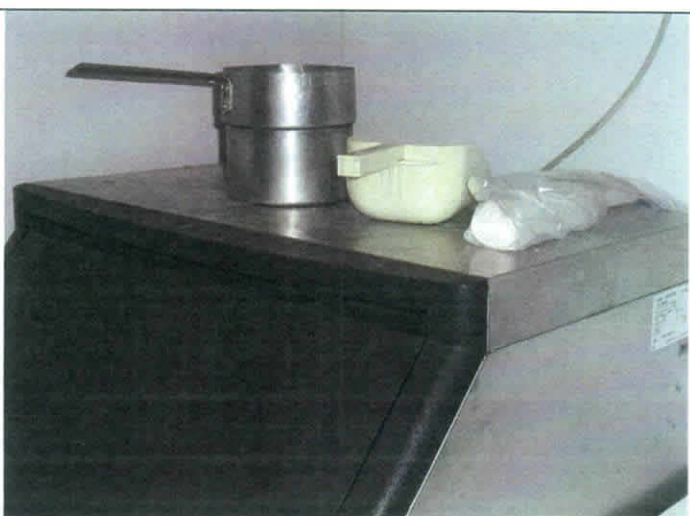


Photo No.16



Photo No.17



Photo No.18

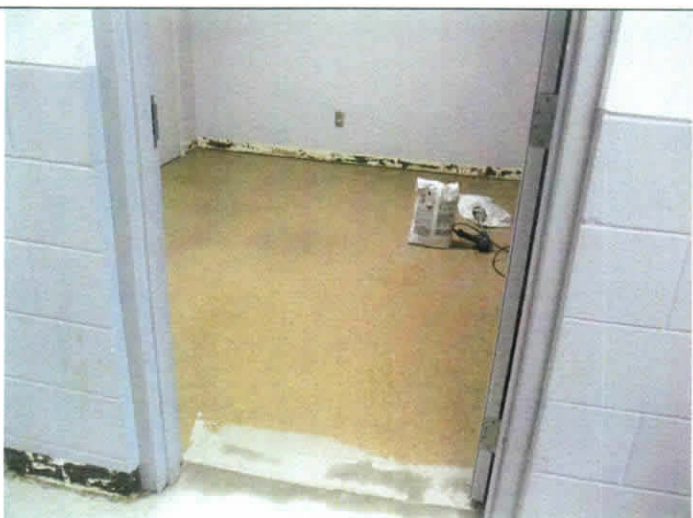


Photo No.19



Photo No. 20



Photo No.21



Photo No.22



Photo No.23



Photo No. 24

**DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349**

NGB-AVN-SI

October 23, 2003

MEMORANDUM FOR: ADJUTANT GENERAL TX ARNG, ATTN.: State Safety and Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

SUBJECT: Transmittal of the Survey Reports for Hazen Armory, Brinkley Armory, Forest City Armory, Lonoke Armory, West Helena Armory and Mariana Armory in Arkansas.

1. References.

a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.

b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.

c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.

d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.

e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.

f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.

g. DA PAM 40-501, 10 December 1998, Hearing Conservation.

h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2001, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.

i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.

SUBJECT: Transmittal of the Survey Reports for Hazen Armory, Brinkley Armory, Forest City Armory, Lonoke Armory, West Helena Armory and Mariana Armory in Arkansas.

j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.

k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.

l. Report dated 25 Sep 2003, Industrial Hygiene Survey, C Graham of Technical Solutions Fayetteville, GA.

2. General.

a. At the request of the AR ARNG Safety and Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling of the Hazen Armory, Brinkley Armory, Forest City Armory, Lonoke Armory, West Helena Armory and Mariana Armory in Arkansas.

b. The surveys were conducted by Mr. Non-Responsive Technical Solutions Int., Fayetteville, GA.

3. Findings. All Health Hazard information is on the survey findings of the report. (See enclosure 1)

4. Recommendations.

- a. Follow all recommendations made in reference 1.l., requesting industrial hygiene (IH) services where needed to complete the recommendations.
- b. Control water infiltration in the armory and/or replace or repair damaged surfaces or components (ceiling and floor tiles). Building conditions that present IAQ concerns or problems not only exacerbates normally minor health issues but also tend to promote or accelerate building deterioration.
- c. The recommendations given in the comment section and data collected will serve as a baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY-04. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY-04 IHIP.
- d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present survey, especially if this will help eliminate health hazards and reduce medical surveillance cost.

SUBJECT: Transmittal of the Survey Reports for Hazen Armory, Brinkley Armory, Forest City Armory, Lonoke Armory, West Helena Armory and Mariana Armory in Arkansas.

- e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
 - f. Give special consideration to cleaning light fixtures, increasing the wattage and painting walls a lighter color when upgrading the lighting in the facility.
5. If additional information is needed about the industrial hygiene survey or air sample results, please contact Mr. **Non-Responsive** Regional Industrial Hygienist, NGB-AVN-SI, 1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

NBG-AVN-SH

State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl
as

Army National Guard Industrial Hygiene Survey



Marianna Armory

591 Highway 243
Marianna, AR 72360
(870) 295-3355
POC: SSG **Non-Responsive**

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25 September 2003

MEMORANDUM FOR: Arkansas Army National Guard, ATTN: CPT [Non-Responsive] Commander, Troop E – 151st Calvary, 591 Highway 243, Marianna, AR 72360

SUBJECT: Industrial Hygiene Survey of Marianna Armory Army National Guard, Marianna, Arkansas

BACKGROUND:

At the request of Mr. [Non-Responsive] and Mr. [Non-Responsive] National Guard Bureau Regional Industrial Hygiene South Office, Atlanta, GA, an Initial baseline industrial hygiene survey was performed at the following Army National Guard Armory facility on **15 September 2003**:

**Marianna Armory
591 Highway 243
Marianna, AR 72360**



This facility houses the following units:

No.	Unit	Commander
1	Troop E – 151st Calvary	CPT [Non-Responsive]
2	Det 1, Troop E, 151st Calvary	CPT [Non-Responsive]
3		

The baseline industrial hygiene survey includes:

- Lead wipe dust surveys
- Illuminations surveys
- Ventilation surveys
- Noise surveys, if necessary

A field survey form is completed on all industrial operations at the facility, and the data contained in this report.

EXECUTIVE SUMMARY:

An initial baseline industrial hygiene survey was conducted at the Marianna Armory, Marianna, Arkansas, on 15 September 2003 as part of the Arkansas Army National Guard Occupational Health Program to identify potential hazards in the workplace. The survey consisted of collecting lead wipe samples, bulk asbestos samples (as needed), conducting noise and illumination survey, as well as evaluating the condition of the building, including the Heating Ventilation and Air Conditioning (HVAC) System as it relates to indoor air quality. A review of several industrial hygiene programs, such as hazard communication, radiation protection, ergonomics, and personal protective equipment was also performed.

The following table summarizes the survey findings and recommendations for each topic surveyed:

Topic	Summary of Findings	Recommendations
Building condition / Indoor Air Quality	Water damage to several areas of the ceiling through out the building, are evidence of roof leaks. Some areas have been repaired, but some are still in need of repair.	Create a maintenance work order to identify and fix sources of leaks.
Lead Wipe Samples	Below Reportable Levels (BRL) to 5350 $\mu\text{g}/\text{ft}^2$	Decontaminate surfaces in the IFR area, decontaminate all contaminated items, and follow good hygiene and housekeeping practices.
Asbestos Bulk Samples	No issues	No action
Illumination Survey	9.1 to 108.1 foot-candles	Upgrade lighting measurements as required. Replacing blown or broken lights, painting the walls a light color, cleaning existing light fixtures, rearranging furniture to make better use of available light, and supplemental or task lighting are considerations in increasing available light levels.
Noise Survey	No issues	No action
Hazards Communication	MSDS are updated for chemicals used	Update and maintain chemical inventory list and cross-reference MSDS book to inventory list for easy access in case of emergency. Personnel responsible for these items should receive annual training in HAZCOM requirements

Ergonomics	Ergonomics Survey and Supply Areas	Complete ergonomics survey on all personnel and offer ergonomic training or awareness to employees who spend the majority of their time working on a computer terminal
Personal Protective Equipment	No issues	No Action

TECHNICAL ASSISTANCE:

POC for further assistance concerning this evaluation is Mr. **Non-Responsive** or Mr. **Non-Responsive**

Mr. **Non-Responsive** or Mr. **Non-Responsive**

NGB Regional Industrial Hygiene South

510 Plaza Drive, Suite 1530

College Park, GA 30349

Office: (404) 559-4174

FAX: (404) 559-4175

E-mail **Non-Responsive**@us.army.mil or
Non-Responsive.army.mil

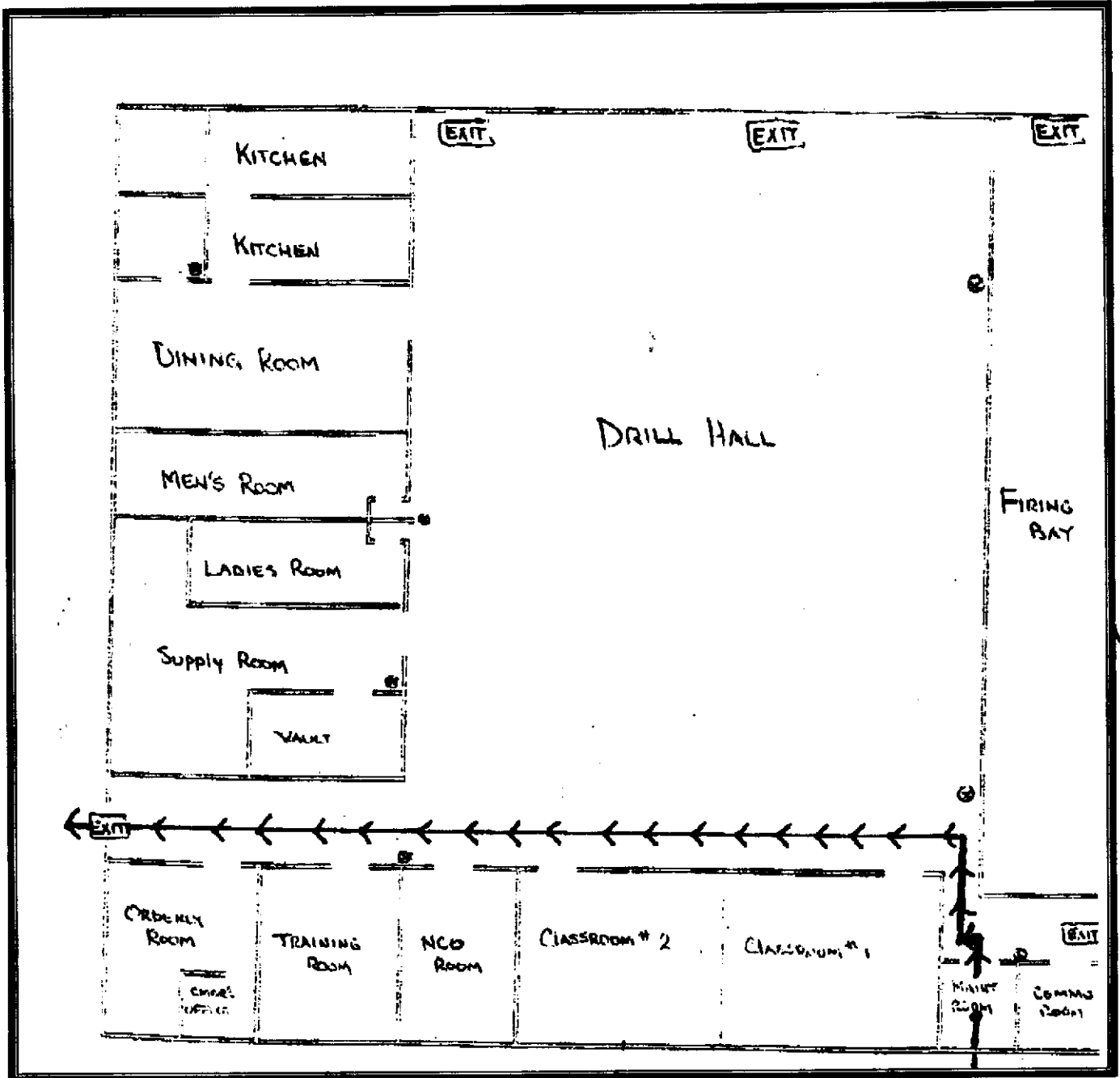
INSTRUMENTATION:

The following survey instrumentation was provided by or for the contractor, and was used to obtain lead wipe dust, illumination, ventilation, and noise sample measurements. All noise dosimeter instrumentation was calibrated before and after sampling. All other instrumentation was operated according to manufacture recommendations.

Instrument	Serial Number	Calibration
Extech Light Meter	Q009486	NEW, Purchase July 2003
Bruel & Kjaer Sound Level Meter	1942881	18 March 2002
Bruel & Kjaer 4231 Acoustic calibrator	1944553	18 March 2002
Alnor Velometer	54067	29 July 2003
Ghost Wipe Lead Dust Wipes		

FINDINGS:

FACILITY DIAGRAM:



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PERSONNEL DATA:

This facility houses the following full-time personnel:

Last Name	First Name	MI	Sex	SSN (Last 4 digits)	Rank	Unit #		
Non-Responsive				Non-Responsive	SSG	2		
					SFC	2		
					SGT	1		
					SSG	1		
					PFC	1		
					Specialist	1		
					SFC	1		
				T	M		Specialist	1
					M		SGT	1
					M		CPL	1
					M		Specialist	1
					M		LT	
					M		1SGT	1
					M		SFC	1
	M		SGT	1				

No.	Location	Description	Picture #
1	Orderly Room	Lighting does not meet illumination standards, as bulbs are out.	
2	Training Room	Water spot on ceiling tile with mold developing	
3	Commander's Office	Mold on ceiling tile, with obvious moisture problems	
4	Kitchen	Ceiling have leak spots	
5			
6			

Paint Chips Sample Results:

Analytical Environmental Servs, Inc.	Date: 01-Oct-03
CLIENT: Technical Solutions International	Client Sample ID: S-MARIANNA
Lab Order: 0309797	Tag Number:
Project: Marianna Armory	Collection Date: 9/15/2003
Lab ID: 0309797-005A	Matrix: PAINT

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TOTAL METALS IN PAINT						
Lead	BRL	0.00953		wt%	1	9/29/2003 3:24:00 PM

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ADMINISTRATIVE OFFICES:

Light Reading Results:

There are several administrative offices in the facility. Administrative personnel are required to use computer systems, file, read, write and perform other administrative tasks as necessary. Computer use occurs throughout the day.

Illumination and Engineering Society of North America (IES) requires 20 to 50 foot-candles (FC) for storage areas and 50 – 100 FC for administrative areas.

Light levels found in the administrative areas are as follows:

Location	Sample Reading in Foot-candles (FC)	Average FC	Remarks
Orderly – 1	25.2		
Orderly – 2	40.0		By window
Orderly – 3 Computer Desk	9.1		
1 st SGT	97.2		
Training Room	69.8		
Training Room	80.1		
Commander's Office	108.1		
Platoon Room	48.7		Was maintenance closet
Storage	62.3		

Ventilation Sample Results:

Location	Sample Reading (FPM)	Area of grid	Control range
Readiness NCO Office	400	No Grill – needs to be fixed	

Lead Wipe Sample Results:

Under the Environment Protection Agency standard (40 CFR 745) lead dust levels above 40 micrograms per square foot on bare and carpeted floors is considered dangerous.

Sample Location	Sample No.	Results ($\mu\text{g}/\text{ft}^2$)	Remarks
Intake grill area in Readiness NCO's office	22-Marianna	52.0	

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KITCHEN / MESS HALL

The kitchen is used for cooking, and the surfaces are used to prepare sandwiches and other light meals.

Light Reading Results:

Illumination and Engineering Society of North America (IES) requires 20 to 50 foot-candles (FC) for storage areas and 50 – 100 FC for administrative areas.

Light levels found in the kitchen / mess hall area are as follows:

Location	Sample Reading in Foot-candles (FC)	Average FC	Remarks
Mess Hall		57.9	
Mess Hall	54.4		
Kitchen Sink	59.2		
Kitchen counter	59.1		
Cook's Office	26.8		

Lead Wipe Sample Results:

Under the Environment Protection Agency standard (40 CFR 745) lead dust levels above 40 micrograms per square foot on bare and carpeted floors is considered dangerous.

Sample Location	Sample No.	Results ($\mu\text{g}/\text{ft}^2$)	Remarks
Blank (Admin, Kitchen, Drill Hall & HVAC)	9-Marianna	BRL	Below Reporting Levels
Kitchen Counter	10-Marianna	BRL	
Kitchen Sink	11-Marianna	BRL	

DRILL HALL

Personnel officially use the drill hall 2 days per month. It is occasionally rented out for community events. Weapons cleaning take place by units during drill weekends.

Light Reading Results:

Illumination and Engineering Society of North America (IES) requires 20 to 50 foot-candles (FC) for storage areas and 50 – 100 FC for administrative areas.

Light levels found in the drill hall area are as follows:

Location	Sample Reading in Foot-candles (FC)	Average FC	Remarks
Drill Hall	37.3		
Drill Hall		44.4	

Lead Wipe Sample Results:

Under the Environment Protection Agency standard (40 CFR 745) lead dust levels above 40 micrograms per square foot on bare and carpeted floors is considered dangerous. The following are the sample results:

Sample Location	Sample No.	Results ($\mu\text{g}/\text{ft}^2$)	Remarks
Drill Hall – 1	7-Marianna	BRL	Below Reporting Levels
Drill Hall – 2	8-Marianna	BRL	

Noise Sample Results:

Noise levels in the drill hall area were below the threshold required for hearing protection. There is no requirement for a Hearing Conservation Program for full-time personnel.

SUPPLY ROOM(s) and VAULT(s)

This facility has 1 supply room, with several storage areas. The supply sergeant uses the computer between 8-10 hours per day. The safety sergeant maintains an inventory of all chemicals. A Material Safety Data Sheet book is maintained with a table of contents, and/or is cross-referenced to the chemical inventory sheet for easy accessibility by all personnel in case of emergency. Heavy lifting is performed with the aid of hand jacks, lifts, and other personnel.

Light Reading Results:

Illumination and Engineering Society of North America (IES) requires 20 to 50 foot-candles (FC) for storage areas and 50 – 100 FC for administrative areas.

Light levels found in the Supply Room / Vault areas are as follows:

Location	Sample Reading in Foot-candles (FC)	Average FC	Remarks
Supply Desk		78.1	

Lead Wipe Sample Results:

Under the Environment Protection Agency standard (40 CFR 745) lead dust levels above 40 micrograms per square foot on bare and carpeted floors is considered dangerous.

Sample Location	Sample No.	Results ($\mu\text{g}/\text{ft}^2$)	Remarks
Blank (Supply / Vault)	1-Marianna	BRL	Below Reporting Levels
Vault Shelf	2-Marianna	BRL	
Vault Rack	3-Marianna	795	
Supply Room outside vault	4-Marianna	30.0	

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INDOOR FIRING RANGE

This IFR is now used as storage; however, it has not been converted.

Lead Wipe Sample Results:

The Army National Guard All States Log Number P01-0075, Policies and Responsibilities for Inspection, Evaluation, and Operation of ARNG Indoor Firing Range (IFR) and Guidelines for IFR Rehabilitation, Conversion, and Cleaning requires a limit of 200 micrograms per square foot for surface contamination in and around indoor firing ranges. The following are the results of the sample readings:

Sample Location	Sample No.	Results ($\mu\text{g}/\text{ft}^2$)	Remarks
Blank (IFR)	16-Marianna	BRL	Below Reporting Levels
Wall near entrance / exit	17-Marianna	50.0	
Backstop	18-Marianna	5350	
Floor by backstop	19-Marianna	525	
Table stored in IFR	20-Marianna	BRL	
Water tank stored in IFR	21-Marianna	BRL	

MOTOR POOL

The building is used fulltime, approximately 22 days per month. Nine (9) fire extinguishers were found in the area. The monthly inspection was last logged for September 10th, 2003.

Ventilation Sample Results:

An exhaust hose is available in each bay area, to be attached to any vehicle that is occupying the bay, allowing exhaust fumes to be vented outside.

No carbon monoxide units are available to alarm in case of dangerous levels when doors are closed, or when vehicles are left idle close to the building

Hearing Conservation Program

A noise survey was not performed in the maintenance area, because no vehicles were being serviced at the time of the survey.

Lead Wipe Sample Results:

Under the Environment Protection Agency standard (40 CFR 745) lead dust levels above 40 micrograms per square foot on bare and carpeted floors is considered dangerous. The following are the sample results:

Sample Location	Sample No.	Results ($\mu\text{g}/\text{ft}^2$)	Remarks
Motor Pool Admin	12-Marianna	BRL	Below Reporting Levels
Blank (Motor Pool)	13-Marianna	BRL	
Motor Pool Bay 1 floor	14-Marianna	27.0	
Motor Pool Bay 2 work bench	15-Marianna	BRL	

APPENDIX A – Recommendations:

- a. Continue maintenance schedule for ensuring that filters in the HVAC system are properly changed, any leaks or standing water are identified, repaired, and prevented, and supply and exhaust grilles are appropriately cleaned. Failure to do so may lead to further indoor air quality issues. The plan should include monitoring, inspecting and cleaning HVAC components such as outside air intakes, outside air dampers, air filters, drain pans, heating and cooling coils, the interior of air handling units, fan motors and belts, air humidification, controls and cooling towers. Consult manufacturers' instructions for appropriate maintenance schedules.
- b. Non-porous (e.g., metals, glass, and hard plastics) and semi-porous (e.g., wood, and concrete) materials that are structurally sound and are visibly moldy can be cleaned and reused. Cleaning should be done using a detergent solution. Porous materials such as ceiling tiles and insulation, and wallboards with more than a small area of contamination should be removed and discarded. Porous materials (e.g., wallboard, and fabrics) that can be cleaned, can be reused, but should be discarded if possible. A professional restoration consultant should be contacted when restoring porous materials with more than a small area of fungal contamination. All materials to be reused should be dry and visibly free from mold. Routine inspections should be conducted to confirm the effectiveness of remediation work.
- c. Any initial water infiltration should be stopped and cleaned immediately. An immediate response (within 24 to 48 hours) and thorough clean up, drying, and/or removal of water damaged materials will prevent or limit mold growth. If the source of water is elevated humidity, relative humidity should be maintained at levels below 60% to inhibit mold growth. Emphasis should be on ensuring proper repairs of the building infrastructure, so that water damage and moisture buildup does not recur.
- d. Contaminated materials that cannot be cleaned should be removed from the building in a sealed plastic bag. There are no special requirements for the disposal of moldy materials.
- e. Upgrade lighting measurements as required. Replacing blown or broken lights, painting the walls a light color, cleaning existing light fixtures, rearranging furniture to make better use of available light, and supplemental or task lighting are considerations in increasing available light levels.
- f. An ergonomics survey should be completed for all supply and administrative personnel as a preventative measure to address and document any ergonomic concerns or problems. An emphasis on maintaining neutral postures and proper lifting techniques should be covered.
- g. Material Safety Data Sheets (MSDS) are required to be kept at the primary workplace facility and to be easily accessible in case of emergency. Personnel responsible for these items should receive annual training in the requirements of the Hazardous Communication Program and the appropriate keeping and storage of MSDSs.
- h. Ensure personnel are prohibited from drinking, eating, smoking chewing tobacco and gum, or applying makeup in supply and maintenance areas. Hands should be cleaned with soap and water before eating drinking, eating, smoking, chewing tobacco and gum, or applying makeup. Remove all refrigerators, cups, and other utensils from supply and maintenance areas.
- i. Equipment should not be stored in the IFR area, since stored items can become contaminated with lead dust. All stored items should be removed as soon as possible and thoroughly decontaminated before their removal. Consult The Army National Guard All States Log Number POI-0075, Policies and Responsibilities for Inspection, Evaluation, and Operation of ARNG Indoor Firing Ranges (IFR) and Guidelines for IFR Rehabilitation, Conversion, and Cleaning.
- j. Dry sweeping of active or inactive indoor firing ranges is strictly prohibited.
- k. A high efficiency particulate air (HEPA) filtered vacuum system or wet method using a detergent and water solution should be used to clean the range.
- l. Ensure fire extinguisher are visually inspected on a monthly basis and recorded on service tag.
- m. Perform noise survey on maintenance equipment. Ensure that all noise hazardous machinery and noise hazardous areas are appropriately marked.
- n. Perform noise dosimetry on maintenance personnel during drill weekend, in order to document noise exposure.

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- o. Plumbed eyewashes should be flushed on a weekly basis to ensure removal of opportunistic pathogens at least three minutes of flushing will greatly reduce the number of organisms in the eyewash.
 - p. Install Carbon Monoxide monitors specifically designed for industrial use in motor pool.

APPENDIX B – Pictures



Photo # 1

Training Room – Water spots on ceiling tile with mold developing.



Photo # 2

Commander's office – mold on ceiling tile. There is an obvious moisture issue.



Photo # 3

Leak spots on kitchen ceiling



Photo # 4

A paint chip was taken from this storage area for lead sampling.



Photo # 5
Drill Hall floor – Samples taken in this area



Photo # 6
Entrance to the motor pool area



Photo # 7
Office in motor pool area – Sample taken here



Photo # 8
Ventilation system to channel out carbon monoxide. The hose is attached to the exhaust of the vehicle when it is running in the maintenance bay.



Photo # 9

Oil and lubrication storage area, with good signage.



Photo # 10

Backstop of inactive indoor firing range

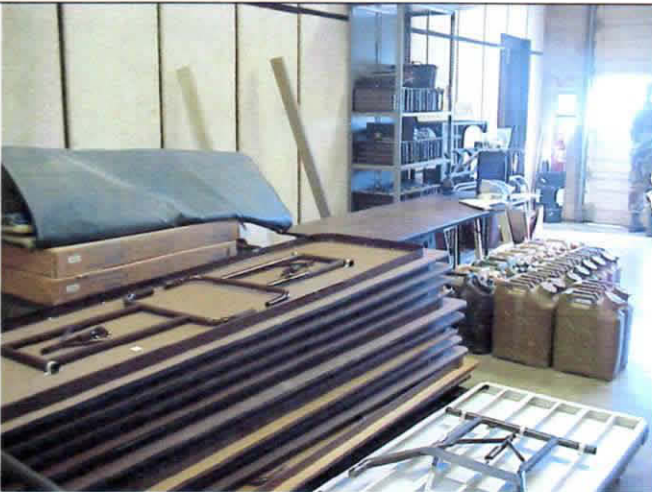


Photo # 11

Items stored in inactive indoor firing range.

APPENDIX C - Lab Report

Analytical Environmental Servs, Inc.

Date: 10/1/2003

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: Technical Solutions International
 Project: Marianna Armory
 Project No: Marianna Armor
 PO No:

Lab Order: 0309797
 Date Received: 9/25/2003 6:45:0
 Matrix: Wine
 Analyst: [REDACTED]

Laboratory ID	Client Sample ID	Results	Units	MDL	DF	Date Collected	Date Analyzed
0309797-001A	1-MARIANNA	BRL	µg. Total	2.83	1	9/15/2003	9/30/2003
0309797-002A	2-MARIANNA	BRL	µg. Total	2.83	1	9/15/2003	9/30/2003
0309797-003A	3-MARIANNA	795	µg. Total	2.83	1	9/15/2003	9/30/2003
0309797-004A	4-MARIANNA	30.0	µg. Total	2.83	1	9/15/2003	9/30/2003
0309797-006A	7-MARIANNA	BRL	µg. Total	2.83	1	9/15/2003	9/30/2003
0309797-007A	8-MARIANNA	BRL	µg. Total	2.83	1	9/15/2003	9/30/2003
0309797-008A	9-MARIANNA	BRL	µg. Total	2.83	1	9/15/2003	9/30/2003
0309797-009A	10-MARIANNA	BRL	µg. Total	2.83	1	9/15/2003	9/30/2003
0309797-010A	11-MARIANNA	BRL	µg. Total	2.83	1	9/15/2003	9/30/2003
0309797-011A	22-MARIANNA	52.0	µg. Total	2.83	1	9/15/2003	9/30/2003

Qualifiers:

MDL - Method Detection Limit

DF - Dilution Factor

ND - Not Detected at the Reporting Limit

Page 1 of 1

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: Technical Solutions International
 Project: Marianna Armory
 Project No: Marianna Armor
 PO No:

Lab Order: 0309798
 Date Received: 9/25/2003 6:45:0
 Matrix: Wipe
 Analyst:

Laboratory ID	Client Sample ID	Results	Units	MDL	DF	Date Collected	Date Analyzed
0309798-001A	12-MARIANNA	BRL	µg. Total	2.83	1	9/15/2003	9/30/2003
0309798-002A	13-MARIANNA	BRL	µg. Total	2.83	1	9/15/2003	9/30/2003
0309798-003A	14-MARIANNA	27.0	µg. Total	2.83	1	9/15/2003	9/30/2003
0309798-004A	15-MARIANNA	BRL	µg. Total	2.83	1	9/15/2003	9/30/2003
0309798-005A	16-MARIANNA	BRL	µg. Total	2.83	1	9/15/2003	9/30/2003
0309798-006A	17-MARIANNA	50.0	µg. Total	2.83	1	9/15/2003	9/30/2003
0309798-007A	18-MARIANNA	5350	µg. Total	9.20	3.25	9/15/2003	9/30/2003
0309798-008A	19-MARIANNA	525	µg. Total	2.83	1	9/15/2003	9/30/2003
0309798-009A	20-MARIANNA	BRL	µg. Total	2.83	1	9/15/2003	9/30/2003
0309798-010A	21-MARIANNA	BRL	µg. Total	2.83	1	9/15/2003	9/30/2003

Qualifiers: MDL - Method Detection Limit
 ND - Not Detected at the Reporting Limit

DF - Dilution Factor

Page 1 of 1

APPENDIX D – HHIM Sheet(s)



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NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
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510 PLAZA DRIVE
COLLEGE PARK, GA 30349

NGB-ARS-IHSE (40-5f)

April 4, 2006

MEMORANDUM FOR: Adjutant General AR ARNG, ATTN: MAJ [Non-Responsive] State
Occupational Health Office, Camp Robinson North Little Rock, AR 72118-2200.

Thru: LTC [Non-Responsive] Deputy Chief Surgeon, DET 4 MED JTFHQ, PO BOX 011 BLDG 6401
RMTC, NLR, AR 72199-9000

SUBJECT: Transmittal of the Survey Reports for Jonesboro Armory, Paragould Armory, Rector Armory and
Walnut Ridge Armory in AR.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.
- b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.
- f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, 10 December 1998, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2003, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.

NGB-ARS-IHSE (40-5f)

April 4, 2006

SUBJECT: Transmittal of Industrial Hygiene Report, Field Maintenance Shop (FMS) No.1, Jonesboro, Arkansas, February 3, 2006.

- j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.
- k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.

l. Industrial Hygiene Survey Report, Industrial Hygiene Technician, Colorado Springs, CO. 80915.

2. General.

a. At the request of MAJ **Non-Responsive** AR ARNG Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling at the FMS No.1, Jonesboro, Arkansas 23 January 2006.

b. The surveys were conducted by Thomas Minckler of Industrial Hygiene Technician, 1503 Zaiger Dr., Colorado Springs, CO. 80915

3. Findings. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed. Additionally one noise dosimetry notification letter was generated based on the data collected during the survey. Operations of very short duration were not sampled due to the requirements of the sampling method. If the operation changes or if the length of the operation is increased, contact this office to schedule sampling if it is deemed needed then. (See ENCL 1).

4. Recommendations.

a. Follow the guidance given in reference 1.1. as good IH practices, requesting industrial hygiene (IH) services where needed. The recommendations that follow are based on the survey findings as reported.

1. Continue to train employees in the Federal Hazardous Communication Program. Ensure that the welding rod MSDS's are included in the binder and on the inventory list. Also, inventory the MSDS's on a semi-annual basis. (RAC 3)
2. Due to the large cubic inch displacement diesel engines (379-855 CID range) which are serviced in this maintenance facility, a work request should be submitted requesting that a new exhaust system be installed which is capable of providing at least 2200 CFM at the terminal end of the exhaust duct. Consideration should be given to both the high exhaust temperatures and the fact that many of the serviced engines are turbo charged when selecting branch/duct construction materials. Reduction/elimination of sharp 90-degree angles in the exhaust branch/ducts will also greatly increase its overall effectiveness. Continue to open bay doors, turn on the general ventilation exhaust system and use local exhaust ventilation hoods while the vehicles are running inside the motor pool. Attached as enclosure 10 are copies of engineering design guidelines/plates, which should help the design of an effective system. (RAC 2)
3. Lighting in the motor pool (bays 1-4) should be upgraded to 100 foot candles (50-100 FC nominal). Continue to keep the bay doors open to increase the illumination levels. NOTE: Ventilation upgrades throughout the facility maintenance bays could limit the amount of available

SUBJECT: Transmittal of Industrial Hygiene Report, Field Maintenance Shop (FMS) No.1, Jonesboro, Arkansas, February 3, 2006.

lighting in critical work areas unless consideration is given to exhaust branch/duct placement. Lighting levels in those critical work areas (under vehicle hoods, wheel cylinder areas, undercarriages and etc.) should be at least 100 FC's (50-100 FC nominal range). To provide adequate lighting while working underneath vehicles continue to use the fluorescent droplights. A brighter color on the walls and ceiling would also enhance the illumination levels in the motor pool. **(RAC 3)**

4. Eye wash/shower stations must be flushed weekly for at least 3 minutes to rid of the harmful bacteria *acanthamoeba*. Also, continue to keep a weekly register on the date and times the flushing occurred. Get new eyewash bottle solutions in the battery room and add water to the 5 gallon portable eyewash container and flush weekly. A 16 gallon portable gravity fed eyewash (see encl.11) would be the best solution in that a weekly 1 minute flushing would suffice and replacement of the chemical solution and water would be every 4 months. **(RAC 3)**
5. Ensure that all personal protective equipment (i.e. respirators, goggles, face shields, and gloves) are cleaned with soap and water after use and properly stored. Replace rubber gloves due to deterioration. **(RAC 3)**
6. Consider using a transformer for the three phase motor on the portable 50 ton lift. The transformer would increase or decrease the voltage which is directly proportional to the amperage. The phase converter, which was initially going to be installed, could do both but usually at a more than 10 % loss. Also, the phase converter is more expensive and less efficient than the transformer. **(RAC 3)**
7. Continue all employees in the Hearing Conservation Program and make sure that the workers have an annual audiogram. A DD Form 2214 (noise survey) was performed for impact noise sources such as pneumatic wrenches, drills, and hammers (see encl.4 for results). Also, strictly enforce hearing protection during engine run times and when using pneumatic power tools. **(RAC 3)**
8. Submit a request for a new updated carbon monoxide detector in the motor pool area. The Nighthawk CO monitor is recommended. The manufacture recommends that the Nighthawk carbon monoxide detector be checked once per week. The Nighthawk should be replaced with either model no. 900-0056 (110 volt) or model 900-0076 (110 volt outlet plus battery). The manufacture suggested replacing the unit every 5 to 6 years. Ensure that the CO detector is calibrated annually. **(RAC 3)**
9. Replace the filter in the break room's AC unit. This will help in circulating cool air to the area. Add a grease filter to the bottom of the kitchen stove exhaust fan. **(RAC 3)**
10. Due to possible ice contamination from the vehicle exhaust and welding fumes, consider moving the ice machine (ice is considered a food) to the break area. **(RAC 2)**
11. The battery charger should be located in the battery room and not the POL bulk storage room due to the electrical fire hazard. Contact the safety office for further guidance. The switch for the

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April 4, 2006

SUBJECT: Transmittal of Industrial Hygiene Report, Field Maintenance Shop (FMS) No.1, Jonesboro, Arkansas, February 3, 2006.

mechanical exhaust fan and the battery charger should be interconnected. This action will ensure its operation when personnel are most likely to be present and contaminants are being generated. Although not a regulatory requirement, this action is beneficial in maintaining exposures at the lowest practical level. The battery room lighting should supply a uniform 50 FC in all servicing/charging areas as recommended by reference 1i. (RAC 3)

b. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY2006. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2007 IHIP.

c. Have all HHIM data entered into the HHIM computer module.

d. Use the report to help in correcting all deficiencies noted.

e. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.

f. Contact the State Occupational Health Nurse, MAJ **Non-Responsive** for any medical Surveillance that may be needed.

k. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. The present report addressed to the local facility commanders was divided in such a way that personal data can be detached and kept by the OHM or blocked when forwarding these reports to other entities within the appropriate offices of AR ARNG. If additional information is needed please contact Mr. **Non-Responsive** **Non-Responsive** Regional Industrial Hygienist, NGB-AVN-SI, COMM. (404) 559-4174 OR 1 (800) 326-0262.

Non-Responsive

Regional Industrial Hygienist

CF: NGB-ARS-IHSE

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

MAJ **Non-Responsive** State Occupational Health Office, Camp Robinson North Little Rock, AR 72118-2200.

ENCL.

as

BEST AVAILABLE COPY
Industrial Hygiene Report
For
Arkansas National Guard
(ARARNG)
At
Paragould Armory
1201 Highway 135 North
Paragould, Arkansas 72450-0355



Prepared for:
Department of the Army and Air Force
National Guard Bureau
Regional Industrial Hygiene Office
Region South
510 Plaza Drive, Suite 1530
College Park, Georgia 30349
By
Non-Responsive
DBA: Non-Responsive & Associates
25 January 2006

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February 8, 2006

MEMORANDUM FOR: Arkansas Army National Guard, Attn: SFC [Non-Responsive] C. Company 875th Engineer Battalion, 1201 Highway 135 North, Paragould, Arkansas 72450-0355

SUBJECT: Industrial Hygiene Consultation and Health Hazard Information Module (HHIM) Survey, C. Company 875th Engineer Armory, Army National Guard, Paragould, Arkansas

1. REFERENCES: See Enclosure 8
2. BACKGROUND: At the request of Mr. [Non-Responsive] National Guard Bureau Regional Industrial Hygienist, Atlanta, Georgia, an Industrial Hygiene Consultation and Health Hazard Information Module Field Survey were performed at the Paragould Armory, Army National Guard, Paragould, Arkansas on January 25, 2006. The POC was SFC [Non-Responsive] at 870-236-2001. His address was Paragould Armory, 1201 Highway 135 North, Paragould, Arkansas 72450-0355. The primary mission of the engineer company was building roads, bridges, buildings, and demolition. Mr. [Non-Responsive] assisted in the survey. The purpose of the survey was to perform lead wipe samples; a ventilation survey, an Illuminations survey, and complete HHIM field survey forms on all industrial operations at the facility (see encl 1 for completed HHIM Survey Form).
3. INSTRUMENTATION: The following survey instrumentation was provided by the contractor and was used to obtain lead wipe dust samples and illumination measurements. All other instrumentation was operated according to manufacture recommendations.
 - a) Reed LM-81LX, Light Meter, S/N: Q225589, calibrated: 11/15/2005
 - b) Ghost Lead Dust Wipes, Manufactured: December 1, 2003, Expiration: 06/06
 - c) TSI, Model 8386, SN: 00100166
4. Findings:
 - a) C. Company and Supply:
 - i) Administrative duties included pay, promotions, schools, family support, assignments, and supplies. The supply area was broken down into class 2 items such as clothing and equipment. The supply area was also responsible for maintaining TA 50.
 - ii) Ninety-eight M-Day soldiers trained at the facility.
 - b) General Area Armory Information:
 - i) Material Safety Data Sheets (MSDS) were located in the facility. All employees must be initially trained in the Federal Hazardous Communication Program IAW 1910.1200 (see encl 2 for a listing of hazardous chemicals/materials at the facility).

- ii) Twelve lead dust wipe samples were taken, using a 10 inch by 10 inch template. Five samples were above the federal standard of $40\mu\text{g}/\text{ft}^2$. One sample was above the Army National Guard standard of $200\mu\text{g}/\text{ft}^2$. Pictures of the lead sample wipes were taken (see encl.9, photo's M02006 to M03106). The analytical lead result sheet included the sampled locations and corrected results. Also, the sample submission sheets were enclosed in the report (see enclosure 3). The following table notes where the samples were taken, the surveyor's field number, and the lead results:

Location:	Surveyor's Field No:	Results:
Vault Floor	M02006	$97\mu\text{g}/\text{ft}^2$
Drill Hall Floor	M02106	$<14\mu\text{g}/\text{ft}^2$
1 st Platoon Room Shelf	M02206	$29\mu\text{g}/\text{ft}^2$
Door Panel, Recruiters Office	M02306	$29\mu\text{g}/\text{ft}^2$
Under Folding Chair, Drill Hall	M02406	$350\mu\text{g}/\text{ft}^2$
Storage Room Shelf	M02506	$160\mu\text{g}/\text{ft}^2$
Supply Room Vent	M02606	$120\mu\text{g}/\text{ft}^2$
Kitchen Floor	M02706	$<14\mu\text{g}/\text{ft}^2$
North End Floor, Drill Hall	M02806	$22\mu\text{g}/\text{ft}^2$
Top of Scale, Next to Classroom	M02906	$43\mu\text{g}/\text{ft}^2$
A & O Platoon Room Floor	M03006	$39\mu\text{g}/\text{ft}^2$
Readiness NCO Office	M03106	$25\mu\text{g}/\text{ft}^2$

Note 1: $\mu\text{g}/\text{ft}^2$ refers to micrograms or one millionth of a gram per square foot

Note 2: BDL means below detection level

- iii) Drill Hall: Conducting drill and ceremonies in the large hall was its main purpose (see encl.9, photo 1). One ceiling lamp was out. Illumination levels ranged from 15 to 85 FC's.
- iv) Furnace/General Mechanical Ventilation: The furnace filters were clogged (see encl.9, photo 2).
- v) The facility had a cockroach problem (see encl.9, photo 3).
- vi) The following table identifies area deficiencies:

AREA	DEFICIENCIES
Classroom	4 fluorescent tubes were out
Operations Office	Four fluorescent tubes were out.
Drill Hall	One ceiling lamp was burned out
Female Restroom	Light cover was missing

- vii) Due to the low noise levels (administrative areas) there was no requirement for a Hearing Conservation Program. The only requirement would be when the M-Day troops were firing their weapons. M-Day and permanent party soldiers had earplugs.
- viii) A listing of the C. Company 875th Engineer personnel was attached as encl. 4
- ix) A design floor plan and illumination levels of the armory was attached as encl. 5.

ILLUMINATION SURVEY RESULTS:

- a) Illumination Levels: The following additional illumination level readings were taken during the survey and are reported below in foot candles (FC's).

AREA/LOCATION	FOOT CANDLES (FC)
Drill Hall (garage doors closed)	15-85
Kitchen	19-38
Classroom	7-59
Female Latrine	6-9
Storage Room	12-16
Officer Latrine	11-18
Supply Room	9-30
Recruiter's Parlor	87-104
Commander's Office	55-88
Orderly Room	28-120
Operations Office	28-70
1 st Platoon Office	18-104
2 nd Platoon Office	38-107
3 rd Platoon Office	13-43
Commo Room	41-105

As indicated in the IES Lighting Handbook, Application Volume 1987, Offices: 20-50 FC's, Supply and Publication Areas: 20-50 FC's, Assembly 20-50 FC's, Restrooms: 5-10 FC's, Classrooms: 50-100 FC's, Kitchen: 20-50 FC's, FC's, Library: 50-100 FC's, Storage Rooms: 10-20 FC's, Mail Room: 20-50 FC's.

6. RECOMMENDATIONS: See Enclosure 6

7. TECHNICAL ASSISTANCE::

POC for further assistance concerning this evaluation is **Non-Responsive**

Non-Responsive

Industrial Hygiene Technician

CF:

Office of the Adjutant General, Arkansas Army National Guard,
ATTN: TAG-DZ-SO (MAJ **Non-Responsive**)
Bldg. #3000, Camp Robinson,
North Little Rock, AR 72199-9600

HEALTH HAZARD INFORMATION MODULE FIELD SURVEY

Enclosure 1

BEST AVAILABLE COPY
SEE PRIVACY ACT STATEMENT ON REVERSE
(For use of this form, see EICEM User's Instructions)

SECTION 1.

DEMOGRAPHIC DATA

ARLOC 05000 a. INSTALLATION ARK NAT. GUARD c. BLDG/ROOM NUMBER PARAGOULD
LOCATION/ZONE CODE AD d. OPERATION/CODE ADD 1 SAH e. DESCRIPTION C. COMPANY
875th ENGINEERS CONDUCTED TRAINING, ADMINISTRATION DUTIES, SCHOOLS, AND
PROMOTIONS FOR 98 M-DAY SOLDIERS.
f. MACOM/CODE NG h. SUBMACOM/CODE XX-1 i. SUPERVISOR SFC Non-Responsive
j. TELEPHONE/AUTOVON NUMBER (870) 236 12001 k. FAC: 3 l. FREQUENCY (Min Per Day) 8 HRS/DY
m. NO CIV(S) 2 n. NO MIL 2 o. NO CONTRACTOR(S) 2 p. NO LOC(S) 2 q. NO OTHER 2

SECTION 2.

III STAFFING DATA

a. LAB HOODS 0 b. VAPOR DEGREASERS 0 c. MAINTENANCE BAYS 0 d. SPRAY BOOTHS 0
e. OPEN SURFACE TANKS 0 f. VENTILATION UNITS 0

SECTION 3.

SURVEY DATA

a. SURVEY DATE 1-25-2006 b. EVALUATOR (INITIALS) JLM

c. CONTROLS PRESENT	e. EVALUATION	d. UNIT CODE	f. CONTROLS REQUIRED	g. STATUS
OTH (DRILL HALL)	15-85 FC ADEQUATE	FTC	50 FC (20-50 nominal range)	ACCOM
OTH (CLASSROOM)	7-59 FC INADEQUATE	FTC	100 FC (50-100 nominal range)	RECMO
OTH (KITCHEN)	19-38 FC ADEQUATE	FTC	50 FC (20-50 nominal range)	ACCOM
OTH (SUPPLY RM)	8-30 FC INADEQUATE	FTC	50 FC (20-50 nominal range)	ACCOM

h. PERSONAL PROTECTIVE EQUIPMENT (R=REQUIRED; A=AVAILABLE)

1. RESPIRATOR

DISPOSABLE
FACE AIR PURIFYING
FACE AIR PURIFYING
FULL FACE AIR PURIFYING
POWERED AIR PURIFYING
AIRLINE
SELF-CONTAINED
ABRASIVE BLASTING HOOD

MANUFACTURER

NIOSH TC NO

R/A

2. GLOVES	R/A	3. EYES/FACE	R/A	4. HEARING	R/A	5. BODY	R/A	6. HEAD/FOOT	R/A
ACID	/	CHEMICAL/SPASH	/	MUFFS	/	APRONS	/	HARD HATS	/
OIL	/	SAFETY/IMPACT	/	EARPLUGS	X/X	COVERALLS	/	IMPERMEABLE BOOTS	/
SOLVENTS	/	CHEMICAL/SAFETY	/	CANAL CAPS	/	FULL BODY SUIT	/	SAFETY CONDUCT SHOES	/
HOT SURFACES	/	FULL FACE SHIELD	/	HELMETS	/	SAFETY BELT/HARNES	/	SAFETY/HONCONDUCT	/
COLD SURFACES	/	WELDING HELMET	/			HEAT REFLECT VEST/SUIT	/	TIYE SHOES	/
NBC AGENTS	/					BDU'S	X/X		

SECTION 4.

HAZARD INVENTORY DATA

a. CAS CODE	b. HAZARD DESCRIPTION	c. PAC H EPC	d. MEDICAL SURVEILLANCE RECOMMENDED (YES or NO)
7439-92-1	LEAD, INORGANIC DUSTS, AS PB	ZB	NO

SECTION 5 PERSONNEL

a. LAST NAME	b. GRADE	c. DESIG	d. CATEGORY
Non-Responsive			AGR
			AGR
		M	TRAINING NCO
		M	SUPPLY SERGEANT

SECTION 7 COMMENTS (add blank sheet of paper if necessary)

- COCKROACH INFESTATION WAS EVIDENT; AREA NEEDED CLEANING.
- C+CO 875TH ENGINEERS WERE ASSIGNED TO THE ARMORY; 98 M-DAY SOLDIERS WERE PERFORMING MONTHLY TRNG AT FACILITY.
- LIGHTS OUT IN DRILL HALL, OPERATIONS ROOM, AND CLASSROOM; MISSING LIGHT COVER IN WOMEN'S LATRINE.
- SUPPLY AREA DEALT WITH CLASS 2 ITEMS - FOOD & EQUIPMENT

PRIVACY ACT STATEMENT

Title 5 U.S. Code, Section 552; Executive Order 12958 authorizes the use of your Social Security Number as a identification number. Disclosure of this information is to identify and monitor data relating each DA classification system exposed to FOIA Requested Record #J-15-0085 (AL) of this information is to provide statistics of exposure for any given record.

Disclosure of your Social Security Number is not mandatory; however, nondisclosure may result in denial of service.

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Print Inventory

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Unit	Storage	Month	Submitted
Paragould / CO C 875 ENGR BN	FL-01	1/2006	1/24/2006 1:21:00 PM

SLN	Item	NSN	Manu.	MSDSID	Quantity	Ctn. Size	SL	HCC	Date Updated
A01	SPRAY PAINT, SAND	--	RUSTOLEUM		1	12 OZ			1/24/2006
A03	SAND SPRAY PAINT	---	WAL-MART STORES INC.		1	11 oz			1/24/2006
A04	SPRAY PAINT,BROWN	8010-00-721-9742	LHB IND.		1	10 OZ			1/24/2006
A05	LUBRICATING OIL	9150-00-889-3522	AMERICAN INK AND OIL		31	4 OZ			1/24/2006
A07	SPRAY PAINT SATIN GREEN	--	RUSTOLEUM		2	12 OZ			1/24/2006
A08	2 CYCLE OIL	---	STIHL		0	12.8 oz			1/24/2006
A09	SPRAY PAINT FLAT BLACK	8140	SHERWIN-WILLIAMS		2	12 OZ			1/24/2006
A10	ACRYLIC LATEX PAINT	247/84	PROGRESS PAINT		0	29 OZ			1/24/2006
A12	GLAZING MASTIQUE	--	ACE HARDWARE CORP.		1	16 OZ.			1/24/2006
B01	BAR AND CHAIN LUBE	0781-516-5003	STIHL		0	32 OZ			1/24/2006
B02	DEODERANT GP	6840-00-246-6438	FRESH PRODUCTS INC.		5	4 oz			1/24/2006

B03	FLAT OLIVE DRAB PAINT	8010-01- 331-6113	LHB INDUSTRIES	7	11 oz	1/24/2006
B04	GLOSS BLACK PAINT	8010-01- 331-6107	LHB INDUSTRIES	4	11 oz	1/24/2006
B05	GLOSS WHITE PAINT	8010-01- 331-6105	LHB INDUSTRIES	5	11 oz	1/24/2006
B07	70% ALCOHOL	--	HUMCO	1	32 OZ.	1/24/2006
B08	INSECT REPELLENT	--	VPC BRANDS	5	6.5 OZ	1/24/2006
B09	NOXON 7 METAL POLISH	--	RECKITT AND COLEMAN INC.	1	8 OZ	1/24/2006
B10	PERMETHRIN ARTHROPOD REPELLENT	6840-01- 278-1336	COULSTON INTERNATIONAL CORP.	0	6 OZ	1/24/2006
B11	TUB & TILE ADHISIVE CAULK	--	OSI	1	6 OZ	1/24/2006
B12	SCOURING POWDER	7930-00- 985-6102	FITZPATRICK BROS.	2	14 OZ	1/24/2006
C01	GLASS CLEANER	7930-01- 326-8110	LIGHTHOUSE FOR THE BLIND HOUSTON	0	16 OZ	1/24/2006
C02	FOAMING WASP & HORNET SPRAY	--	IQ PRODUCTS	0	19.5 OZ	1/24/2006
C03	PLEDGE FURNITURE POLISH	---	DRACKETT PROFESSIONAL	6	17.7 oz	1/24/2006
C04	MIXED MOGAS	---		1	1.25 gallon	1/24/2006
C04	RUST INHIBITIVE PRIMER	433/16	PROGRESS PAINT	1	1 GALLON	1/24/2006
C05	ALKYD GLOSS ENAMEL	417/84	PROGRESS PAINT	1	1 GALLON	1/24/2006

C06	SPRAY NINE	7930-01-177-0795	SPRAY NINE CORPORATION	5	24 OZ	1/24/2006
C07	BAR/CHAIN OIL	---	STIHL	0	32 oz	1/24/2006
D01	BREAKTHROUGH SOLVENT	6850-01-378-0679	INLAND TECHNOLOGIES	2	5 GALLON	1/24/2006
D03	RUST INHIBITIVE PROMER	--	PROGRESS PAINT	1	1 GALLON	1/24/2006
D04	ALKYD GLOSS ENAMEL	---	PROGRESS PAINT	6	1 gallon	1/24/2006
D05	LIQUID HAND SOAP		ZEP MANUFACTURING CO.	3	1 gallon	1/24/2006

Non-Responsive

SSG 24 Jan 06

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Unit	Storage	Month	Submitted
Paragould / CO C 875 ENGR BN	SA-01	1/2006	1/24/2006 1:25:00 PM

SLN	Item	NSN	Manu.	MSDSID	Quantity	Ctn. Size	SL	HCC	Date Updated
A01	BAR AND CHAIN OIL	--	WCI OUTDOOR		0	32 OZ			1/24/2006
A02	2 CYCLE ENGINE OIL	---	WCI OUTDOOR		0	8 OZ			1/24/2006
A03	2 CYCLE ENGINE OIL	9150-00-117-8791	SALATHE OIL COMPANY		0	16 OZ			1/24/2006
A04	WINDEX	7930-01-381-3499	JOHNSON DIVERSY INC.		7	32 OZ			1/24/2006
A05	AIF, DEXRON III	9150-00-698-2382	SC TERMINALS		31	32 OZ			1/24/2006
A06	HYDRAULIC FLUID	9150-01-332-7819	SDB CONSULTANTS LTD		2	1 pt			1/24/2006
A07	ALKYD GLOSS ENAMEL	417/35	PROGRESS PAINT		1	32 oz			1/24/2006
A08	TUB AND TILE EPOXY	---	ZYNOLITE PRODUCTS		1	16 oz			1/24/2006
A09	PINE OIL	6840-00-584-3129	LHB INDUSTRIES		5	1 GALLON			1/24/2006
A10	BRAKE FLUID, SILICONE	9150-01-102-9455	GE ELECTRIC COOPERATION		1	1 GALLON			1/24/2006
	GENERAL PURPOSE	9150-00-							

A11	LUBRICANT AND PRESERVATIVE	458-0075	LHB INDUSTRIES	1	12.5 oz	1/24/2006
A12	LAWNMOWER ENGINE OIL	--	ACE HARDWARE	1	20 OZ	1/24/2006
A13	DETERGENT, GP	7930-00-926-5280	LHB INDUSTRIES	1	16 OZ	1/24/2006
A14	RUSTPLATE RUST INHIBITIVE PRIMER	---	PROGRESS PAINT MANUFACTURING INC.	1	1 GALLON	1/24/2006
A15	ACRYLIC LATEX PAINT	247/81	PROGRESS PAINT	1	31.5 OZ	1/24/2006
A16	FIBERED PLASTIC ROOF CEMENT	--	ACE HARDWARE INC.	2	1 GALLON	1/24/2006
A17	15W40 DIESEL ENGINE OIL	9150-01-421-1427	SAFETY KLEEN	1	1 QT	1/24/2006
A18	GAA	9150-01-197-7693	SOWESCO	13	14 OZ	1/24/2006
A19	WD-40	.	WD 40 COMPANY	1	8 OZ	1/24/2006
A20	SIMPLE GREEN	---	SUNSHINE	6	1 GALLON	1/24/2006
A22	HYDRAULIC FLUID	9150-01-131-3323	VELISICOL CHEMICAL CORP.	1	1 QUART	1/24/2006
A23	HYDRAULIC FLUID	9150-01-353-4799	AMALIE OIL CO	2	1 quart	1/24/2006
A24	ACRYLIC LATEX CAULK & SILICONE	---	DAP	1	10.1 OZ	1/24/2006
A25	MURIATIC ACID	---	SUNNYSIDE CORP.	1	1 GALLON	1/24/2006

A26	HEAVY DUTY MOTOR OIL 15W		CHEVRON	1	1 quart	1/24/2006
A27	HYDRAULIC FLUID DEXRON 3	9150-1-353-4799	AMALIE OIL	2	1 quart	1/24/2006
A28	CONCRETE PATCH	---	ACE HARDWARE	2	1 QUART	1/24/2006
A29	TOP CLEAN	---	HILLYARD INC.	2	1 GALLON	1/24/2006
A30	2 CYCLE MARINE OIL	---	VALVOLINE CO.	1	16 OZ	1/24/2006
B01	DIESEL	---		6	5 GALLON	1/24/2006
B02	HYDRAULIC FLUID	9150-00-252-6385	ROYAL LUBRICANTS INC.	24	1 quart	1/24/2006
B03	10W OIL	9150-00-188-6668	IMPERIAL OIL CO	1	5 gallon	1/24/2006
B04	GEAR LUBE OIL 80W90	9150-01-035-5396	IMPERIAL OIL COMPANY	1	5 GALLON	1/24/2006
B05	ANTI-FREEZE	--	AFTERMARKET AUTO PARTS	0	1 GALLON	1/24/2006
B06	ANTIFREEZE AND COOLANT	6850-01-464-9125	OLD WORLD INDUSTRIES INC.	0	1 gallon	1/24/2006
B07	DEXRON III MERCRON	9150-01-358-4799	CHEVRON	14	1 quart	1/24/2006
B08	DISHWASHING DETERGENT	7930-00-880-4454	LHB INDUSTRIES	5	1 GALLON	1/24/2006

9150-01-

1

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B09	LUBRICATING OIL	438-6076	SAFETY KLEEN	15	QUART	1/24/2006
B10	ANTIFREEZE AND COOLANT	6850-01-441-3218	KMCO INC	0	1 gallon	1/24/2006
B11	POLYURETHANE HEAVY DUTY ENAMEL	---	PROGRESS PAINT MANUFACTURING INC.	1	1 GALLON	1/24/2006
B12	KILZ ORIGINAL	---	MASTERCHEM INDUSTRIES INC.	1	1 GALLON	1/24/2006
B14	DEGREASANT	---		1	1 GALLON	1/24/2006
B16	JOINT COMPOUND	---	DAP INC	1	12 pound	1/24/2006

Non-Responsive

SSG 24 Jan 06

TEST REPORT
Page 1 of 3
2/10/06

Submitted To: **Non-Responsive**
Associates
1503 Zaiger Drive
Colorado Springs, CO 80915

Reference Data:	Lead
Client Sample No.:	M02006 through M03206
P.O. No.:	Not Available
Sample Location:	Paragould Armory
Sample Type:	Ghost Wipe
Method Reference:	3050B/6010B
DCL Set ID No.:	06-S-0351
DCL Sample ID No.:	06-01864 through 06-01876
Sample Receipt Date:	1/27/2006
Preparation Date:	01/27/06
Analysis Date:	01/27/06

The samples were prepared in accordance with EPA method 3050B. Sample condition was acceptable upon receipt except where noted. The samples were then analyzed in accordance with EPA method 6010B using a Perkin Elmer 3000XL (ICP) purged spectrometer.

The results are provided in the enclosed data table. Results relate only to the items tested and are not blank corrected unless indicated in the data table.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Non-Responsive

Analyst

CINCINNATI OFFICE
4388 GLENDALE-MILFORD ROAD
CINCINNATI, OHIO 45242-3706
513 733-5336, FAX 513 733-5347**Non-Responsive**

Reviewer

WEST COAST OFFICE
11 SANTA YORBA COURT
NOVATO, CALIFORNIA 94948
800 280-8071, FAX 415 883-0489

TEST REPORT
Page 2 of 3
06-S-0351

Results Batch 1
Lead

Client #	DCL #	Total Area (ft ²)	µg/Wipe	µg/ft ²
M02006	06-01864	0.69	67.	97.
M02106	06-01865	0.69	ND	<14.
M02206	06-01866	0.69	20.	29.
	Prep Blank 1		ND	
% Recovery	LCS 1		91.	
% Recovery	LCS 2		92.	
RPL			10.	

ND = not detected at or above the reporting limit (RPL).

LCS = laboratory control sample.

Non-Responsive

Analyst

Non-Responsive

Reviewer

TEST REPORT
Page 3 of 3
06-S-0351

Results Batch 2
Lead

Client #	DCL #	Total Area (ft ²)	µg/Wipe	µg/ft ²
M02306	06-01867	0.69	20.	29.
M02406	06-01868	0.69	240.	350.
M02506	06-01869	0.69	110.	160.
M02606	06-01870	0.69	86.	120.
M02706	06-01871	0.69	ND	<14.
M02806	06-01872	0.69	15.	22.
M02906	06-01873	0.69	30.	43.
M03006	06-01874	0.69	27.	39.
M03106	06-01875	0.69	17.	25.
M03206	06-01876	0.69	ND	<14.
	Prep Blank 2		ND	
% Recovery	LCS 3		92.	
% Recovery	LCS 4		91.	
RPL			10.	

ND = not detected at or above the reporting limit (RPL).
LCS = laboratory control sample.

Non-Responsive

Analyst

Non-Responsive

Reviewer



**DATA
CHEM**
LABORATORIES, INC.

ANALYTICAL REQUEST FORM

☒ **REGULAR** Status (5 working days from receipt)

☐ **RUSH** Status Required - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____

DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES

Date 1-25-06 Purchase Order No. Non-Responsive
Company Name Non-Responsive & Associates
Address 1503 ZAIGER DRIVE
Colorado Springs Colo. 80915
City _____ Zip _____
Person to Contact Non-Responsive
Telephone (719) 510-9517
Fax Telephone (509) 757-4846

Billing Address (if different from above)
MR Non-Responsive
ARMY NATIONAL GUARD, COLLEGE PARK
GA

Quote No. _____

Sample Collection

Sampling Site Paragould ARMORY

Industrial Process Administrative

Date of Collection 1-25-2006

Time Collected 0800-1100 am

Date of Shipment 1-25-2006

QC Requirements ☒ Standard ☐ Other

Collector's Name Non-Responsive

Signature Non-Responsive

REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Media Type	Sample Volume (Liters)	ANALYSES REQUESTED - Use Method Number if Known
01864	M02006	GHOST WIPE	10" X 10"	LEAD; VAULT FLOOR
01865	M02106	"	"	" ; DRILL HALL FLOOR
01866	M02206	"	"	" ; 1st PLATOON RM SHELF
01867	M02306	"	"	" ; DOOR PANEL, RECRUITERS OFFICE
01868	M02406	"	"	" ; UNDER FOLDING CHAIR, DRILL HALL
01869	M02506	"	"	" ; STORAGE RM SHELF
01870	M02606	"	"	" ; SUPPLY RM VENT
01871	M02706	"	"	" ; Kitchen FLOOR
01872	M02806	"	"	" ; NORTH END FLOOR, DRILL HALL
01873	M02906	"	"	" ; TOP OF SCALE, NX TO CLASSRM
01874	M03006	"	"	" ; A + O PLT RM FLOOR
01875	M03106	"	"	" ; READINESS NCO OFFICE FLOOR
01876	M03206	"	"	" ;

CHAIN OF CUSTODY

Relinquish (Signature) <u>Non-Responsive</u>	Date / Time <u>1-25-06 5:30 PM</u>	Received by: <u>Non-Responsive</u>	Date / Time <u>1-25-06 10:34</u>
Relinquish (Signature) _____	Date / Time _____	Received by: _____	Date / Time _____

4388 Glendale Milford Road / Cincinnati, OH 45242 • 800-458-1493 or 513-733-5336 / Fax: 513-733-5347

DISTRIBUTION:

WHITE - LABORATORY COPY

CANARY - CUSTOMER COPY

Enclosure 4

FULL TIME SUPPORT PERSONNEL

SFC **Non-Responsive** - READINESS NCO
PHONE # 870-236-2001
HOME # 870-236-2444

SSG **Non-Responsive** - TRAINING NCO
PHONE # 870-236-2001

SSG **Non-Responsive** - SUPPLY SERGEANT
PHONE # 870-236-2001



MOTOR PARK

AREA #2

GATE

WEST

AREA #1

SOUTH

Enclosure 6

Recommendations:

- a) Conduct semi-annual inventories and update MSDS's on all chemicals in the facility. (RAC 3)
- b) Replace the lamps/bulbs in the drill hall, the operations office, and the classroom. Also, replace light cover in the women's restroom and insure that all facility light covers are wiped down and cleaned to increase illumination levels. (RAC 3)
- c) Due to the lead dust wipe results, it is recommended that the vault floor, the folding chairs and tables, the storage room shelves, the supply room vent, the a & O Platoon floor, and the weight scale be thoroughly wiped down and or wet mopped with an industrial cleaner using tri-phosphates, Mr. Kleen or Spic-n-Span. For additional lead cleaning measures, see enclosure 7. (RAC 3)
- d) Submit a work order to facilities maintenance office (FMO) to have pest control spray the area for cockroaches. In the meantime, ensure that the facility is thoroughly cleaned to help rid the pests. The area was in need of a good cleaning. (RAC 2)
- e) Change out furnace filters monthly. (RAC 3)
- f) Perform monthly checks on fire extinguishers. Each month, ensure that the devices are turn upside down and tapped with a rubber mallet to loosen any material at the bottom. (RAC 3)
- g) If work practices change, a new assessment should be made on the controls in place.

6. Armory Cleanup.

6.1 High Test Result.

6.1.1 If the public utilizes your facility and the results came back above 40 ug/ft² you are responsible for cleaning this area and adjoining areas to meet the 40 ug/ft² or less.

6.1.1.1 Unless you can guarantee no children under the age of 7 will come into your facility.

6.1.1.2 Unless your state public health has other guidance, e.g., post signage to warn personnel who are pregnant or of child bearing age, or under the age of 7 y/o.

6.1.1.3 Signs stating "No smoking, drinking or eating, application of make-up without washing of hands prior to activity."

6.2 Cleaning of Building. Before proceeding into the cleanup mode, first, discuss with your Environmental office what procedures they would recommend and then coordinate your efforts with local agencies, if warranted.

6.2.1 The building, and dusty materials and equipment in it should be cleaned one time to reach the dust lead levels appropriate for the function of this facility, e.g., used by full-time personnel only, utilized by adults or children 7 y/o, or ~~order~~ children only, or utilized by pregnant individuals and/or children under the age of 7. NOTE: This type cleaning implies that this is not a facility that has an active Indoor Firing Range. For facilities with active ranges, these facilities should be monitored with wipe samples taken over the drill floor area by the Range Custodian quarterly, to ascertain the level of lead is at the required level for your particular facility and situation.

6.2.1.1 This cleanup can be accomplished using a HEPA vacuum (a very tedious and long operation) and then by utilizing a wet method with "Spic n Span" or something equivalent to this detergent - using wet rags to wipe down surfaces and mops soaked in this solution to do floor area. NOTE: Personal protective gloves, rubber boots or protective disposable shoe/boot covers should be used during this procedure and personnel's

clothing should be washed separately from their families, if they have young children at home. Personnel should wash their hands after performing this operation to assure lead contaminants are not ingested.

6.2.1.2 Frequent changing out of the water used is vital. Disposal of this hazardous waste water and rags/mop heads, Personal Protective Equipment (PPE), etc., should be coordinated with your Environmental office.

6.2.2 Clean all ductwork where lead was found. EPA has a protocol specifically for replacing or cleaning lead in dust form in HVAC systems. EPA Office of Pollution Prevention and Toxics, "*Reducing Lead Hazards When Remodeling Your Home*" www.epa.gov/opptintr/lead/rrpamph.pdf.

6.2.3 Continue to enforce good housekeeping and hygiene practices. These measures make good sense to minimize exposures to any toxic chemicals in the workplace.

6.2.4 Provide lead awareness training to the general workforce and any occupants of your facility.

NOTE: Before you start any new procedures or practices be aware of the local city and state regulations in your area.

ARMORY**CLEANUP & FOLLOW-UP HOUSEKEEPING
RECOMMENDATIONS****Materials Needed:**

1. Cloth Mop head (s) & Mop head holder(s) with handle.
2. Mop bucket (s) with wringer.
3. Clean cotton rags and sponges.
4. Disposable gloves
5. Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water.
6. Disposable overshoes or rubber boots. Personnel conducting cleaning operations should not take clothes, boots, etc., home for laundering.
7. HEPA vacuum
8. Six (6) mill plastic bags to dispose of waste.
9. Waste water containers.

Disposal of Waste Water and Cleaning Materials:

1. **NOTE:** Consult with Local Army National Guard Environmental Office prior to taking any collection, disposal or wiping activities commence. Each state and territory may have additional regulatory guidance on collection, storage and disposal of wastewater.
2. Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: thorough cleaning of mop heads may be sufficient enough to reuse on future Armory cleanups but check with local Environmental Office.
3. Disposable gloves should be treated as hazardous waste.
4. Soiled cotton rags should be treated as hazardous waste.
5. Wash water contaminated with Lead can be collected and allowed to slowly evaporate leaving Lead deposits/sludge that may be collected in plastic containers, placed in metal drums, and stored for future delivery to an authorized hazardous waste disposal site.

- a. Drums shall be properly labeled to identify contents In-Accordance With (IAW) Federal, State and local regulatory guidance.
- b. Disposal of containerized waste shall be coordinated IAW State hazardous waste program requirements.
- c. The Environmental Office shall coordinate removal and disposal of all containerized hazardous waste through established waste streams.

Post-Cleanup Precautionary Measures:

1. Thoroughly wash hands with soap and water.
2. Rinse off rubber boots with soap and water, capturing wastewater for collection into established waste stream. If personnel choose to use over shoes for protection, dispose of overshoes into waste stream. NOTE: This recommendation is for initial clean up activities and PPE requirements may be reduced after it has been determined non-hazardous levels have been achieved.
3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted

Initial Armory Cleanup:

1. Use a vacuum cleaner equipped with a HEPA exhaust filter. HEPA vacuum all surfaces in the room (ceiling, walls trim, and floors). Start with the ceiling and work down, moving toward the entry door. Completely clean each room before moving on.
2. Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

3. Wet wipe, with cotton rags or sponge, any horizontal, diagonal or vertical surfaces up six (6) feet from floor surfaces using hot water and "Spic-n-Span" or an equivalent product.
 - a. Rinse out cleaning cloths thoroughly and frequently.
 - b. Change out cleaning water as necessary.

NOTE: If walls to be cleaned show signs of deterioration, e.g., chipping or crumbling paint, in which wiping, scrubbing, or disrupting might potentially increase or spread contamination, then this portion of the clean up should be avoided.

4. Now prepare water and detergent (e.g. Spic N Span, Mr. Clean, Pine Sol) for the mopping phase, according to manufactures recommendations, which should be found on the products label for general clean up.
 - a. Change out water frequently (when water appears dirty)
 - b. Rinse out mop heads frequently to prevent contamination of dirty water.
5. Cover entire drill floor surface with above prescribed water and detergent.
6. Final rinse should be with clean water only - -after mop heads have been cleaned.

Recommended Follow-up Housekeeping Practices *after Clearance sampling of cleaned area is performed by certified personnel:*

1. Floor cleaning and dusting should be accomplished using the wet method described in Initial Armory Cleanup SOP.

Note: Only exception to these wet cleaning procedures would be the use of a chemically treated dust floor mop. This can be used for follow-up armory cleaning by sweeping of large particles of dirt and paper.

- a. Pre-treated (chemically treated) dust floor mop will limit dust particles from being disbursed into the surround atmosphere.

- b. If treated dust mop is used - -Do Not Shake Mop head - - have mop head laundered after use. Always keep used dust mop heads in sealed double plastic bags when stored at armory/facility. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
2. Frequency of Cleanup- Armories will vary, according to usage and how often they should be cleaned. The following general cleaning schedule is provided:
 - a. Only full-time technicians and traditional soldiers using facility during the month. (*Cleaned Monthly*)
 - b. Occasional activities taking place during the month, e.g., 1-2 classes or volleyball games, etc. (*Cleaned 2x's Monthly*)
 - c. Used regularly by soldiers or outside agencies/personnel. (*Cleaned Regularly - -at least Weekly*)

NOTE: Armories with adjoining Indoor Firing Ranges (IFR) should be cleaned more than weekly, again depending on use of Armory and IFR.

NOTE: Clearance sampling/testing is to be accomplished by certified personnel after these cleanup procedures are followed. If the area is an average Armory, occupied by adults only, for which you are cleaning and is **not a Converted IFR space**, you may continue to utilize the Armory space before the officials re-test this space. Please notify your Safety and/or Occupational Health personnel of the completion of this cleaning regime and they will notify the proper officials of the sampling/testing requirements needed.

If work is contracted out, a third party should do the clearance sampling.

Young children and females who are pregnant, there should be posted signs on all facilities, warning of the potential danger of exposure to lead dust.

Enclosure 8**REFERENCES:**

- a) Title 29, Code of Federal Regulations (CFR) Part 1910, Occupational Safety and Health Administration (OSHA).
- b) ARNG PAM 385-16, Guidelines for Converting Indoor Firing Ranges to Other Uses, 31 January 1994.
- c) NGR 385-15, Policy and Responsibilities for Inspection/Evaluation and Use of National Guard Indoor Firing Ranges.
- d) Army Regulation (AR) 40-5, 15 October 1990, Medical Service, Preventive.
- e) AR 11-34, 15 February 1990, The Army Respiratory Program.
- f) AR 385-10, 23 May 1988, Army Safety Program.
- g) FC-Reg. 385-2, 1 July 1999, Ionizing and Nonionizing Radiation Protection Program
- h) Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- i) Technical Bulletin Medical (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program.
- j) Technical Bulletin Medical (TB MED) 530, 1 January 1991, Food Service Sanitation
- k) National Guard Regulation (NGR) 385-10, 20 December 1989, Army National Guard Safety and Occupational Health Program.
- l) Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- m) IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.

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Enclosure 9



Photo No.1



Photo No.2



Photo No.3



Photo No.4



Photo No.5



Photo No.6



Photo No.7



Photo No.8



Photo No.9



Photo No.10



Photo No.11



Photo No.12



Photo No.13



Photo No.14



Photo No.15

**DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349**

NGB-AVN-SI

December 19, 2003

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG, ATTN.: State Safety and Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

SUBJECT: Transmittal of the Survey Reports for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory, in Arkansas.

1. References.

a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.

b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.

c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.

d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.

e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.

f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.

g. DA PAM 40-501, 10 December 1998, Hearing Conservation.

h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2001, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.

i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.

NGB-AVN-SI

SUBJECT: Transmittal of the Survey Reports for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory, in Arkansas.

j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.

k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.

l. Report Survey dated 8 October 2003, Industrial Hygiene Survey, Mr. [Non-Responsive] [Non-Responsive] New Orleans, LA.

2. General.

a. At the request of the AR ARNG Safety and Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling of the for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory in Arkansas.

b. The surveys were conducted by Mr. [Non-Responsive] 5400 Milne Blvd, New Orleans, LA.

3. Findings. All Health Hazard information is on the survey findings of the report. (See enclosure 1)

4. Recommendations.

- a. Follow all recommendations made in reference 1.l., requesting industrial hygiene (IH) services where needed to complete the recommendations.
- b. Control water infiltration in the armory and/or replace or repair damaged surfaces or components (ceiling and floor tiles). Building conditions that present IAQ concerns or problems not only exacerbates normally minor health issues but also tend to promote or accelerate building deterioration.
- c. The recommendations given in the comment section and data collected will serve as a baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY-04. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY-04 IHIP.
- d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present survey, especially if this will help eliminate health hazards and reduce medical surveillance cost.

NGB-AVN-SI

SUBJECT: Transmittal of the Survey Reports for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory, in Arkansas.

- e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
 - f. Give special consideration to cleaning light fixtures, increasing the wattage and painting walls a lighter color when upgrading the lighting in the facility.
5. If additional information is needed about the industrial hygiene survey or air sample results, please contact Mr. **Non-Responsive** Regional Industrial Hygienist, NGB-AVN-SI, 1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

NBG-AVN-SH

State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl
as

BASELINE INDUSTRIAL HYGIENE SURVEY FOR:

CO C 875th Engineer Battalion

PARAGOULD, AR

Conducted: 8 October 2003

ATTN: Captain **Non-Responsive**
1201 HWY 135
North Paragould, AR 72450

PREPARED BY:

Non-Responsive

5400 Milne Blvd.
New Orleans, LA 70124-1826
(504) 488-6489

CONTENTS

- 1. INTRODUCTION**
- 2. INSTRUMENTATION**
- 3. FINDINGS**
- 4. RECOMMENDATIONS**
- 5. REFERENCES**

Attachment 1: Schematic of the Armory

Attachment 2: Photographs of the facility

Attachment 3: Laboratory Reports: Lead Swipes

Attachment 4: HHIM Field Survey Form(s)

1. INTRODUCTION

At the request of the National Guard Bureau South Region Industrial Hygiene Office, **Non-Responsive** performed a Baseline Industrial Hygiene Survey at the Army National Guard Paragould, AR Armory. The purpose of the survey was to establish a baseline to evaluate health hazards, identify controls present in the work site, collect lead swipe samples from the renovated/inactive or closed Indoor Firing Ranges (IFR), perform an illumination survey and make recommendations regarding health hazards associated with the work at the Paragould, AR Armory.

The building was completed in 1956 with approximately 10,108 square feet. There has never been an IFR at this facility. The facility houses Co C 875th Engineer Battalion with 2 FTS and 78 total assigned.

The full-time personnel are assigned to perform administrative duties Monday thru Friday from 0730 to 1600. The facility contains administrative areas, a drill hall, classrooms, supply room, kitchen, weapons vault, dispatch and retention offices, break area, latrines and locker rooms. A schematic can be found at Attachment 1.

The facility was visually examined and personnel consulted to assess potential hazards present. Lead samples were taken in the drill hall where weapons are cleaned two to three times a year. An illumination survey was performed throughout the facility.

2. INSTRUMENTATION/CALIBRATION

An Extech DLM2 Light Meter, SN # L374324, Calibrated 7/10/03, was used to conduct the illumination survey. It was operated according to the manufacturer's recommendations.

3. FINDINGS

ILLUMINATION

Light readings were taken in various locations throughout the facility with emphasis at desks and/or work stations. The results were compared to guidelines recommended by the Illuminating Engineering Society (IES) and NGB Design Guide 415-1. The results of the survey are shown in Table 1.

Table 1 – Light Readings

Location	Light Reading (foot candles)	IES Recommendation (foot candles)
Recruiting Parlor	110.8	50-100
Recruiting Office	122/2	50-100
Supply Room*	2 Readings – Avg 19.7	30*
Classroom	3 Readings – Avg 59.23	70
Kitchen Serving & Scullery	51.7	30
Kitchen Preparation	56.8	70
Assembly Hall	4 Readings – Avg 23.85	20
Commo	47.0	50-100
3 rd Platoon Office	43.1	50-100
2 nd Platoon Office	47.9	50-100
1 st Platoon Office	56.3	50-100
Operations Office	45.0	50-100
Orderly Room	2 Readings – Avg 74.2	50-100
CO's Office	2 Readings – Avg 58.45	50-100

*Reading of 20.9 at desk should be 50-100 foot candles.

ADMINISTRATION

Personnel perform administrative duties that consist of reading, handling and generating paper work. Computer use comprises two to six hours of the work day. This continuous use of computers can lead to eye strain and/or hand/wrist and shoulder soreness.

MOTOR POOL

Only operator maintenance, Prevention Maintenance Checks and Services (PMCS) is performed at the armory. No repair service is performed. When repairs are needed the vehicles are taken to the OMS shop.

ASSEMBLY HALL

The assembly hall is located in the center of the building. It is used primarily as an assembly area. Weapons are cleaned two to three times a year near an open bay door.

LEAD CONTAMINATION

There has never been an IFR at this facility but lead samples were taken in the drill hall to determine if there was any contamination from other activities.

TABLE 2

SAMPLE NUMBER	SAMPLE LOCATION	RESULTS
PGD Blank	Assembly Hall	<10 ug/sq ft
PGD 1	Assembly Hall	<10 ug/sq ft
PGD 2	Assembly Hall	<10 ug/sq ft
PGD 3	Assembly Hall	<10 ug/sq ft
PGD 4	Assembly Hall	<10 ug/sq ft
PGD 5	Vault	33 ug/sq ft

No results were greater than the EPA recommended concentration of 40 ug/sq ft.

WEAPONS VAULT

The Paragould, AR Armory has a weapons storage vault located in the Supply Room. Accountability and weapons issuing are performed in this area. There are no weapons cleaned in the area.

HAZCOM

MSDSs were available for chemicals used.

ERGONOMICS

Many workstations were not set up to provide neutral postures and appropriate ergonomically correct positions. Consideration should be given to providing all those full-time employees who spend the majority of their time working at a computer terminal ergonomic training to increase awareness of preventive measures. This training should include the importance of proper posture, recommended exercises, and proper set-up of workstations.

SAFETY AND HEALTH

No findings.

4. RECOMMENDATIONS

ILLUMINATION:

Upgrade lighting as required. Lighting can be upgraded in the following ways:

- Replace blown or broken lighting.
- Paint walls a lighter color.
- Clean existing light fixtures.
- Rearrange furniture to make better use of available lighting.
- Provide supplemental lighting.

LEAD SAMPLES

No recommendations.

HAZCOM

Personnel exposed to chemicals should receive initial and annual HAZCOM training.

ERGONOMICS

Complete an ergonomics survey on all work stations and conduct ergonomic training for employees who spend the majority of their time working at a computer terminal.

SAFETY AND HEALTH

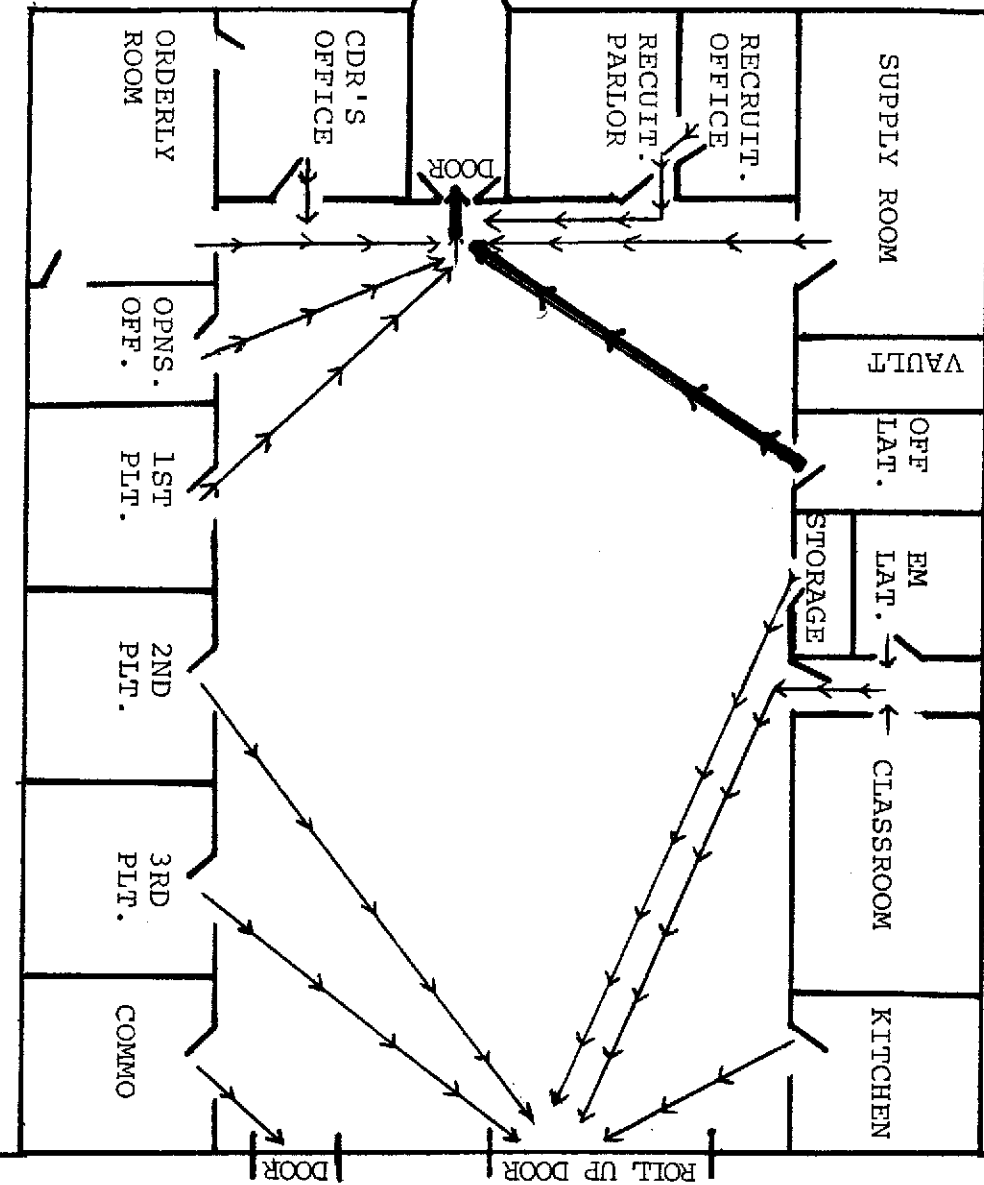
No recommendations.

5. REFERENCES

- Guide to Occupational Exposure 2000, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- American National Standards Institute (ANSI), Illuminating Engineering Society (IES), Industrial Lighting 1991.
- National Institute for Occupational Safety and Health (NIOSH), (76-130), Technical Information, Lead Exposure and Design Considerations for Indoor Firing Ranges GPO, 1975.
- Title 29, Code of Federal Regulations (CFR). 1999 revision, Part 1910. Occupational Safety and Health Standards
- AR 40-5, Preventative Medicine, 15 October 1990.
- AR 385-10, The Army Safety Program,
- National Safety Council, Fundamentals of Industrial Hygiene, 4th Edition, 1996.
- NGB Pamphlet 385-16, Safety Guidelines for Converting Indoor Firing Ranges to Other Uses.
- TB Med 503, The Army Industrial Hygiene Program, February 1985.
- Department of the Army Pamphlet 40-501, August 1991, Hearing Conservation.
- Title 29 CFR, Part 1910.1200, The Hazard Communication Standard.
- NGB Design Guide 415-1
- Title 40 CFR, Part 745.220-238, Lead Standard

HIGHWAY 130

WEST
↓



AREA #1

EAST
↑

GATE

MOTOR PARK

NORTH
↓

AREA #2

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-9551 Email: Non-Responsive@emsl.com



Attn: Non-Responsive nc.
 5400 Milne Blvd. (Cell Phone 504-578-6017)
 New Orleans, LA 70124
 Fax: (504) 488-6489 Phone: (504) 488-6489
 Project: PGD

Customer ID: TOMO77
 Customer PO:
 Received: 12/05/03 12:07 PM
 EMSL Order: 200314014
 EMSL Project ID:

Lead in Wipes by Flame AAS (SW 846, 7420)

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Analyzed</i>	<i>Area Sampled</i>	<i>Lead Concentration</i>
PGD Blank	0001	12/9/03	n/a	<10.0 µg/wipe
PGD 1	0002	12/9/03	144 in ²	<10.0 µg/ft ²
PGD 2	0003	12/9/03	144 in ²	<10.0 µg/ft ²
PGD 3	0004	12/9/03	144 in ²	<10.0 µg/ft ²
PGD 4	0005	12/9/03	144 in ²	<10.0 µg/ft ²
PGD 5	0006	12/9/03	144 in ²	33.0 µg/ft ²

Non-Responsive

Laboratory Director
or other approved signatory

The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA, unless specifically indicated otherwise in the comment section.

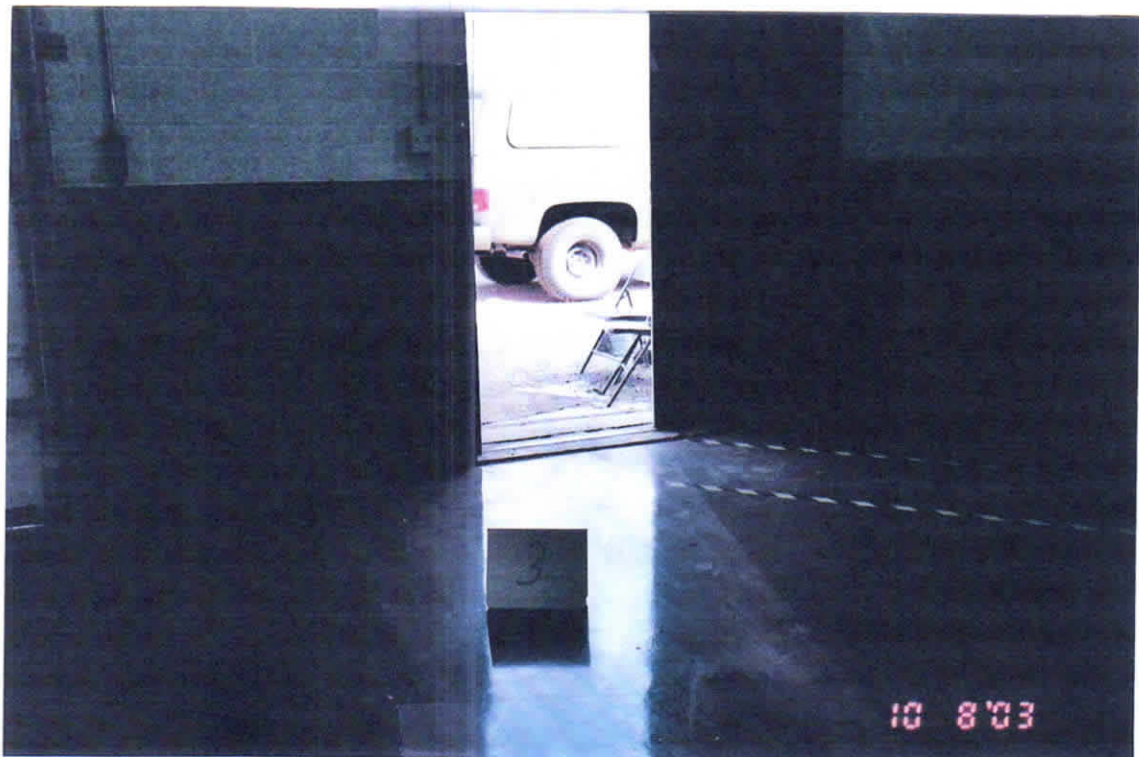
ACCREDITATIONS: NJ-NELAP: 04653, AIHA Environmental Lead Laboratory Approval Program: 100194

Date Printed: 12/9/03 11:12:52 AM

PARAGOULD

BEST AVAILABLE COPY







Reminders: ergonomics - dermatitis - physical agents - flammable storage
EYE (permanent) _____ - EYE (portable) _____ - SHW - GMV - LEV

ACO ADM DSA DSN LAB LCK
RAD ECB EPL RHS SPR WEL.

(OVER)

Back page

FOIA Requested Record #J-15-0085 (AR)
Released by National Guard Bureau
Page 440 of 709



BEST AVAILABLE COPY
**DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349**

ARNG-CSG

May 6, 2013

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG: ATTN: SFC [Non-Responsive] Arkansas
ARNG Paris Armory, 800 West Grober Street, PARIS, AR 72855.

Thru: LTC [Non-Responsive] AR ARNG Deputy State Surgeon, BLDG 15309 BOX 09, Camp
Robinson, NLR, AR 72199-9600.

SUBJECT: Industrial Hygiene Survey of AR ARNG Paris Armory, Paris, Arkansas.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program.
- b. Army Regulation (AR) 40-5, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program.
- f. DA PAM 40-503, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2011, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. USAEHA TG-141, January 2007, Guidelines for Air Sampling and Bulk sample Collection.
- k. Title 29, Code of Federal Regulations (CFR), 2011 rev., part 1910, Occupational Safety and Health Standards.

2. General. At the request of the AR ARNG Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling at the AR ARNG Paris Armory, Paris, Arkansas.

May 6, 2013

SUBJECT: Industrial Hygiene Survey of AR Paris Armory, Paris, Arkansas.

3. Findings. The information that follows is based on the findings of the survey performed. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed (See ENCL 1). Operations of very short duration were not sampled due to the requirements of the sampling method. If the operation changes or if the length of the operation is increased, contact this office to schedule sampling if it is deemed needed.
4. Recommendations. Follow the recommendations made in the enclosed report, requesting industrial hygiene (IH) services where needed to complete the recommendations.
 - a. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY2013. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2014 IHIP.
 - b. Have all HHIM data entered into the HHIM computer module.
 - c. Use the report to help in correcting all deficiencies noted.
 - d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.
 - e. Contact the State Occupational Health Office for any medical Surveillance that may be needed.
 - f. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
5. The present report addressed to the local facility commanders was divided in such a way that personal data can be detached and kept by the OHM or blocked when forwarding these reports to other entities within the appropriate offices of AR ARNG. If additional information is needed please contact Mr. **Non-Responsive** Regional Industrial Hygienist, (404) 559-4174 OR 1 (800) 326-0262.

Non-Responsive

Regional Industrial Hygienist

CF:

State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.
State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl
as

INDUSTRIAL HYGIENE SURVEY REPORT
FOR
ARKANSAS ARMY NATIONAL GUARD
(ARARNG)
800 WEST GROBER STREET
PARIS, AR 72855



Thru

Mr. **Non-Responsive** Region South
Industrial Hygiene Office, 510 Plaza Drive, Suite 1530,
College Park, GA 30348

By:

Non-Responsive IHT
Non-Responsive H Surveying, Inc.
1481 Center Street Extension # 1805
Mount Pleasant, SC
Ph. 845-701-1155

18 April 2013

INTRODUCTION

At the request of Mr. **Non-Responsive** of the National Guard Bureau (ARNG) Region South Industrial Hygiene Office; **Non-Responsive** IHT of **Non-Responsive** H Surveying Inc. conducted a baseline Industrial Hygiene survey and walk through evaluation. This evaluation took place at the Paris Armory of the Arkansas ARNG located at 800 West Grober Street on April 17, 2013. The purpose of the survey was to evaluate any and all health hazards and controls present in the workplace. Collect bulk samples and or wipe samples (if necessary) to determine lead or asbestos exposures, perform illumination, ventilation and noise surveys, and make recommendations regarding health hazards associated with work at the site.

The facility was visually examined and site personnel interviewed regarding work activities, and type of materials/chemicals used during typical/atypical workdays, or stored on site.

Pre and Post Industrial Hygiene survey reports were held with SFC **Non-Responsive** who was the acting POC for the Paris Armory at the time the survey was completed.

The writer would like to acknowledge the assistance and cooperation extended to him by site's population in general, and takes this opportunity to express his gratitude to all personnel.

FACILITY DESCRIPTION

This is a one story building which was constructed of concrete blocks with a brick outer layer for walls and concrete flooring in most areas. The building contains numerous work spaces which include offices, a kitchen, a gym, a classroom and a supply room office. There is also a drill hall and latrines. Floor coverings throughout the building were carpeting, tile or concrete. According to the POC, the Indoor Firing Range has been converted to storage space at this facility. All walls are painted or paneled. Ceiling tile is 36 inch drop panels in most areas and in some places the ceiling is a sheet rock type of material.

INSTRUMENTATION

The following instrumentation and/or sampling media were provided by the contractor and where necessary were used to obtain lead wipe samples, asbestos bulk samples, paint chip samples illumination and noise measurements.

Quest Q2700	Sound Level Meter	S/N HU3120048	calibrated on 06/05/2012
Quest QC-10	Calibrator w/Adapter	S/N QE4100294	calibrated on 06/05/2012
TSI 9551IAQ	Meter	S/N 955P1107011	calibrated on 07/08/2012
EXTECH 407026	Light Meter	S/N L570331	calibrated on 09/05/2012

"Ghost wipes" lead dust wipes no expiration date

FINDINGS

Office Spaces

The Paris armory offices spaces are mostly equipped with the same furnishings. The offices contained at least a chair, desk and some had a computer stations. At the time of the survey, general housekeeping was needed in some of the office spaces. In some work areas there were stained ceiling tiles from exposure to water. There was no sign of mold or water damage on the floors or walls of the offices. While interviewing the employee at the armory that day, it appeared that the temperature and humidity were satisfactory for working conditions, the HVAC system effectively monitors and controls temperature and humidity.

Latrines

The latrines were clean and free of mold or water damage, also at the time of the survey there didn't appear to be any leaks or broken latrine fixtures. The ceilings showed no sign of water damage.

Kitchen

The kitchen was in need of some light housekeeping behind reefers and stoves. When the water was running there didn't appear to be any broken fixtures or leaking pipes.

Classrooms

The classrooms were neat and in orderly conditions. At the time of the survey there appeared to be slight water damage to ceiling tiles.

Supply

Most of the supply and storage areas were clean and orderly. Lead samples were taking from the IFR which was converted to a storage area, paint chip samples sent in as well.

Vault

The humidity was 33 and temperature was 72 in the weapons vault at the time of the survey. Lead swipe samples were taking inside and outside the immediate area of the weapons vault.

Drill Hall

The facility's drill hall has a concrete floor and concrete block walls. The ceiling is flat with no signs of leaks; the POC informed me that patch work to fix leaks was completed about two years ago. The inside of the roof seemed in good shape at the time of the survey. The lighting fixtures and numerous windows provided ample illumination for an area of that size, illumination standards were met or exceeded. Lead swipe samples were taken from different areas of the floor and tables, due to the cleaning of weapons inside the drill hall.

Storage facility

The storage facility located in the back was used for storage of lawn care items, personnel gear and other items. There were no offices located in this facility at the time of the survey. No maintenance is performed in this facility. At the time of the survey there were no signs of leaks.

Sampling***Lead Swipe Sampling Results***

<i>Sample Site</i>	<i>Result/Units ug.</i>	<i>Reporting Limits</i>
Vault Wall	BRL	20
Vault Floor	BRL	20
Vault Door Inside	BRL	20
Blank	BRL	20
<i>Vault Door Outside</i>	<i>25</i>	<i>20</i>
Floor Outside Vault	BRL	20
Drill Hall Floor Bay	BRL	20
<i>Drill Hall Floor Ctr</i>	<i>26</i>	<i>20</i>
<i>IFR Floor Front</i>	<i>24</i>	<i>20</i>
IFR Ctr Wall	BRL	20
<i>IFR Bay Door</i>	<i>1120</i>	<i>20</i>
<i>IFR Floor Ctr</i>	<i>40</i>	<i>20</i>
<i>IFR Floor Back</i>	<i>194</i>	<i>20</i>
IFR Far Wall	BRL	20
<i>IFR Lockers</i>	<i>105</i>	<i>20</i>

Noise Level

Readings throughout the main facility and the out buildings measured between 50 to 55 decibels "slow A scale". There was no activity out of office work going on at the time of the survey.

Radiation

Not applicable

Asbestos

An Asbestos sample was taken from the office floor. The sample came back ND "none detected".

Illumination

The average illumination in the offices, conference room and classrooms was 48. See the table below for illumination values. These values show that some areas do not meet the recommended illumination standard. The following table reflects foot candle measurements noted during this survey.

Office/Areas/Equipment	Illumination Foot Candles (ftc) Ftc/ lights/lights out/windows	Meets: IES Lighting Handbook
Drill hall	43 / 13 / 0 out / no windows	Yes
Weapons Vault	40 / 1 / 0 out / no windows	Yes
CMDR Office	52 / 4 / 0 out / 1 window	Yes
Supply Area	41 / 12 / 0 out / no windows	Yes
Kitchen	51 / 8 / 0 out / 4 windows	Yes
Male Latrine avg	20 / 4 / 0 out / 0 window	Yes
Female Latrine avg	22 / 4 / 1 out / no windows	Yes
IFR/Storage	41 / 30 / 0 out / no windows	Yes
Admin Office	49 / 4 / 0 out / 1 window	Yes
Class room	72 / 12 / 0 out / 4 windows	Yes

Indoor Air Quality (IAQ)

Based on interviews, measurements and observations overall there is no technical or instrumental basis for IAQ concerns in this facility. No evidence of mold, extreme particulate build up or condensation on walls or floors. There were no obvious roof leaks at the time of the survey. Throughout the building the average temperature was 68 (DF) and the average humidity was 37. Many factors such as personal activity may affect personal comfort. Acceptable relative humidity levels can range from 30 to 70% year round. Elevated humidity could promote growth of mold, bacteria and dust mites which can aggravate allergies and asthma. Carbon dioxide levels were very low and are a measure as to whether adequate volumes of fresh outdoor air are being introduced to indoor air. Outdoor levels of Carbon dioxide are usually 300-400 parts per million and indoor levels should be between 600-800 parts per million. The carbon dioxide levels in this facility did not exceed 562 parts per million. The ventilation system is in good working condition and maintains a comfortable working environment. At the time of the survey there was no record of a maintenance record program of the HVAC system. HVAC intake and ac ducts needed cleaning.

Hazardous Materials

Materials used at this armory are standard in most armory sites. Haz-mat inventories are posted appropriate. The flammable cabinet was located in the drill hall and was properly marked. The MSDS Binder was visible.

Indoor Firing Range

According to the POC, the Indoor Firing Range was turned into a supply area and gym a few years ago.

Technical Assistance

For technical assistance regarding information found in this report, please contact Mr. **Non-Responsive** of the Southeast Regional Industrial Hygiene office at 404-559-4174.

References

Title 29, Code of Federal Regulations (CFR) Part 1910, Occupational Safety and Health Administration (OSHA)

AR 40-5, Preventive Medicine, 25 May 2007.

AR 385-10, 29 February 2000, Army Safety Program.

TB MED 503, The Army Industrial Hygiene Program, 30 October 2000.

Title 29 CFR, Part 1910.1200, The Hazard Communication Standard.

The IES Lighting Handbook, Tenth Edition; Illuminating Engineering Society / 2011

Threshold Limit Values (TLV's) For Chemical Substances and Physical Agents, And Biological Exposure Indices (BEI's), 2009, ACGIH, Cincinnati Ohio

Industrial Ventilation, 25th Edition, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio

AR 11-34 Army Respiratory Protection Program, 15 February 1990

DA Pam 40-501, Hearing Conservation Program, 10 December 1998

NFPA 10: Standard for Portable Fire Extinguishers

Recommended values from IES Lighting Handbook Application Volume 1987

ENCLOSED

1. Recommendations
2. Photos
3. Lead swipe testing results

ATTACHMENT 1

RECOMMENDATIONS

Based on interviews with the POC and other personnel as well as observations by Non-Responsive IH Surveying Inc. staff and IAQ measurements, it appears the overall condition of the Paris Armory is in good condition, except for some ceiling tile damage by roof leaks and housekeeping needs.

Numerous areas came back with lead levels over the reporting limit of 20 ug. for the lab; however NGB standards are 200ug. At the time of the survey these levels do not pose an immediately danger to health or life. General housekeeping of these areas should keep reading at safe levels RAC 3

Stained ceiling tiles should be replaced RAC 3

General housekeeping should be addressed to keep vermin at a minimum RAC 3

ATTACHEMENT 2

PHOTOS



Paris Weapons Vault



Office



IFR now storage area/locker room



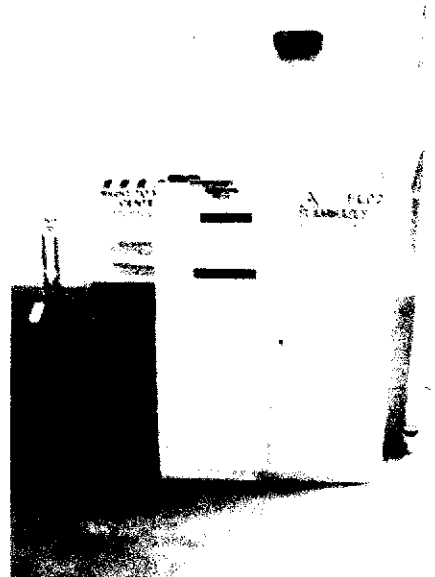
Drill hall



Latrine



Storage area



Storage area



Kitchen

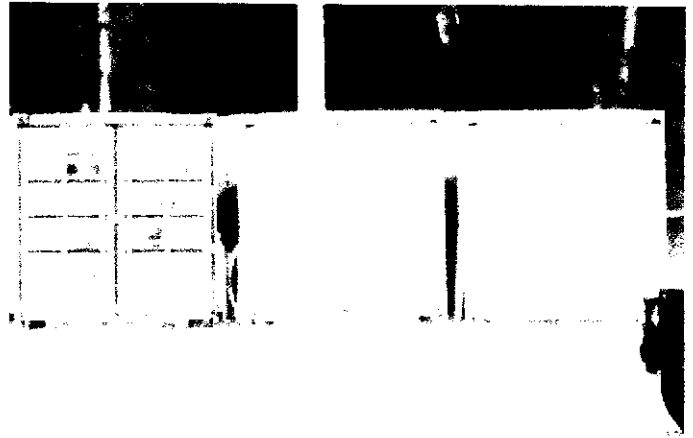
Flammable cabinet/MSDS Binder present



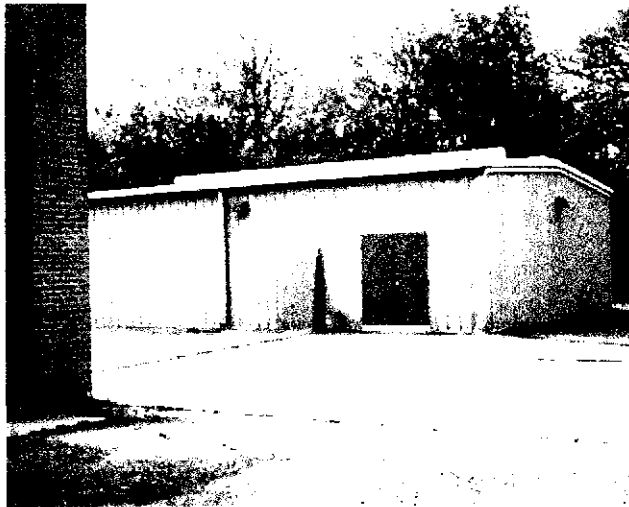
Storage area/Housekeeping needed



Water damage tile



Storage containers



Storage building

ATTACHEMENT 3

LAB RESULTS

April 29, 2013

Non-Responsive

National Guard Bureau Region-South IH
510 Plaza Drive, Suite 1530
College Park GA 30349

TEL: (404) 559-4174

FAX: (404) 559-4175

RE: Paris Armory

Dear **Non-Responsive**

Order No: 1304K91

Analytical Environmental Services, Inc. received 15 samples on 4/22/2013 8:00:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/12-06/30/13.
- AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/13.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Non-Responsive

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

TEL: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 13044091

Date: 4/12/13 Page 1 of 2

COMPANY:				ADDRESS:				ANALYSIS REQUESTED				Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.				No. of Containers			
National Guard Bureau Southeast Regional Industrial Hygiene Office				510 Plaza Dr Suite 1530 College Park GA 30349				LEAD											
PHONE: 404-559-4174				FAX:				PRESERVATION (See codes)				REMARKS							
SAMPLED BY:				SIGNATURE:				DATE				TIME				RECEIVED BY			
SAMPLE ID				DATE				TIME				RECEIVED BY				DATE/TIME			
1				04/12/13				0800				1				04/12/13			
2				0507				1				2				0507			
3				0843				1				3				0843			
4				0819				1				4				0819			
5				0827				1				5				0827			
6				0833				1				6				0833			
7				0838				1				7				0838			
8				0845				1				8				0845			
9				0852				1				9				0852			
10				0853				1				10				0853			
11				0915				1				11				0915			
12				0921				1				12				0921			
13				0926				1				13				0926			
14				04/12/13				0932				1				14			
1				001 PAR 0417								VAVIT PAR 0417							
2				002 PAR 0417								VAVIT PAR 0417							
3				003 PAR 0417								VAVIT PAR 0417							
4				004 PAR 0417								VAVIT PAR 0417							
5				005 PAR 0417								VAVIT PAR 0417							
6				006 PAR 0417								VAVIT PAR 0417							
7				007 PAR 0417								VAVIT PAR 0417							
8				008 PAR 0417								VAVIT PAR 0417							
9				009 PAR 0417								VAVIT PAR 0417							
10				010 PAR 0417								VAVIT PAR 0417							
11				011 PAR 0417								VAVIT PAR 0417							
12				012 PAR 0417								VAVIT PAR 0417							
13				013 PAR 0417								VAVIT PAR 0417							
14				014 PAR 0417								VAVIT PAR 0417							

RECEIVED BY: 4/12/13

DATE/TIME: 8:00

PROJECT NAME: Par 25 Army

PROJECT #:

SITE ADDRESS: 300 West Chamber St

SEND REPORT TO: NGB

INVOICE TO:

(IF DIFFERENT FROM ABOVE)

QUOTE #:

PO #:

SPECIAL INSTRUCTIONS/COMMENTS:

Please email results to @yahoo.com

SHIPMENT METHOD:

OUT / IN / VIA:

CLIENT: ☐ MAIL ☐ COURIER

☐ GREYHOUND ☐ OTHER

STATS PROGRAM (If any):

8-mail: Y/N; Fax: Y/N

DATA PACKAGE: ☐ I ☐ II ☐ III ☐ IV

TURNAROUND TIME REQUEST:

☒ Standard 5 Business Days

☐ 2 Business Day Rush

☐ Next Business Day Rush

☐ Same Day Rush (extra req.)

☐ Other

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY, IF NO TAT IS MARKED ON COC AS WILL PROCEED WITH STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MAINT CODES: A - Air O - Groundwater SE - Sediment SO - Soil SW - Surface Water W - Water (Blank) WW - Wastewater DW - Drinking Water O - Other (Specify)

PRESERVATIVE CODES: HCl - Hydrochloric acid + ice T - Ice only N - Nitric acid S-H - Sulfuric acid + ice SAM - Sodium Bisulfate/Methanol + ice O - Other (Specify) NA - None

COMPANY:		ADDRESS:		ANALYSIS REQUESTED		REMARKS	
National Guard Bureau Southeast Regional Industrial Hygiene Office		510 Plaza Dr Suite 1530 College Park GA 30349		LEAD		Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.	
PHONE: 404-559-4174	FAX:	SIGNATURE		PRESERVATION (See codes)			
SAMPLED	SAMPLED	DATE		TIME			
1	DISPAN 0417	4/12		0940			
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
DATE/TIME RECEIVED BY		DATE/TIME		PROJECT INFORMATION		RECEIPT	
4/12/13		4/12/13 8:00		PROJECT NAME: Paris Army		Total # of Containers	
PROJECT #		PROJECT #		PROJECT #		Turnaround Time Request	
SITE ADDRESS: 7000 Gabor St		SITE ADDRESS: 7000 Gabor St		PROJECT #		Standard 3 Business Days	
SEND REPORT TO: MGB		SEND REPORT TO: MGB		PROJECT #		2 Business Day Rush	
INVOICE TO:		INVOICE TO:		PROJECT #		Next Business Day Rush	
IF DIFFERENT FROM ABOVE		IF DIFFERENT FROM ABOVE		PROJECT #		Same Day Rush (extra req.)	
SHIPMENT METHOD		SHIPMENT METHOD		PROJECT #		Other	
OUT / / VIA:		OUT / / VIA:		PROJECT #		STATE PROGRAM (if any)	
IN / / VIA:		IN / / VIA:		PROJECT #		E-mail? Y/N	
CLIENT? <input type="checkbox"/> FAX <input type="checkbox"/> MAIL <input type="checkbox"/> COURIER <input type="checkbox"/>		CLIENT? <input type="checkbox"/> FAX <input type="checkbox"/> MAIL <input type="checkbox"/> COURIER <input type="checkbox"/>		PROJECT #		Fax? Y/N	
OTHER <input type="checkbox"/>		OTHER <input type="checkbox"/>		PROJECT #		DATA PACKAGE <input type="checkbox"/>	
SPECIAL INSTRUCTIONS/COMMENTS:		SPECIAL INSTRUCTIONS/COMMENTS:		PROJECT #		IV	
Please email results to @yahoo.com		Please email results to @yahoo.com		PROJECT #			

ALL CHECKS DEPOSITED AFTER 1PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF NO TAX IS MARKED ON COCAES WILL PROCEED WITH STANDARD TAX.

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. DATE 01-15-2010 BY 60322 UCBAW/STP

A - Air GW - Groundwater SR - Sediment SD - Soil SW - Surface Water W - Water (Blank) WW - Wastewater DW - Drinking Water O - Other (specify)
 H+ - Hydrochloric acid + ice I - Ice only N - Nitrate acid S+ - Sulfuric acid + ice S-H - Sodium Bisulfate/Monohydrate + ice NA - No
 MATRIX CODES: A - Air GW - Groundwater SR - Sediment SD - Soil SW - Surface Water W - Water (Blank) WW - Wastewater DW - Drinking Water O - Other (specify)
 PRESERVATIVE CODES:

Analytical Environmental Services, Inc

Date: 29-Apr-13

Lab Order: 1304K91

Client: National Guard Bureau Region-South IH

Project: Paris Armory

Matrix: Wipe

Date Received: 4/22/2013 8:00:00 AM

LEAD ON WIPES (N9100/7082)

N7082

Laboratory ID	Client Sample ID	Result	Units	Reporting Limit	DF	Qual	Date Collected	Date Analyzed	Analyst
1304K91-001A	001 PAR 0417	BRL	ug, Total	20	1		04/17/2013	04/25/2013	TA
1304K91-002A	002 PAR 0417	BRL	ug, Total	20	1		04/17/2013	04/25/2013	TA
1304K91-003A	003 PAR 0417	BRL	ug, Total	20	1		04/17/2013	04/25/2013	TA
1304K91-004A	004 PAR 0417	BRL	ug, Total	20	1		04/17/2013	04/25/2013	TA
1304K91-005A	005 PAR 0417	25	ug, Total	20	1		04/17/2013	04/25/2013	TA
1304K91-006A	006 PAR 0417	BRL	ug, Total	20	1		04/17/2013	04/25/2013	TA
1304K91-007A	007 PAR 0417	BRL	ug, Total	20	1		04/17/2013	04/25/2013	TA
1304K91-008A	008 PAR 0417	26	ug, Total	20	1		04/17/2013	04/25/2013	TA
1304K91-009A	009 PAR 0417	24	ug, Total	20	1		04/17/2013	04/25/2013	TA
1304K91-010A	010 PAR 0417	BRL	ug, Total	20	1		04/17/2013	04/25/2013	TA
1304K91-011A	011 PAR 0417	1120	ug, Total	108	5.38		04/17/2013	04/25/2013	TA
1304K91-012A	012 PAR 0417	40	ug, Total	20	1		04/17/2013	04/25/2013	TA
1304K91-013A	013 PAR 0417	194	ug, Total	20	1		04/17/2013	04/25/2013	TA
1304K91-014A	014 PAR 0417	BRL	ug, Total	20	1		04/17/2013	04/25/2013	TA
1304K91-015A	015 PAR 0417	105	ug, Total	20	1		04/17/2013	04/25/2013	TA

Qualifiers: BRL - Not Detected at the Reporting Limit

DF - Dilution Factor

B - Analyte detected in the associated Method Blank

Results are blank corrected where applicable

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client GA Army Work Order Number 1304K91Checklist completed by [Redacted] Date 4/22/13Carrier name: FedEx ☐ UPS ☐ Courier ☐ Client ☐ US Mail ☒ Other ☐Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒Container/Temp Blank temperature in compliance? (4°C ± 2°C) 4/22/13 Yes ☒ No ☐Cooler #1 Sub Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler #5 ☐ Cooler #6 ☐Chain of custody present? Yes ☒ No ☐Chain of custody signed when relinquished and received? Yes ☒ No ☐Chain of custody agrees with sample labels? Yes ☒ No ☐Samples in proper container/bottle? Yes ☒ No ☐Sample containers intact? Yes ☒ No ☐Sufficient sample volume for indicated test? Yes ☒ No ☐All samples received within holding time? Yes ☒ No ☐Was TAT marked on the COC? Yes ☒ No ☐Proceed with Standard TAT as per project history? Yes ☐ No ☐ Not Applicable ☒Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐Water - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒Adjusted? ☐ Checked by ☐Sample Condition: Good ☒ Other(Explain) ☐(For diffusive samples or AIHA lead) Is a known blank included? Yes ☐ No ☒

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1304J86

Date: 4/17/15 Page 1 of 1

COMPANY: National Guard Bureau Southeast Regional Industrial Hygiene Office PHONE: 404-559-4174		ADDRESS: 510 Plaza Dr Suite 1530 College Park GA 30349 FAX:				
SAMPLED BY: 		SIGNATURE: 				
#	SAMPLE ID	SAMPLED DATE	TIME	Temp	Composite	Matrix (See codes)
1	00016 Pax 0417	4/17	1003	-		
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						

RETURNSHIPPED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1.		PAT	4/22/13
2.			8:00
3.			

SPECIAL INSTRUCTIONS/COMMENTS: Please email results to @yahoo.com 		SHIPMENT METHOD OUT / / VIA: IN / / VIA: <input type="checkbox"/> CLIENT PICKUP <input type="checkbox"/> UPS <input checked="" type="checkbox"/> COURIER <input type="checkbox"/> GROUND <input type="checkbox"/> OTHER	
---	--	--	--

ANALYSIS REQUESTED		PROJECT INFORMATION		RECEIPT
ASBESTOS PRESERVATION (See codes)		PROJECT NAME: Paris Army PROJECT #: SITE ADDRESS: BOY WEST GARAGE PARIS ALABAMA SEND REPORT TO: NGB INVOICE TO: (IF DIFFERENT FROM ABOVE) QUOTE #: PO#		Total # of Containers Turnaround Time Requested: <input checked="" type="checkbox"/> Standard 5 Business Days <input type="checkbox"/> 2 Business Day Rush <input type="checkbox"/> Next Business Day Rush <input type="checkbox"/> Same Day Rush (extra req.) <input type="checkbox"/> Other STATE PROGRAM (if any): B-mail? Y/N: Fax? Y/N: DATA PACKAGE: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> IV
VISIT our website www.asestanta.com to check on the status of your results, place bottle orders, etc. REMARKS: OFFICE FIA				

SAMPLES RECEIVED AFTER 5PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AFS WILL PROCEED WITH STANDARD TAT.

COPIES ARE DISPOSED OF 10 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

01 = Air 02 = Groundwater 03 = Sediment 04 = Surface Water 05 = Water (Banks) 06 = Wastewater 07 = Drinking Water 08 = Other (specify)
 09 = Air 10 = Groundwater 11 = Sediment 12 = Surface Water 13 = Water (Banks) 14 = Wastewater 15 = Drinking Water 16 = Other (specify)
 17 = Air 18 = Groundwater 19 = Sediment 20 = Surface Water 21 = Water (Banks) 22 = Wastewater 23 = Drinking Water 24 = Other (specify)
 25 = Air 26 = Groundwater 27 = Sediment 28 = Surface Water 29 = Water (Banks) 30 = Wastewater 31 = Drinking Water 32 = Other (specify)
 33 = Air 34 = Groundwater 35 = Sediment 36 = Surface Water 37 = Water (Banks) 38 = Wastewater 39 = Drinking Water 40 = Other (specify)
 41 = Air 42 = Groundwater 43 = Sediment 44 = Surface Water 45 = Water (Banks) 46 = Wastewater 47 = Drinking Water 48 = Other (specify)
 49 = Air 50 = Groundwater 51 = Sediment 52 = Surface Water 53 = Water (Banks) 54 = Wastewater 55 = Drinking Water 56 = Other (specify)
 57 = Air 58 = Groundwater 59 = Sediment 60 = Surface Water 61 = Water (Banks) 62 = Wastewater 63 = Drinking Water 64 = Other (specify)
 65 = Air 66 = Groundwater 67 = Sediment 68 = Surface Water 69 = Water (Banks) 70 = Wastewater 71 = Drinking Water 72 = Other (specify)
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 481 = Air 482 = Groundwater 483 = Sediment 484 = Surface Water 485 = Water (Banks) 486 = Wastewater 487 = Drinking Water 488 = Other (specify)
 489 = Air 490 = Groundwater 491 = Sediment 492 = Surface Water 493 = Water (Banks) 494 = Wastewater 495 = Drinking Water 496 = Other (specify)
 497 = Air 498 = Groundwater 499 = Sediment 500 = Surface Water 501 = Water (Banks) 502 = Wastewater 503 = Drinking Water 504 = Other (specify)
 505 = Air 506 = Groundwater 507 = Sediment 508 = Surface Water 509 = Water

BEST AVAILABLE COPY
ANALYTICAL ENVIRONMENTAL SERVICES, INC.

Bulk Sample Summary Report



Lab Code 102082-0

26-Apr-13

Client Name: National Guard Bureau Region-South IH		AES Job Number: 1304J86	
Project Name: Paris Armory		Project Number:	

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
016PAR0417	1304J86-001A		ND	ND	ND	ND	ND	ND	Floor Tile
Layer: 1									

Note: CH=chrysotile, AM=amosite, CR=crocidolite, AC=actinolite, TR=tremolite, AN=anthophyllite

For comments on the samples, see the individual analysis sheets.

ND = None Detected

AES, Inc. is accredited by NIST's National Voluntary Laboratory Accreditation Program (NVLAP) for Polarized Light Microscopy (PLM) analysis, Lab Code 102082-0. All analyses performed in accordance with EPA "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (EPA 600/M4-82-020), 1982 as found in 40 CFR, Part 763, Appendix E to Subpart E and "Method for the Determination of Asbestos in Bulk Building Materials" (EPA/600/R-93/116), 1993.

These test results apply only to those samples actually tested, as submitted by the client. All percentages are reported by visually estimated volume. PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials, quantitative TEM is currently the only method that can be used to determine conclusive asbestos content.

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Microanalyst:

Non-Responsive

QC Analyst:

Non-Responsive

**DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349**

NGB-AVN-SI

December 19, 2003

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG, ATTN.: State Safety and Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

SUBJECT: Transmittal of the Survey Reports for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory, in Arkansas.

1. References.

a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.

b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.

c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.

d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.

e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.

f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.

g. DA PAM 40-501, 10 December 1998, Hearing Conservation.

h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2001, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.

i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.

NGB-AVN-SI

SUBJECT: Transmittal of the Survey Reports for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory, in Arkansas.

j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.

k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.

l. Report Survey dated 8 October 2003, Industrial Hygiene Survey, Mr. [Non-Responsive] [Non-Responsive] New Orleans, LA.

2. General.

a. At the request of the AR ARNG Safety and Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling of the for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory in Arkansas.

b. The surveys were conducted by Mr. [Non-Responsive] 5400 Milne Blvd, New Orleans, LA.

3. Findings. All Health Hazard information is on the survey findings of the report. (See enclosure 1)

4. Recommendations.

- a. Follow all recommendations made in reference 1.l., requesting industrial hygiene (IH) services where needed to complete the recommendations.
- b. Control water infiltration in the armory and/or replace or repair damaged surfaces or components (ceiling and floor tiles). Building conditions that present IAQ concerns or problems not only exacerbates normally minor health issues but also tend to promote or accelerate building deterioration.
- c. The recommendations given in the comment section and data collected will serve as a baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY-04. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY-04 IHIP.
- d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present survey, especially if this will help eliminate health hazards and reduce medical surveillance cost.

NGB-AVN-SI

SUBJECT: Transmittal of the Survey Reports for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory, in Arkansas.

- e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
 - f. Give special consideration to cleaning light fixtures, increasing the wattage and painting walls a lighter color when upgrading the lighting in the facility.
5. If additional information is needed about the industrial hygiene survey or air sample results, please contact Mr. **Non-Responsive** Regional Industrial Hygienist, NGB-AVN-SI, 1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

NBG-AVN-SH

State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl
as

BASELINE INDUSTRIAL HYGIENE SURVEY FOR:

DET 1 COMPANY B 875TH ENGINEERS

PIGGOTT, AR

Conducted: 7 October 2003

ATTN: SSG Non-Responsive
775 East Main Street
Piggott, AR 72454

PREPARED BY:

Thomas T. O'Leary
5400 Milne Blvd.
New Orleans, LA 70124-1826
(504) 488-6489

CONTENTS

- 1. INTRODUCTION**
- 2. INSTRUMENTATION**
- 3. FINDINGS**
- 4. RECOMMENDATIONS**
- 5. REFERENCES**

Attachment 1: Schematic of the Armory

Attachment 2: Photographs of the facility

Attachment 3: Laboratory Reports: Lead Swipes

Attachment 4: HHIM Field Survey Form(s)

1. INTRODUCTION

At the request of the National Guard Bureau South Region Industrial Hygiene Office, **Non-Responsive** performed a Baseline Industrial Hygiene Survey at the Army National Guard Piggott, AR Armory. The purpose of the survey was to establish a baseline to evaluate health hazards, identify controls present in the work site, collect lead swipe samples from the renovated/inactive or closed Indoor Firing Ranges (IFR), perform an illumination survey and make recommendations regarding health hazards associated with the work at the Piggott, AR Armory.

The building was completed in 1957 with approximately 7,007 square feet. There has **never been an IFR at this facility.** The facility houses Det 1Co B 875th Eng Bn with one FTS and a total of 36 personnel assigned.

The full-time person is assigned to perform administrative duties Monday thru Friday from 0730 to 1600. The facility contains administrative areas, a drill hall, classrooms, supply room, kitchen, weapons vault, dispatch and retention offices, break area, latrines and locker rooms. A schematic can be found at Attachment 1.

The facility was visually examined and personnel consulted to assess potential hazards present. Lead samples were taken in the IFR, drill hall, classrooms, stage and weight room. An illumination survey was performed throughout the facility.

2. INSTRUMENTATION/CALIBRATION

An Extech DLM2 Light Meter, SN # L374324, Calibrated 7/10/03, was used to conduct the illumination survey. It was operated according to the manufacturer's recommendations.

3. FINDINGS

ILLUMINATION

Light readings were taken in various locations throughout the facility with emphasis on desks and/or work stations. The results were compared to guidelines recommended by the Illuminating Engineering Society (IES). The results of the survey are shown in Table 1 and NGB Design Guide 415-1.

Table 1 – Light Readings

Location	Light Reading (foot candles)	IES Recommendation (foot candles)
Motor Storage Area	3 Readings – Avg 6.83	30
Kitchen	2 Readings – Avg 69.9	50-100
Maintenance NCO	28.3	50-100
Maintenance Storage	22.4	20
Classroom	3 Readings – Avg 76.2	50-100
NBC Room	36.7	50-100
Supply Room	3 Readings – Avg 30.1	30
Weight Room #1	43.6	30
Weight Room #2	48.2	30
Orderly Room	45.9	50-100
Officer's Admin Area	2 Readings – Avg 41.5	50-100

ADMINISTRATION

Personnel perform administrative duties that consist of reading, handling and generating paper work. Computer use comprises two to six hours of the work day. This continuous use of computers can lead to eye strain and/or hand/wrist and shoulder soreness.

MOTOR POOL

Only operator maintenance, Prevention Maintenance Checks and Services (PMCS) is performed at the armory. No repair service is performed. When repairs are needed the vehicles are taken to the OMS shop.

DRILL HALL

The drill hall is located in the center of the building. It is used primarily as an assembly area. Weapons are cleaned two to three times a year near an open bay door.

LEAD CONTAMINATION

There has never been an IFR at this facility but lead samples were taken in the drill hall to determine if there was any contamination from other activities.

TABLE 2

SAMPLE NUMBER	SAMPLE LOCATION	RESULTS
PGT BLANK	Assembly Hall	<10 ug/sq ft
PGT	Assembly Hall	<10 ug/sq ft
PGT 2	Assembly Hall	<10 ug/sq ft
PGT 3	Assembly Hall	<10 ug/sq ft
PGT 4	Classroom*	54 ug/sq ft
PGT 5	Classroom*	43 ug/sq ft
PGT 6	Classroom*	<10 ug/sq ft
PGT 7	Maintenance Bay	28 ug/sq ft
PGT 8	Maintenance Bay	49 ug/sq ft
PGT 9	Maintenance Bay	28 ug/sq ft
PGT10	Kitchen	13 ug/sq ft
PGT 11	Vault	<10 ug/sq ft

*Weapons are cleaned in this area.

Results of three of the 11 samples taken were greater than the recommended 40 ug/sq ft.

WEAPONS VAULT

The Piggott, AR Armory has a weapons storage vault located in the Supply Room. Accountability and weapons issuing are performed in this area. There are no weapons cleaned in the area.

HAZCOM

MSDSs were available for chemicals used.

ERGONOMICS

Many workstations were not set up to provide neutral postures and appropriate ergonomically correct positions. Consideration should be given to providing all those full-time employees who spend the majority of their time working at a computer terminal ergonomic training to increase awareness of preventive measures. This training should include the importance of proper posture, recommended exercises, and proper set-up of workstations.

SAFETY AND HEALTH

The unit has established a kitchen in the Motor Storage Area (See photos) through self-help construction. Although the oven/range is vented to the outside there is no provision to draw outside air for ventilation. Air is drawn from the Motor Storage Area and the results of the sample taken show an elevated level of lead (13 ug/sq ft.).

4. RECOMMENDATIONS

ILLUMINATION:

Upgrade lighting as required. Lighting can be upgraded in the following ways:

- Replace blown or broken lighting.
- Paint walls a lighter color.
- Clean existing light fixtures.
- Rearrange furniture to make better use of available lighting.
- Provide supplemental lighting.

LEAD SAMPLES

Clean surfaces with sample results <40 ug/sq ft following good hygiene and housekeeping practices.

HAZCOM

Personnel exposed to these chemicals should receive initial and annual HAZCOM training.

ERGONOMICS

Complete an ergonomics survey on all work stations and conduct ergonomic training for employees who spend the majority of their time working at a computer terminal.

SAFETY AND HEALTH

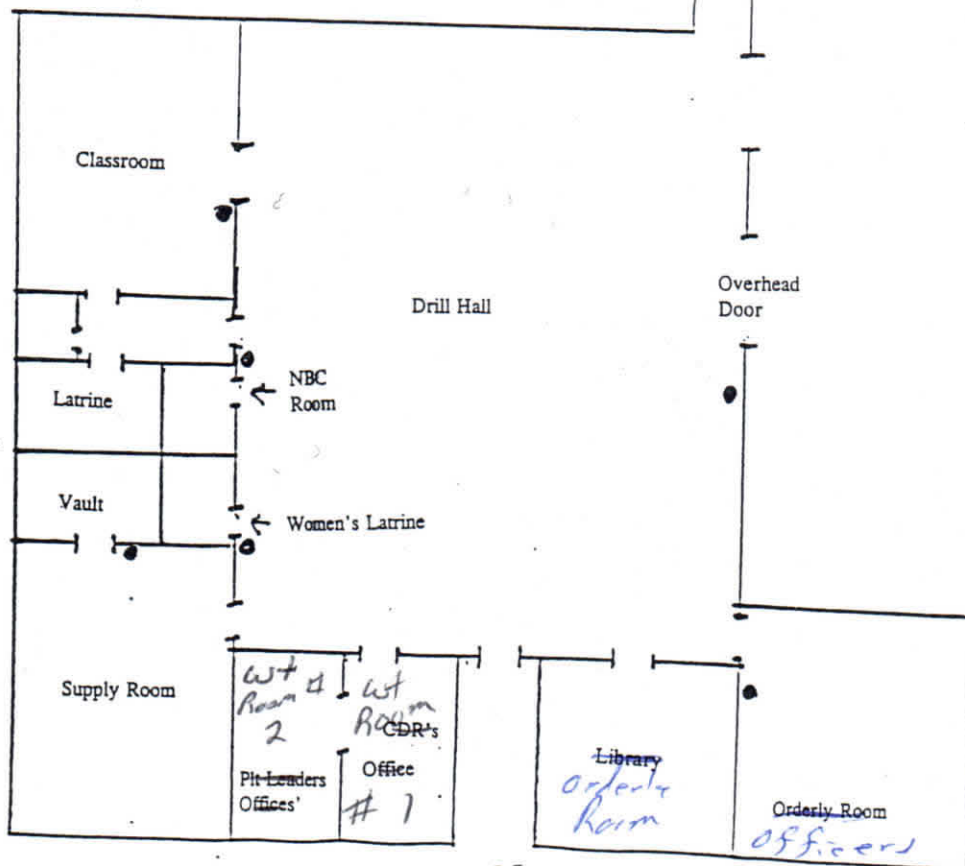
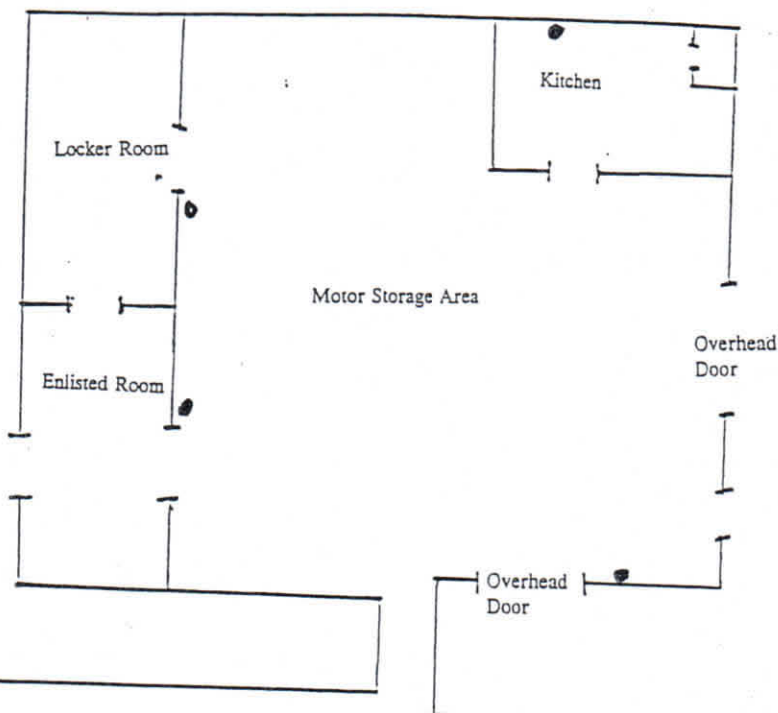
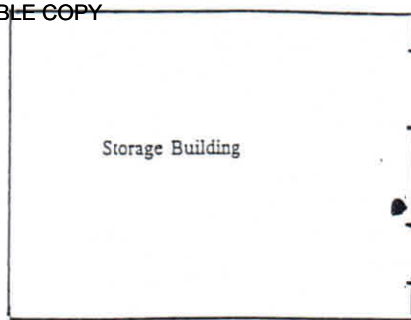
Cease using this area to prepare food until it can be sealed off from the Motor Storage Area and provisions have been made to draw supplied air from the outside. Although vehicles are not normally repaired in the Motor Storage Area, the engines are running to move the vehicles in and out of the area. Diesel exhaust is a known carcinogen and food should not be exposed to these fumes.

5. REFERENCES

- Guide to Occupational Exposure 2000, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- American National Standards Institute (ANSI)/Illuminating Engineering Society (IES), Industrial Lighting 1991.
- National Institute for Occupational Safety and Health (NIOSH), (76-130), Technical Information, Lead Exposure and Design Considerations for Indoor Firing Ranges GPO, 1975.
- Title 29, Code of Federal Regulations (CFR). 1999 revision, Part 1910. Occupational Safety and Health Standards
- AR 40-5, Preventative Medicine, 15 October 1990.
- AR 385-10, The Army Safety Program,
- National Safety Council, Fundamentals of Industrial Hygiene, 4th Edition, 1996.
- NGB Pamphlet 385-16, Safety Guidelines for Converting Indoor Firing Ranges to Other Uses.
- TB Med 503, The Army Industrial Hygiene Program, February 1985.
- Department of the Army Pamphlet 40-501, August 1991, Hearing Conservation.
- Title 29 CFR, Part 1910.1200, The Hazard Communication Standard.
- NGB Design Guide 415-1
- Title 40 CFR 745.220-238, Lead Standard

PIGGOTT NATIONAL GUARD ARMORY BEST AVAILABLE COPY
FIRE EVACUATION PLAN

● = EXTINGUISHER

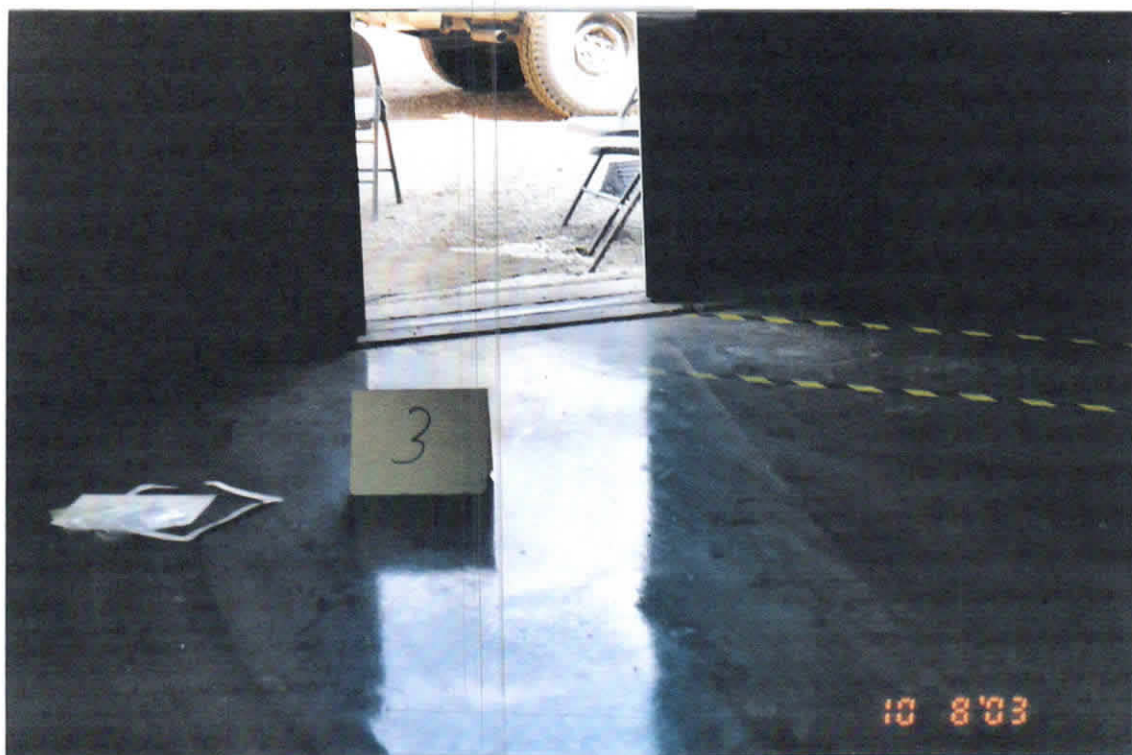


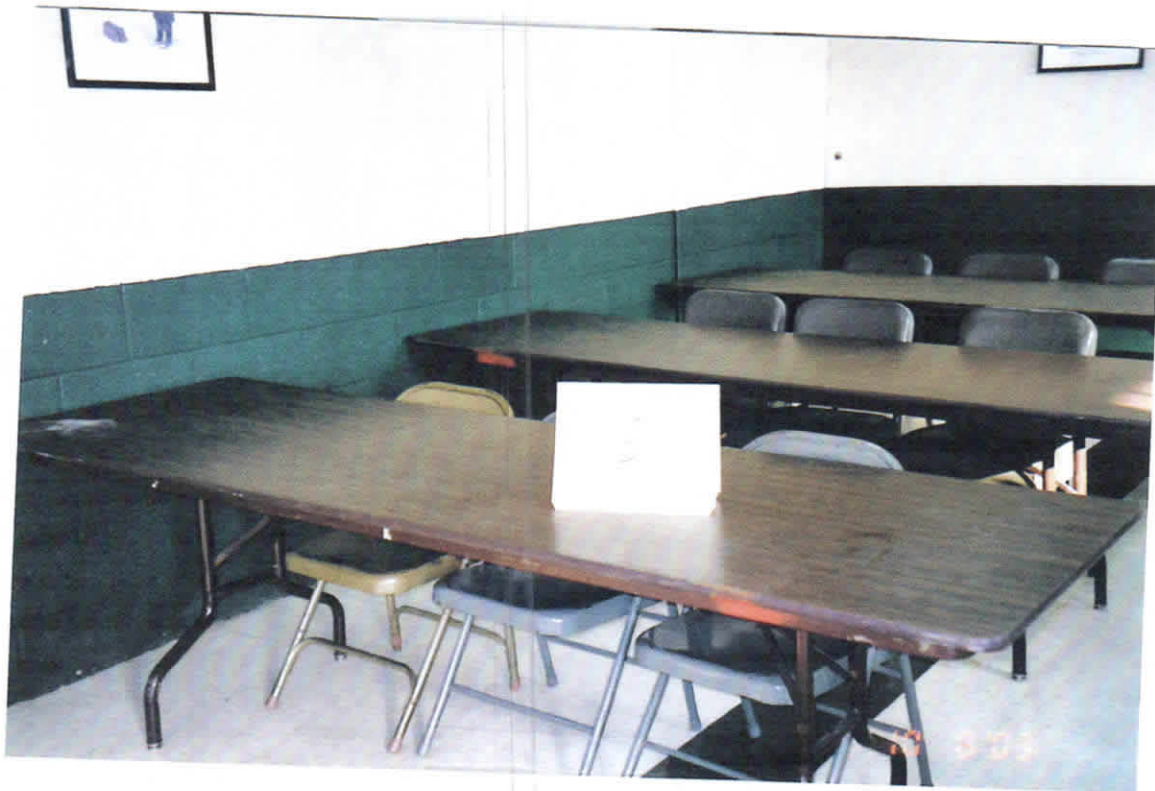
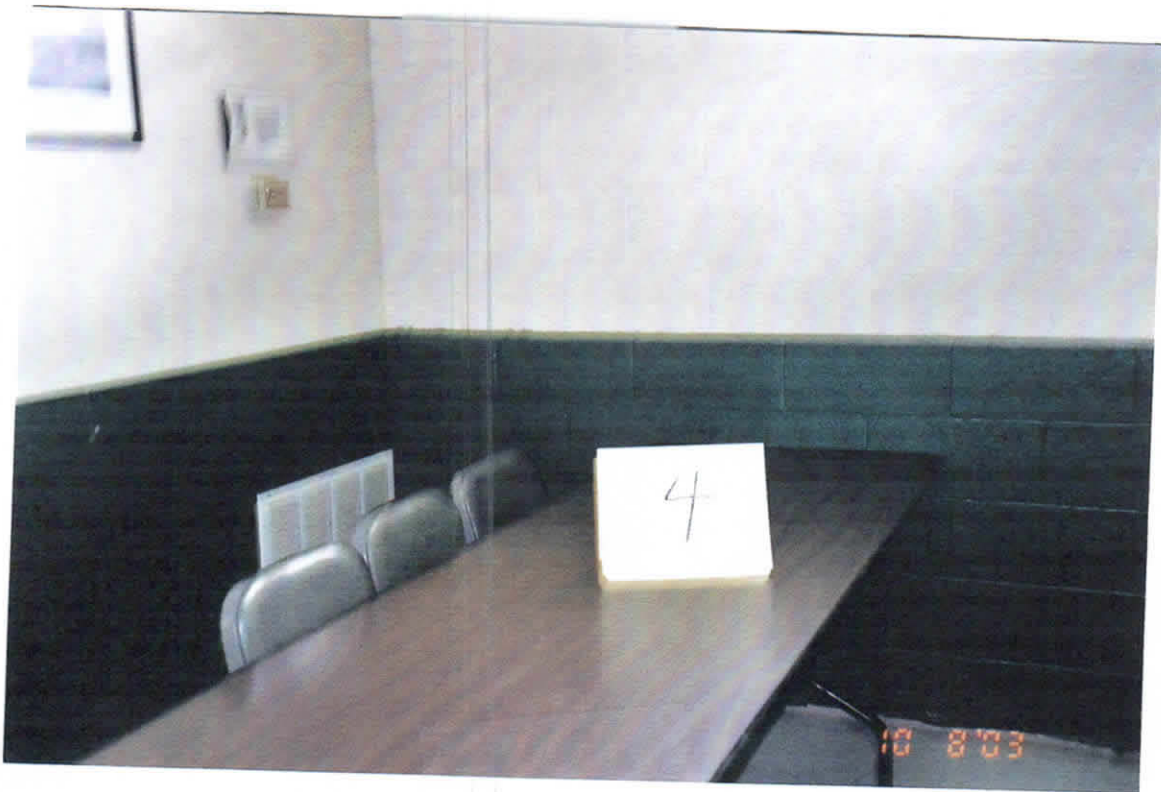
E

W

Piggout

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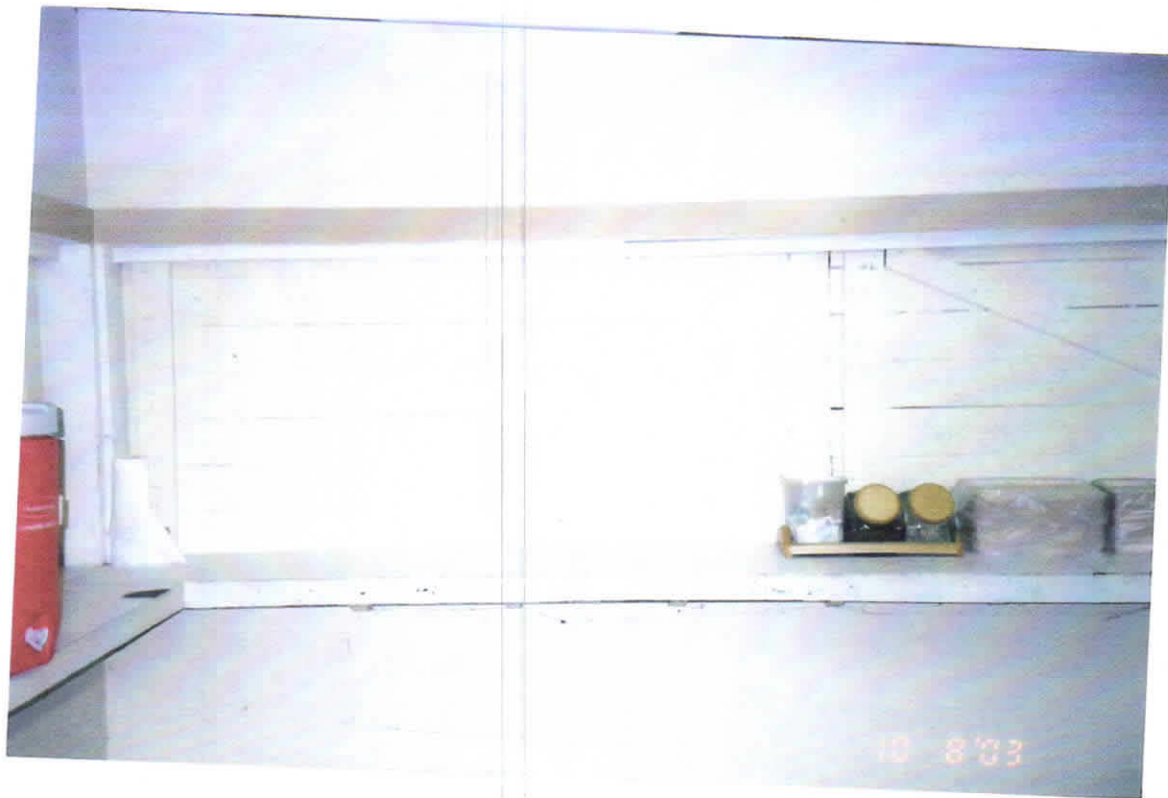














EMSL Analytical

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3 Cooper St., Westmont, NJ 08108

Phone: (954) 858-4800 Fax: (954) 858-8551 Email: gmiller1@emsl.com

Attn: Tom O'Leary
Tom O'Leary, Inc.
5400 Mjine Blvd. (Cell Phone 504-578-6017)
New Orleans, LA 70124

Fax: (504) 488-6489

Phone: (504) 488-6489

Project: PGT

Customer ID: TOMO77

Customer PO:

Received: 12/05/03 12:07 PM

EMSL Order: 200313988

EMSL Project ID:

Lead in Wipes by Flame AAS (SW 846, 7420)

Client Sample Description	Lab ID	Analyzed	Area Sampled	Lead Concentration
PGT Blank	0001	12/9/03	144 in ²	<10.0 µg/ft ²
PGT 1	0002	12/9/03	144 in ²	<10.0 µg/ft ²
PGT 2	0003	12/9/03	144 in ²	<10.0 µg/ft ²
PGT 3	0004	12/9/03	144 in ²	<10.0 µg/ft ²
PGT 4	0005	12/9/03	144 in ²	54.0 µg/ft ²
PGT 5	0006	12/9/03	144 in ²	43.0 µg/ft ²
PGT 6	0007	12/9/03	144 in ²	<10.0 µg/ft ²
PGT 7	0008	12/9/03	144 in ²	28.0 µg/ft ²
PGT 8	0009	12/9/03	144 in ²	49.0 µg/ft ²
PGT 9	0010	12/9/03	144 in ²	28.0 µg/ft ²
PGT 10	0011	12/9/03	144 in ²	13.0 µg/ft ²
PGT 11	0012	12/9/03	144 in ²	<10.0 µg/ft ²

Gerold J. Miller, Ph.D.
Laboratory Director
or other approved signatory

The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AHA, unless specifically indicated otherwise in the comment section.

ACCREDITATIONS: NJ-NELAP; 04853, AHA Environmental Lead Laboratory Approval Program: 100194

Date Printed: 12/15/03 9:29:07 AM

PB w/o QC-1

Page 1 of 1

HHIMS Industrial Hygiene Survey Form

Front page

ARLOC 05000 Location AA Operation AD0 Supervisor Mr. [REDACTED] Installation [REDACTED] Building P1C6047 Survey Date 03/10/08 day month year Evaluator Macom Submacom AR RAC DS No. MIL 01 Contractors No. LOCs - Unit / Organization (45) Det 1, Co B 895th Eng

Lab Hoods Vapor Degreasers Spray Booths Open Surface Tanks Controls Present (If > 6, continue in comments)(25) OTHER

OSN Commercial [X] Ventilation Units Frequency (hrs/day) 08 No. CIVS - Unit code F1C

Evaluation (25 characters max) Inadequate Lighting Ergonomic Stress

Controls Required (25 characters max) 20-100 FFC

NIOSH TC # or Foreign equivalent (10 characters max)

Gloves		Respirator		Hearing		Eyes and Face		Head and Feet	
e*	R U	e*	R U	e*	R U	e*	R U	e*	R U
acid		airline		canal caps		cold weather boots/hat		hard hats	
cold surfaces		abrasive blasting hood		(> 85-108 dBA steady)		cold weather clothing		impermeable boots	
hot surfaces		disposable		helmets w/ muffs		coveralls		safety shoes (conductive)	
NBC agents		full face air purifying		muffs alone		full body suit		safety (nonconductive)	
oil		1/2 face air purifying		(108-118 Imuff/earplug comb)		heat reflective		other	
solvents		powered air purifying		muffs and earplugs		vest/suit		other	
surgical gloves		1/4 face air purifying		(118 or >) with time limit		safety belt/harness		other	
leather / cotton		self-contained		other		special purp. clothing		other	
other		other		other		other		other	
chemical splash		other		other		other		other	
full face shield		other		other		other		other	
chem/safety impact		other		other		other		other	
safety impact		other		other		other		other	
welding helmet		other		other		other		other	
sunglasses		other		other		other		other	
welding goggles/glasses		other		other		other		other	
laser eye protection		other		other		other		other	
other		other		other		other		other	

e* = evaluator's recommendation or agreement

Reminders: ergonomics - dermatitis - physical agents - flammable storage
EYE (permanent) - EYE (portable) - SHW - GMV - LEVACO ADM DSA DSN LAB LCK
RAD ECB EPL RHS SPR WEL

HHIMS Industrial Hygiene Survey Form

Back page

CAS code	PAC	EPC
PONOISECO		
POFOOTHAZ		
POFLYPROJ		
POEYEHAAZ		
POFLAMHAZ		
POLFTING		
POSHARPOB		
POHOTOBJE		
POELSHOCK		
COLUBECIL		

Social Security Number or Unique Identifier

Last Name (20 characters max)

First Name (20 characters max)

MI

Sex

Category

Personnel data provided by the facility is attached to this form

Insert Privacy Act Statement

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Operation described is *Administrative work with extended computer*

This operation was explained to the evaluators, but was not actually observed.
There is a noise data sheet attached to this form

There is a ventilation data sheet attached to this form (comments continued on attached)



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DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349

NGB-ARS-IHSE (40-5f)

April 4, 2006

MEMORANDUM FOR: Adjutant General AR ARNG, ATTN: MAJ **Non-Responsive** State
Occupational Health Office, Camp Robinson North Little Rock, AR 72118-2200.

Thru: LTC **Non-Responsive** Deputy Chief Surgeon, DET 4 MED JTFHQ, PO BOX 011 BLDG 6401
RMTC, NLR, AR 72199-9600

SUBJECT: Transmittal of the Survey Reports for Jonesboro Armory, Paragould Armory, Rector Armory and
Walnut Ridge Armory in AR.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.
- b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.
- f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, 10 December 1998, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2003, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.

NGB-ARS-IHSE (40-5f)

April 4, 2006

SUBJECT: Transmittal of Industrial Hygiene Report, Field Maintenance Shop (FMS) No.1, Jonesboro, Arkansas, February 3, 2006.

- j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.
- k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.

1. Industrial Hygiene Survey Report, Industrial Hygiene Technician, Colorado Springs, CO. 80915.

2. General.

a. At the request of MA. **Non-Responsive** AR ARNG Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling at the FMS No.1, Jonesboro, Arkansas 23 January 2006.

b. The surveys were conducted by **Non-Responsive** of Industrial Hygiene Technician, 1503 Zaiger Dr., Colorado Springs, CO. 80915

3. Findings. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed. Additionally one noise dosimetry notification letter was generated based on the data collected during the survey. Operations of very short duration were not sampled due to the requirements of the sampling method. If the operation changes or if the length of the operation is increased, contact this office to schedule sampling if it is deemed needed then. (See ENCL 1).

4. Recommendations.

a. Follow the guidance given in reference 1.1. as good IH practices, requesting industrial hygiene (IH) services where needed. The recommendations that follow are based on the survey findings as reported.

1. Continue to train employees in the Federal Hazardous Communication Program. Ensure that the welding rod MSDS's are included in the binder and on the inventory list. Also, inventory the MSDS's on a semi-annual basis. (RAC 3)
2. Due to the large cubic inch displacement diesel engines (379-855 CID range) which are serviced in this maintenance facility, a work request should be submitted requesting that a new exhaust system be installed which is capable of providing at least 2200 CFM at the terminal end of the exhaust duct. Consideration should be given to both the high exhaust temperatures and the fact that many of the serviced engines are turbo charged when selecting branch/duct construction materials. Reduction/elimination of sharp 90-degree angles in the exhaust branch/ducts will also greatly increase its overall effectiveness. Continue to open bay doors, turn on the general ventilation exhaust system and use local exhaust ventilation hoods while the vehicles are running inside the motor pool. Attached as enclosure 10 are copies of engineering design guidelines/plates, which should help the design of an effective system. (RAC 2)
3. Lighting in the motor pool (bays 1-4) should be upgraded to 100 foot candles (50-100 FC nominal). Continue to keep the bay doors open to increase the illumination levels. NOTE: Ventilation upgrades throughout the facility maintenance bays could limit the amount of available

SUBJECT: Transmittal of Industrial Hygiene Report, Field Maintenance Shop (FMS) No.1, Jonesboro, Arkansas, February 3, 2006.

lighting in critical work areas unless consideration is given to exhaust branch/duct placement. Lighting levels in those critical work areas (under vehicle hoods, wheel cylinder areas, undercarriages and etc.) should be at least 100 FC's (50-100 FC nominal range). To provide adequate lighting while working underneath vehicles continue to use the fluorescent droplights. A brighter color on the walls and ceiling would also enhance the illumination levels in the motor pool. **(RAC 3)**

4. Eye wash/shower stations must be flushed weekly for at least 3 minutes to rid of the harmful bacteria *acanthamoeba*. Also, continue to keep a weekly register on the date and times the flushing occurred. Get new eyewash bottle solutions in the battery room and add water to the 5 gallon portable eyewash container and flush weekly. A 16 gallon portable gravity fed eyewash (see encl.11) would be the best solution in that a weekly 1 minute flushing would suffice and replacement of the chemical solution and water would be every 4 months. **(RAC 3)**
5. Ensure that all personal protective equipment (i.e. respirators, goggles, face shields, and gloves) are cleaned with soap and water after use and properly stored. Replace rubber gloves due to deterioration. **(RAC 3)**
6. Consider using a transformer for the three phase motor on the portable 50 ton lift. The transformer would increase or decrease the voltage which is directly proportional to the amperage. The phase converter, which was initially going to be installed, could do both but usually at a more than 10 % loss. Also, the phase converter is more expensive and less efficient than the transformer. **(RAC 3)**
7. Continue all employees in the Hearing Conservation Program and make sure that the workers have an annual audiogram. A DD Form 2214 (noise survey) was performed for impact noise sources such as pneumatic wrenches, drills, and hammers (see encl.4 for results). Also, strictly enforce hearing protection during engine run times and when using pneumatic power tools. **(RAC 3)**
8. Submit a request for a new updated carbon monoxide detector in the motor pool area. The Nighthawk CO monitor is recommended. The manufacture recommends that the Nighthawk carbon monoxide detector be checked once per week. The Nighthawk should be replaced with either model no. 900-0056 (110 volt) or model 900-0076 (110 volt outlet plus battery). The manufacture suggested replacing the unit every 5 to 6 years. Ensure that the CO detector is calibrated annually. **(RAC 3)**
9. Replace the filter in the break room's AC unit. This will help in circulating cool air to the area. Add a grease filter to the bottom of the kitchen stove exhaust fan. **(RAC 3)**
10. Due to possible ice contamination from the vehicle exhaust and welding fumes, consider moving the ice machine (ice is considered a food) to the break area. **(RAC 2)**
11. The battery charger should be located in the battery room and not the POL bulk storage room due the electrical fire hazard. Contact the safety office for further guidance. The switch for the

NGB-ARS-IHSE (40-5f)

April 4, 2006

SUBJECT: Transmittal of Industrial Hygiene Report, Field Maintenance Shop (FMS) No.1, Jonesboro, Arkansas, February 3, 2006.

mechanical exhaust fan and the battery charger should be interconnected. This action will ensure its operation when personnel are most likely to be present and contaminants are being generated. Although not a regulatory requirement, this action is beneficial in maintaining exposures at the lowest practical level. The battery room lighting should supply a uniform 50 FC in all servicing/charging areas as recommended by reference 1i. (RAC 3)

b. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY2006. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2007 IHIP.

c. Have all HHIM data entered into the HHIM computer module.

d. Use the report to help in correcting all deficiencies noted.

e. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.

f. Contact the State Occupational Health Nurse, MAJ [Non-Responsive] for any medical Surveillance that may be needed.

k. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. The present report addressed to the local facility commanders was divided in such a way that personal data can be detached and kept by the OHM or blocked when forwarding these reports to other entities within the appropriate offices of AR ARNG. If additional information is needed please contact Mr. [Non-Responsive] [Non-Responsive] Regional Industrial Hygienist, NGB-AVN-SI, COMM. (404) 559-4174 OR 1 (800) 326-0262.

Non-Responsive

Regional Industrial Hygienist

CF: NGB-ARS-IHSE

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

MAJ [Non-Responsive] State Occupational Health Office, Camp Robinson North Little Rock, AR 72118-2200.

ENCL.

as

BEST AVAILABLE COPY
Industrial Hygiene Report
For
Arkansas National Guard
(ARARNG)
At
Rector Armory
Company A, Detachment 1
2nd Battalion 153rd Infantry
600 East 9th Street
Rector, Arkansas 72461-2704



Prepared for:
Department of the Army and Air Force
National Guard Bureau
Regional Industrial Hygiene Office
Region South
510 Plaza Drive, Suite 1530
College Park, Georgia 30349
By
DBA **Non-Responsive** & Associates
25 January 2006

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Lighting Deficiencies	Page 2
Illumination Readings	Page 3

Enclosures:

1. Health Hazard Information Module (HHIM) Survey Form
2. Listing of hazardous chemicals/materials at the facility
3. Analytical Lead Wipe Results
4. Personnel Roster
5. Design Drawing of Rector Armory
6. Recommendations
7. Lead Clean up Procedures
8. References
9. Pictures: 1-15

February 9, 2006

MEMORANDUM FOR: Arkansas Army National Guard, Attn: 1SG Danny Gifford, Company A, Detachment 1, 2nd Battalion 153rd Infantry, 600 East 9th Street, Rector, Arkansas 72461-2704

SUBJECT: Industrial Hygiene Consultation and Health Hazard Information Module (HHIM) Survey, Company A, Detachment 1, 2nd Battalion 153rd Infantry, 600 East 9th Street, Rector, Arkansas

1. REFERENCES: See Enclosure 8
2. BACKGROUND: At the request of Mr. **Non-Responsive** National Guard Bureau Regional Industrial Hygienist, Atlanta, Georgia, an Industrial Hygiene Consultation and Health Hazard Information Module Field Survey were performed at the Rector Armory, Army National Guard, Rector, Arkansas on January 25, 2006. The POC was 1SG **Non-Responsive** at 870-886-2711. His address was Rector Armory, Company A., Detachment 1, 2nd Battalion 153rd Infantry, 600 East 9th Street, Rector, Arkansas 72461-2704. The primary unit's mission was that of a light infantry highly mobile unit. Mr. **Non-Responsive** assisted in the survey. The purpose of the survey was to perform lead wipe samples; a ventilation survey, an Illuminations survey, and complete HHIM field survey forms on all industrial operations at the facility (see encl 1 for completed HHIM Survey Form).
3. INSTRUMENTATION: The following survey instrumentation was provided by the contractor and was used to obtain lead wipe dust samples and illumination measurements. All other instrumentation was operated according to manufacture recommendations.
 - a) Reed LM-81LX, Light Meter, S/N: Q225589, calibrated: 11/15/2005
 - b) Ghost Lead Dust Wipes, Manufactured: December 1, 2003, Expiration: 06/06
 - c) TSI, Model 8386, SN: 00100166
4. Findings:
 - a) Company A., Detachment 1, 2nd Battalion 153rd Infantry:
 - i) Administrative duties included pay, promotions, schools, family support, assignments, and supplies. The class 2 supply area had items such as clothing and equipment. The supply area was also responsible for maintaining TA 50.
 - ii) Twelve M-Day soldiers trained at the facility.
 - b) General Area Armory Information:
 - i) Material Safety Data Sheets (MSDS) were located in the facility. All employees must be initially trained in the Federal Hazardous Communication Program IAW 1910.1200 (see encl 2 for a listing of hazardous chemicals/materials at the facility).

- ii) Twelve lead dust wipe samples were taken, using a 10 inch by 10 inch template. Four samples were above the federal standard of $40\mu\text{g}/\text{ft}^2$. No sample was above the Army National Guard standard of $200\mu\text{g}/\text{ft}^2$. Pictures of the lead sample wipes were taken (see encl.9, photo's M03306 to M04406). The analytical lead result sheet included the sampled locations and corrected results. Also, the sample submission sheets were enclosed in the report (see enclosure 3). The following table notes where the samples were taken, the surveyor's field number, and the lead results:

Location:	Surveyor's Field No:	Results:
West End Floor, Drill Hall	M03306	$<14\mu\text{g}/\text{ft}^2$
Vault Floor	M03406	$190\mu\text{g}/\text{ft}^2$
Portable Metal Cart Shelf	M03506	$<14\mu\text{g}/\text{ft}^2$
Chair Hauler Surface	M03606	$81\mu\text{g}/\text{ft}^2$
Middle Furnace Room Shelf	M03706	$38\mu\text{g}/\text{ft}^2$
Kitchen Floor, Underneath Table	M03806	$20\mu\text{g}/\text{ft}^2$
Rear Wall Left Side, Next to Ice Maker	M03906	$<14\mu\text{g}/\text{ft}^2$
Left Side Southwest Drill Hall Wall	M04006	$<14\mu\text{g}/\text{ft}^2$
Platoon Room Book Shelf	M04106	$84\mu\text{g}/\text{ft}^2$
Platoon Room Entrance Floor	M04206	$46\mu\text{g}/\text{ft}^2$
Orderly Room Return Air Vent	M04306	$28\mu\text{g}/\text{ft}^2$
Drill Hall, North Floor	M04406	$<14\mu\text{g}/\text{ft}^2$

Note 1: $\mu\text{g}/\text{ft}^2$ refers to micrograms or one millionth of a gram per square foot

Note 2: BDL means below detection level

- iii) Drill Hall: Conducting drill and ceremonies in the large hall was its main purpose (see encl.9, photo 1). It was also used as a community service area such as Boy Scout events. Illumination levels ranged from 15 to 85 FC's.
- iv) Furnace/General Mechanical Ventilation: The furnace filters were clogged; however, the supervisor changed them out (see encl.9, photo 2).
- v) A motor pool storage building was located behind the facility (see encl.9, photo 3).
- vi) The following table identifies area deficiencies:

AREA	DEFICIENCIES
Small Storage Room	2 fluorescent tubes were burned out
Enlisted Men's Latrine	Four fluorescent tubes were out.
Officer's Latrine	2 fluorescent tubes were burned out
Orderly Room	4 fluorescent tubes were out
Platoon Storage Area	2 fluorescent tubes were out
Motor Pool Storage	2 fluorescent tubes were out
Motor Pool Restroom	1 bulb was out/exhaust vent noisy

- vii) Due to the low noise levels (administrative areas) there was no requirement for a Hearing Conservation Program. The only requirement would be when the M-Day troops were firing their weapons. M-Day and permanent party soldiers had earplugs.
- viii) A listing of Company A., Detachment 1 personnel was attached as encl. 4

- ix) A floor plan and illumination level readings of the armory was attached as encl. 5.

ILLUMINATION SURVEY RESULTS:

- a) Illumination Levels: The following additional illumination level readings were taken during the survey and are reported below in foot candles (FC's).

AREA/LOCATION	FOOT CANDLES (FC)
Drill Hall (garage doors closed)	32-56
Kitchen	45-85
Classroom	11-35
Large Storage Area	13-32
Small Storage Room	12-18
Officer Latrine	34-39
Enlisted Latrine	15-49
Vault	24-73
Supply Room	54-91
Recruiter's Office	19-25
Commander's Office	50-65
North Side Orderly Room	18-112
South Side Orderly Room	15-83
Platoon Storage Area	18-31
Motor Pool Storage Area, Doors Closed	19-42
Motor Pool Office	48-64

As indicated in the IES Lighting Handbook, Application Volume 1987, Offices: 20-50 FC's, Supply and Publication Areas: 20-50 FC's, Assembly 20-50 FC's, Restrooms: 5-10 FC's, Classrooms: 50-100 FC's, Kitchen: 20-50 FC's, FC's, Library: 50-100 FC's, Storage Rooms: 10-20 FC's, Mail Room: 20-50 FC's.

6. RECOMMENDATIONS: See Enclosure 6

7. TECHNICAL ASSISTANCE::

POC for further assistance concerning this evaluation is **Non-Responsive**

Non-Responsive

Industrial Hygiene Technician

CF:

Office of the Adjutant General, Arkansas Army National Guard,
ATTN: TAG-DZ-SO (MAJ **Non-Responsive**)
Bldg. #3000, Camp Robinson,
North Little Rock, AR 72199-9600

HEALTH HAZARD INFORMATION MODULE FIELD SURVEY

Enclosure 1

BEST AVAILABLE COPY
SEE PRIVACY ACT STATEMENT ON REVERSE
(For use of this form, see SFHDX User's Instructions)

SECTION 1.

DEMOGRAPHIC DATA

a. ARLOC 05000 b. INSTALLATION ARK NAT GUARD BLDG/RM NUMBER RECTOR ARMORY
 LOCATION/ZONE CODE AD c. OPERATION CODE ADD 1 SAH d. DESCRIPTION A CO, DETACHMENT
1. 2nd BN 153rd INF BN CONDUCTED TRAINING, ADMINISTRATIVE DUTIES, SCHOOLS, AND
PROMOTIONS FOR 12 M-DAY SOLDIERS.
 e. MACOM/CODE NG 1 f. SUBMACOM/CODE XX-1 g. SUPERVISOR SFC Non-Responsive
 h. TELEPHONE/AUTOVON NUMBER (870) 886-1271 i. FREQUENCY (Min Per Day) 8 HRS/DY
 j. NO CIV(S) 1 k. NO MIL 1 l. NO CONTRACTOR(S) 1 m. NO LOC(S) 1 n. NO OTHER 1

SECTION 2.

HH STAFFING DATA

a. LAB HOODS 0 b. VAPOR DECREASERS 0 c. MAINTENANCE BAYS 0 d. SPRAY BOOTHS 0
 e. OPEN SURFACE TANKS 0 f. VENTILATION UNITS 0

SECTION 3.

SURVEY DATA

a. SURVEY DATE 1-25-2006 b. EVALUATOR (INITIALS) TLM

c. CONTROLS PRESENT	e. EVALUATION	d. UNIT CODE	f. CONTROLS REQUIRED	g. STATUS
OTH (DRILL HALL)	32-56 FTC ADEQUATE	FTC	50 FTC (20-50 nominal range)	ACCOM
OTH (SUPPLY ROOM)	54-91 FTC ADEQUATE	FTC	50 FTC (20-50 nominal range)	ACCOM
OTH (KITCHEN)	45-85 FTC ADEQUATE	FTC	50 FTC (20-50 nominal range)	ACCOM

h. PERSONAL PROTECTIVE EQUIPMENT (R=REQUIRED; A=AVAILABLE)

1. RESPIRATOR

DISPOSABLE

☒ FACE AIR PURIFYING
☒ FACE AIR PURIFYING
 FULL FACE AIR PURIFYING
 POWERED AIR PURIFYING
 AIRLINE
 SELF-CONTAINED
 ABRASIVE BLASTING HOOD

MANUFACTURER

MOSHTC NO

R/A

2. GLOVES	R/A	3. EYES/FACE	R/A	4. HEARING	R/A	5. BODY	R/A	6. HEAD/FOOT	R/A
ACID	/	CHEMICAL/SPLASH	/	MUFFS	/	APRONS	/	HARD HATS	/
OIL	/	SAFETY/IMPACT	/	EARPLUGS	X/X	COVERALLS	/	IMPERMEABLE BOOTS	/
SOLVENTS	/	CHEMICAL/SAFETY	/	CANAL CAPS	/	FULL BODY SUIT	/	SAFETY CONDUCT SHOES	/
HOT SURFACES	/	FULL FACE SHIELD	/	HELMETS	/	SAFETY BELT/HARNES	/	SAFETY/NONCONDUCT	/
COLD SURFACES	/	WELDING HELMET	/			HEAT REFLECT VEST/SU	/	TIVE SHOES	/
NBC AGENTS	/					BDUs	X/X		

SECTION 4.

HAZARD INVENTORY DATA

a. CAS CODE	b. HAZARD DESCRIPTION	c. PAC & EPC	d. MEDICAL SURVEILLANCE RECOMMENDED (YES or NO)
7439-92-1	LEAD, INORGANIC DUSTS, AS PB	2B	NO

SECTION 5 PERSONNEL

[illegible]

SECTION 2-4

COMMENTS add blank sheet of paper if necessary
IN THE PROCESS OF

- NEW UNIT WAS ^{IN THE PROCESS OF} BEING MOVED INTO ARMORY. MUCH OF THE AREA WAS VACANT OF FURNITURE AND EQUIPMENT.
- SGT HAYS WAS GOING TO BE THE READINESS NCO OF ARMORY.
- NO EXHAUST VENTS IN THE RESTROOMS - ARMORY.
- NOISY EXHAUST VENT IN MOTOR POOL STORAGE ^{→ Bldg.} RESTROOM

PRIVACY ACT STATEMENT

THIS IS U.S. Code, Section 301; Executive Order 13526 authorizes the use of your Social Security Number as a identification number. The purpose of this information is to identify and monitor data relating each VA civilian employee exposed to a hazardous substance. This information is to provide database of exposure for any other location.

Disclosure of your Social Security Number

PRIVACY ACT STATEMENT

BEST AVAILABLE COPY

FOIA Requested Record # A45-0096 (AR)

**MATERIAL SAFETY DATA SHEETS
(MSDS)**

INDEX

TAB A - - -	Hazard Communication 29 CFR 1910.1200 (Standard) AR ARNGR 385-5 (Program)	
TAB B - - -	Floor Finish, Non-buffing Floor Finishes Sealer Surface Floor Water Emulsion Floor Polish Remover	7930-01-183-8585 7930-00-298-1947 8010-00-530-8371 7930-00-045-6912
TAB C - - -	Sand Base Sweeping Compound	7930-00-132-5265
TAB D - - -	Dishwashing Compound Dishwashing Soap Hand Simple Green Toilet Soap Detergent Pine Oil Detergent, General Purpose (Wipe-Off) Glass Cleaner	7930-00-899-9534 7930-00-880-4454 7930-01-306-8369 8520-00-228-0598 6840-00-687-7904 7930-00-926-5280 7930-00-664-6910
TAB E - - -	Windshield Cleaner	6850-00-926-2275
TAB F - - -	Metal Polish Plastic Polish (Anti-Static Cream)	7930-00-266-7137 7930-00-935-3794
TAB G - - -	Vinyl Cement (Adhesive) Tile Adhesive	8040-01-340-1575 8040-00-558-4050
TAB H - - -	Corrosion Preventive	8030-00-251-5048
TAB I - - -	Insect Block Repel Lotion Chigg-Away Insect Repellent (Cutter Evergreen) Insecticide, government Issue	6840-01-288-2188 6505-01-137-8456 6840-00-142-8965 6840-01-067-6674
TAB J - - -	Silicone Lube	9150-00-N08-4104
TAB K - - -	Antifreeze, Ethylene Glycol	6850-00-181-7933
TAB L - - -	Silicone Brake Fluid	9150-01-102-9455
TAB M - - -	Lubricating Oil, General Purpose Lubricating Oil	9150-00-273-2389 9150-00-889-3522
TAB Mc- - -	Penetrating Oil Type II	9150-00-529-9718

**MATERIAL SAFETY DATA SHEETS
(MSDS)****INDEX**

TAB N - - -	Motor Oil 15W/40	9150-00-N00-6533
	Motor Oil 15W/40	9150-01-178-4726
	Motor Oil 15W/40	9150-00-186-6709
TAB O - - -	Dextron II (Automatic Transmission Fluid)	9150-00-698-2382
	Dextron III (Automatic Transmission Fluid)	9150-00-N05-7511
TAB P - - -	2-Cycle Engine Oil (50-1)	9150-00-117-8791
	Motor Oil GL 80W/90	9150-01-035-5393
TAB Q - - -	Decon Training & Refill Kits	6910-01-101-1768
TAB R - - -	Plastic Pipe Primer	8010-00-N03-9406
TAB S - - -	Olive Green Spray Paint	8010-00-584-3149
		8010-00-598-5936
		8010-00-936-8367
	Flat Black Spray Paint	8010-00-582-5382
	Black Spray Paint	8010-00-910-8154
	Red Spray Paint	8010-00-721-9743
		8010-00-935-7064
	White Spray Paint	8010-00-584-3150
	Gray Spray Paint	8010-00-721-9749
	Fluorescent Spray Paint	8010-00-958-8148
	Brown Spray Paint	8010-01-229-7544
	Deck Gray, Enamel	8010-00-527-0216
	Alum. Spray Paint	8010-00-721-9751
TAB T - - -		
TAB U - - -		
TAB V - - -		
TAB W - - -		
TAB XYZ - -		



TEST REPORT
Page 1 of 2
2/10/06

Submitted To: **Non-Responsive**
Associates
1503 Zaiger Drive
Colorado Springs, CO 80915

Reference Data:	Lead
Client Sample No.:	M03306 through M04506
P.O. No.:	Not Available
Sample Location:	Rector Armory
Sample Type:	Ghost Wipe
Method Reference:	3050B/6010B
DCL Set ID No.:	06-S-0351
DCL Sample ID No.:	06-01851 through 06-01863
Sample Receipt Date:	1/27/2006
Preparation Date:	01/27/06
Analysis Date:	01/27/06

The samples were prepared in accordance with EPA method 3050B. Sample condition was acceptable upon receipt except where noted. The samples were then analyzed in accordance with EPA method 6010B using a Perkin Elmer 3000XL (ICP) purged spectrometer.

The results are provided in the enclosed data table. Results relate only to the items tested and are not blank corrected unless indicated in the data table.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Non-Responsive

Analyst

Non-Responsive

Reviewer

CINCINNATI OFFICE
4388 GLENDALE-MILFORD ROAD
CINCINNATI, OHIO 45242-3708
513 733-5336, FAX 513 733-5347

WEST COAST OFFICE
11 SANTA YORBA COURT
NOVATO, CALIFORNIA 94945
800 280-8071, FAX 415 893-9469

TEST REPORT
Page 2 of 2
06-S-0351

Results Lead

Client #	DCL #	Total Area (ft ²)	µg/Wipe	µg/ft ²
M03306	06-01851	0.69	ND	<14.
M03406	06-01852	0.69	130.	190.
M03506	06-01853	0.69	ND	<14.
M03606	06-01854	0.69	56.	81.
M03706	06-01855	0.69	26.	38.
M03806	06-01856	0.69	14.	20.
M03906	06-01857	0.69	ND	<14.
M04006	06-01858	0.69	ND	<14.
M04106	06-01859	0.69	58.	84.
M04206	06-01860	0.69	32.	46.
M04306	06-01861	0.69	19.	28.
M04406	06-01862	0.69	ND	<14.
M04506	06-01863	0.69	ND	<14.
	Prep Blank 1		ND	
% Recovery	LCS 1		91.	
% Recovery	LCS 2		92.	
RPL			10.	

ND = not detected at or above the reporting limit (RPL).

LCS = laboratory control sample.

Non-Responsive

Analyst

Non-Responsive

Reviewer



**DATA
CHEM**
LABORATORIES, INC.

ANALYTICAL REQUEST FORM

☒ **REGULAR** Status (5 working days from receipt)

☐ **RUSH** Status Required - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____

DATE _____

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES

Date 1-25-06 Purchase Order No. Non-Responsive
Company Name Non-Responsive & Associates
Address 1503 ZAIGER DRIVE
Colorado Springs CO 80915
Person to Contact Non-Responsive
Telephone (719) 510-9519
Fax Telephone (509) 757-4848

Quote No. _____
Sample Collection _____
Sampling Site RECTOR ARMORY
Industrial Process Administrative
Date of Collection 1-25-06
Time Collected 12:45 - 2:30 PM
Date of Shipment 1-25-06
QC Requirements Non-Responsive
Collect Non-Responsive
Signature Non-Responsive

Billing Address (if different from above)

MR Non-Responsive
ARMY NATIONAL GUARD, COLLEGE
PARK, GA

REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Media Type	Sample Volume (Liters)	ANALYSES REQUESTED - Use Method Number if Known
01851	M03206	GHASE	10" X 10"	LEAD, WEST END FLOOR, DRILL HALL
01852	M03406	"	"	" ; VAULT FLOOR
01853	M03506	"	"	" ; PORTABLE METAL CART, SHELF
01854	M03606	"	"	" ; Chair hauler surface
01855	M03706	"	"	" ; middle furnace run shelf
01856	M03806	"	"	" ; Kitchen Floor underneath right end table
01857	M03906	"	"	" ; Rear wall left side ice maker & rollup door
01858	M04006	"	"	" ; Left side Southwest Drill Hall wall
01859	M04106	"	"	" ; Plt room book shelf from west wall
01860	M04206	"	"	" ; Plt room entrance right room right side
01861	M04306	"	"	" ; Orderly room return air vent
01862	M04406	"	"	" ; Drill hall north floor next to policy board
01863	M04506	"	"	" ; BLANK

CHAIN OF CUSTODY

Signature <u>Non-Responsive</u>	Date / Time <u>1/25/06 15:00</u>	Received by: <u>Non-Responsive</u>	Date / Time <u>1/25/06 16:31</u>
Signature _____	Date / Time _____	Signature _____	Date / Time _____

4388 Glendale Milford Road / Cincinnati, OH 45242 • 800-458-1483 or 513-733-5336 / Fax: 513-733-5347

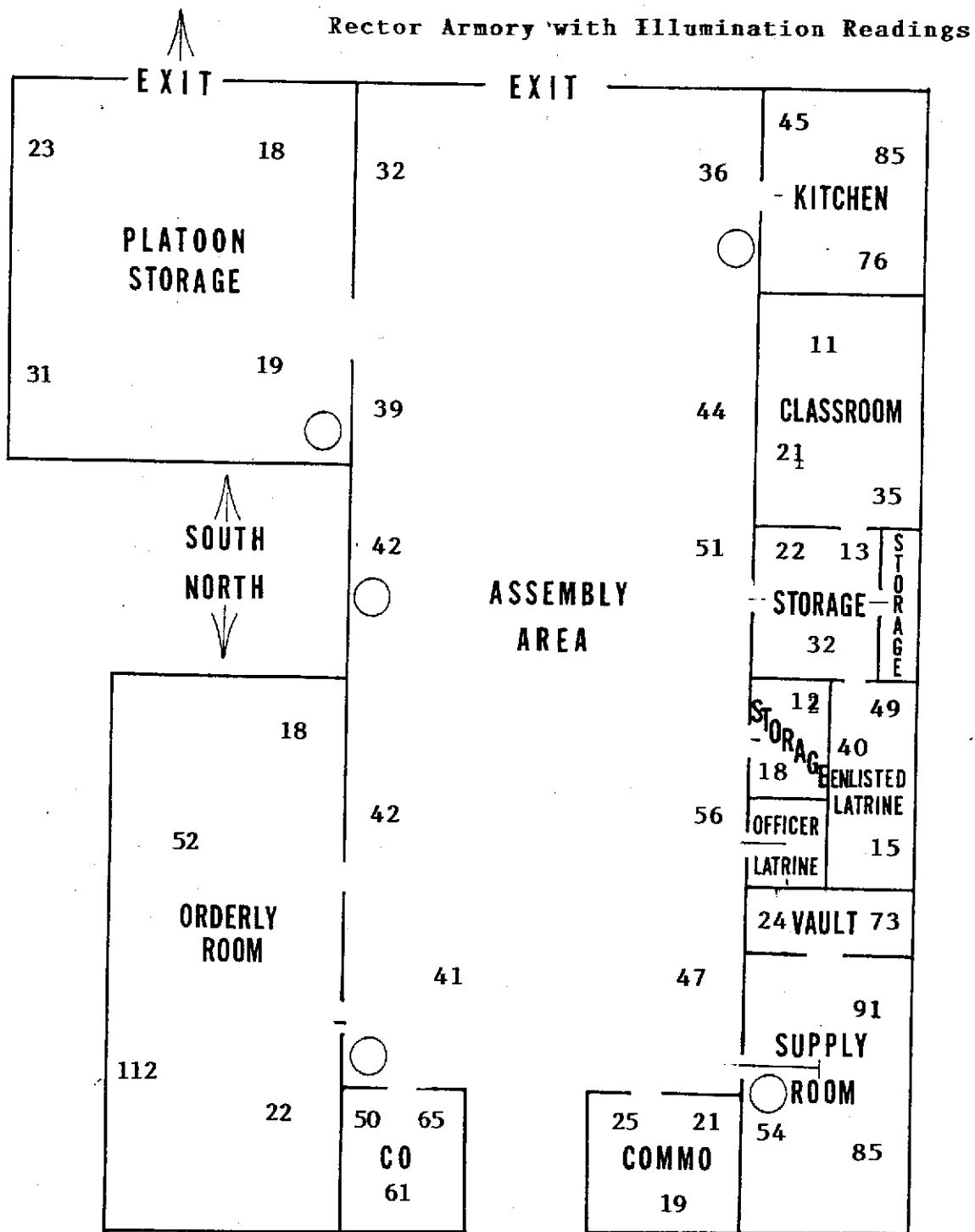
DISTRIBUTION:

WHITE - LABORATORY COPY

GRAY - CUSTOMER COPY

Enclosure 4**Rector Armory****SUBJECT: Personnel Roster**

<u>NAME</u>	<u>RANK</u>	<u>POSITION</u>	<u>UNIT</u>
Non-Responsive	1SG	Readiness NCO	Company A. (-), 153 Infantry Battalion
	SGT	Assistant NCOIC	Company A. (Det. 1), 153 Infantry Battalion
	SFC	Recruiter	Recruiting Command



Enclosure 6

Recommendations:

- a) Conduct semi-annual inventories and update MSDS's on all chemicals in the facility. (RAC 3)
- b) Replace the fluorescent tubes/bulbs in the small storage room, the restrooms, the orderly room, the platoon storage room, and the motor pool storage area and the restroom. Also, ensure that all facility light covers are wiped down and cleaned to increase illumination levels. (RAC 3)
- c) Due to the lighting readings in the classroom, increase the illumination levels to at least 100 FC's (50-100 nominal range). (RAC 3)
- d) Due to the lead dust wipe results, it is recommended that the vault floor, the portable kitchen fan, the Indian Chief stand, and the top of refrigerator be thoroughly wiped down and or wet mopped with an industrial cleaner using tri-phosphates, Mr. Kleen or Spic-n-Span. For additional lead cleaning measures, see enclosure 7. (RAC 3)
- e) Change out furnace filters monthly. (RAC 3)
- f) Submit a work order to repair the noisy exhaust fan in the motor pool storage building restroom. Add exhaust ceiling fans to the armory restrooms. (RAC 3)
- g) Perform monthly checks on fire extinguishers. Each month, ensure that the devices are turn upside down and tapped with a rubber mallet to loosen any material at the bottom. (RAC 3)
- h) If work practices change, a new assessment should be made on the controls in place.

6. Armory Cleanup.

6.1 High Test Result.

6.1.1 If the public utilizes your facility and the results came back above 40 ug/ft² you are responsible for cleaning this area and adjoining areas to meet the 40 ug/ft² or less.

6.1.1.1 Unless you can guarantee no children under the age of 7 will come into your facility.

6.1.1.2 Unless your state public health has other guidance, e.g., post signage to warn personnel who are pregnant or of child bearing age, or under the age of 7 y/o.

6.1.1.3 Signs stating "No smoking, drinking or eating, application of make-up without washing of hands prior to activity."

6.2 Cleaning of Building. Before proceeding into the cleanup mode, first, discuss with your Environmental office what procedures they would recommend and then coordinate your efforts with local agencies, if warranted.

6.2.1 The building, and dusty materials and equipment in it should be cleaned one time to reach the dust lead levels appropriate for the function of this facility, e.g., used by full-time personnel only, utilized by adults or children 7 y/o, or ^{over} ~~order~~ children only, or utilized by pregnant individuals and/or children under the age of 7. NOTE: This type cleaning implies that this is not a facility that has an active Indoor Firing Range. For facilities with active ranges, these facilities should be monitored with wipe samples taken over the drill floor area by the Range Custodian quarterly, to ascertain the level of lead is at the required level for your particular facility and situation.

6.2.1.1 This cleanup can be accomplished using a HEPA vacuum (a very tedious and long operation) and then by utilizing a wet method with "Spic n Span" or something equivalent to this detergent - using wet rags to wipe down surfaces and mops soaked in this solution to do floor area. NOTE: Personal protective gloves, rubber boots or protective disposable shoe/boot covers should be used during this procedure and personnel's

clothing should be washed separately from their families, if they have young children at home. Personnel should wash their hands after performing this operation to assure lead contaminants are not ingested.

6.2.1.2 Frequent changing out of the water used is vital. Disposal of this hazardous waste water and rags/mop heads, Personal Protective Equipment (PPE), etc., should be coordinated with your Environmental office.

6.2.2 Clean all ductwork where lead was found. EPA has a protocol specifically for replacing or cleaning lead in dust form in HVAC systems. EPA Office of Pollution Prevention and Toxics, "*Reducing Lead Hazards When Remodeling Your Home*" www.epa.gov/opptintr/lead/rrpamph.pdf.

6.2.3 Continue to enforce good housekeeping and hygiene practices. These measures make good sense to minimize exposures to any toxic chemicals in the workplace.

6.2.4 Provide lead awareness training to the general workforce and any occupants of your facility.

NOTE: Before you start any new procedures or practices be aware of the local city and state regulations in your area.

ARMORY**CLEANUP & FOLLOW-UP HOUSEKEEPING
RECOMMENDATIONS****Materials Needed:**

1. Cloth Mop head (s) & Mop head holder(s) with handle.
2. Mop bucket (s) with wringer.
3. Clean cotton rags and sponges.
4. Disposable gloves
5. Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water.
6. Disposable overshoes or rubber boots. Personnel conducting cleaning operations should not take clothes, boots, etc., home for laundering.
7. HEPA vacuum
8. Six (6) mill plastic bags to dispose of waste.
9. Waste water containers.

Disposal of Waste Water and Cleaning Materials:

1. **NOTE:** Consult with Local Army National Guard Environmental Office prior to taking any collection, disposal or wiping activities commence. Each state and territory may have additional regulatory guidance on collection, storage and disposal of wastewater.
2. Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: thorough cleaning of mop heads may be sufficient enough to reuse on future Armory cleanups but check with local Environmental Office.
3. Disposable gloves should be treated as hazardous waste.
4. Soiled cotton rags should be treated as hazardous waste.
5. Wash water contaminated with Lead can be collected and allowed to slowly evaporate leaving Lead deposits/sludge that may be collected in plastic containers, placed in metal drums, and stored for future delivery to an authorized hazardous waste disposal site.

- a. Drums shall be properly labeled to identify contents In-Accordance With (IAW) Federal, State and local regulatory guidance.
- b. Disposal of containerized waste shall be coordinated IAW State hazardous waste program requirements.
- c. The Environmental Office shall coordinate removal and disposal of all containerized hazardous waste through established waste streams.

Post-Cleanup Precautionary Measures:

1. Thoroughly wash hands with soap and water.
2. Rinse off rubber boots with soap and water, capturing wastewater for collection into established waste stream. If personnel choose to use over shoes for protection, dispose of overshoes into waste stream. **NOTE: This recommendation is for initial clean up activities and PPE requirements may be reduced after it has been determined non-hazardous levels have been achieved.**
3. **Wash** BDU's or personal clothing **separately** from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. **Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted**

Initial Armory Cleanup:

1. Use a vacuum cleaner equipped with a HEPA exhaust filter. HEPA vacuum all surfaces in the room (ceiling, walls trim, and floors). Start with the ceiling and work down, moving toward the entry door. **Completely clean each room before moving on.**
2. Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

3. Wet wipe, with cotton rags or sponge, any horizontal, diagonal or vertical surfaces up six (6) feet from floor surfaces using hot water and "Spic-n-Span" or an equivalent product.
 - a. Rinse out cleaning cloths thoroughly and frequently.
 - b. Change out cleaning water as necessary.

NOTE: If walls to be cleaned show signs of deterioration, e.g., chipping or crumbling paint, in which wiping, scrubbing, or disrupting might potentially increase or spread contamination, then this portion of the clean up should be avoided.

4. Now prepare water and detergent (e.g. Spic N Span, Mr. Clean, Pine Sol) for the mopping phase, according to manufactures recommendations, which should be found on the products label for general clean up.
 - a. Change out water frequently (when water appears dirty)
 - b. Rinse out mop heads frequently to prevent contamination of dirty water.
5. Cover entire drill floor surface with above prescribed water and detergent.
6. Final rinse should be with clean water only - -after mop heads have been cleaned.

Recommended Follow-up Housekeeping Practices after Clearance sampling of cleared area is performed by certified personnel:

1. Floor cleaning and dusting should be accomplished using the wet method described in Initial Armory Cleanup SOP.

Note: Only exception to these wet cleaning procedures would be the use of a chemically treated dust floor mop. This can be used for follow-up armory cleaning by sweeping of large particles of dirt and paper.

- a. Pre-treated (chemically treated) dust floor mop will limit dust particles from being disbursed into the surround atmosphere.

- b. If treated dust mop is used - -Do Not Shake Mop head - - have mop head laundered after use. Always keep used dust mop heads in sealed double plastic bags when stored at armory/facility. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
2. Frequency of Cleanup- Armories will vary, according to usage and how often they should be cleaned. The following general cleaning schedule is provided:
 - a. Only full-time technicians and traditional soldiers using facility during the month. (*Cleaned Monthly*)
 - b. Occasional activities taking place during the month, e.g., 1-2 classes or volleyball games, etc. (*Cleaned 2x's Monthly*)
 - c. Used regularly by soldiers or outside agencies/personnel. (*Cleaned Regularly - -at least Weekly*)

NOTE: Armories with adjoining Indoor Firing Ranges (IFR) should be cleaned more than weekly, again depending on use of Armory and IFR.

NOTE: Clearance sampling/testing is to be accomplished by certified personnel after these cleanup procedures are followed. If the area is an average Armory, occupied by adults only, for which you are cleaning and is **not a Converted IFR space**, you may continue to utilize the Armory space before the officials re-test this space. Please notify your Safety and/or Occupational Health personnel of the completion of this cleaning regime and they will notify the proper officials of the sampling/testing requirements needed.

If work is contracted out, a third party should do the clearance sampling.

Young children and females who are pregnant, there should be posted signs on all facilities, warning of the potential danger of exposure to lead dust.

Enclosure 8**REFERENCES:**

- a) Title 29, Code of Federal Regulations (CFR) Part 1910, Occupational Safety and Health Administration (OSHA).
- b) ARNG PAM 385-16, Guidelines for Converting Indoor Firing Ranges to Other Uses, 31 January 1994.
- c) NGR 385-15, Policy and Responsibilities for Inspection/Evaluation and Use of National Guard Indoor Firing Ranges.
- d) Army Regulation (AR) 40-5, 15 October 1990, Medical Service, Preventive.
- e) AR 11-34, 15 February 1990, The Army Respiratory Program.
- f) AR 385-10, 23 May 1988, Army Safety Program.
- g) FC-Reg. 385-2, 1 July 1999, Ionizing and Nonionizing Radiation Protection Program
- h) Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- i) Technical Bulletin Medical (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program.
- j) Technical Bulletin Medical (TB MED) 530, 1 January 1991, Food Service Sanitation
- k) National Guard Regulation (NGR) 385-10, 20 December 1989, Army National Guard Safety and Occupational Health Program.
- l) Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- m) IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.

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Enclosure 9



Photo No.1



Photo No.2



Photo No.3

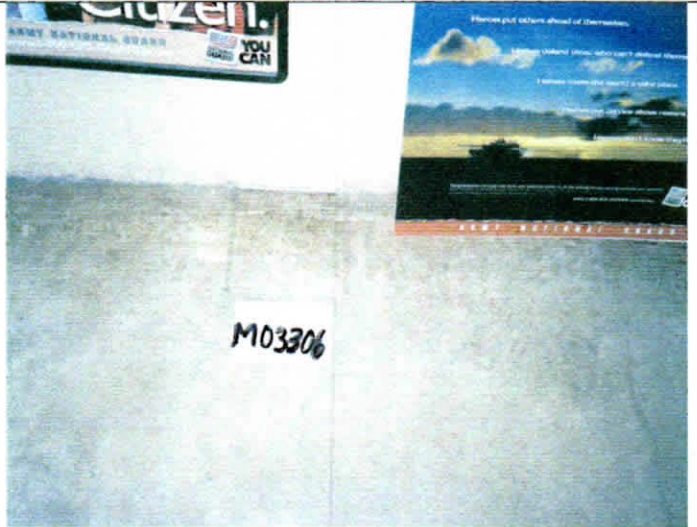


Photo No.4



Photo No.5



Photo No.6



Photo No.7



Photo No.8

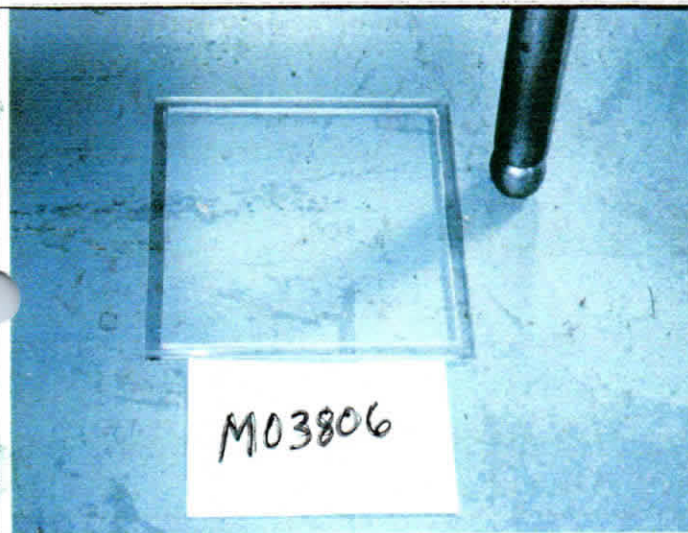


Photo No.9

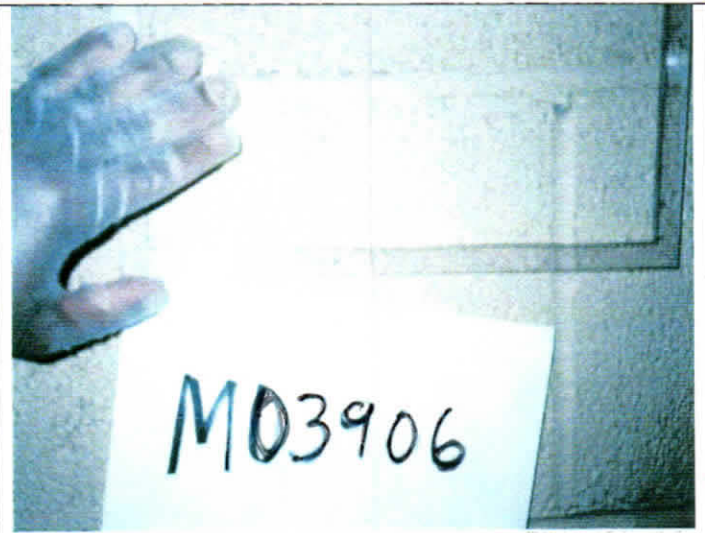


Photo No.10



Photo No.11

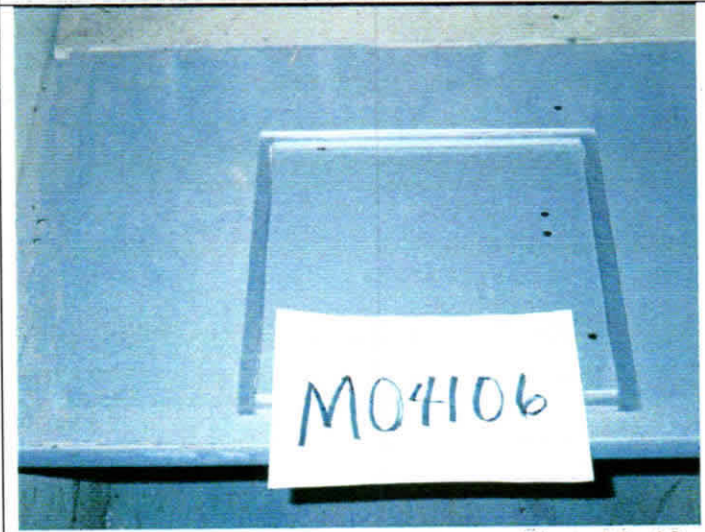


Photo No.12

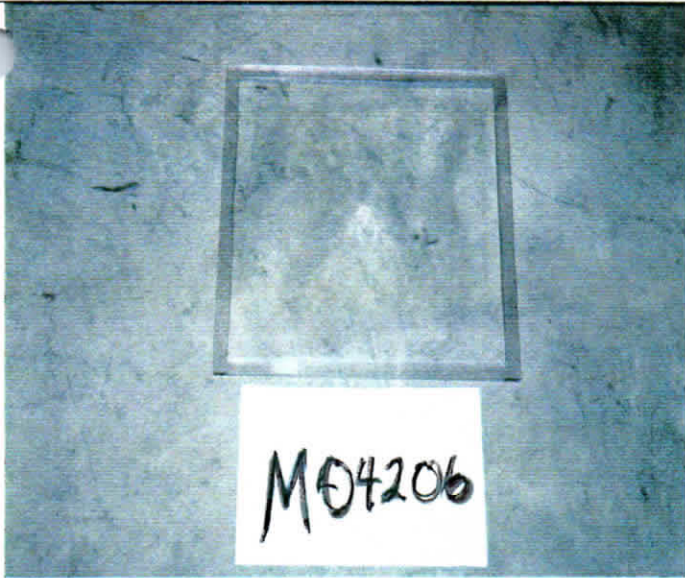


Photo No.13



Photo No.14

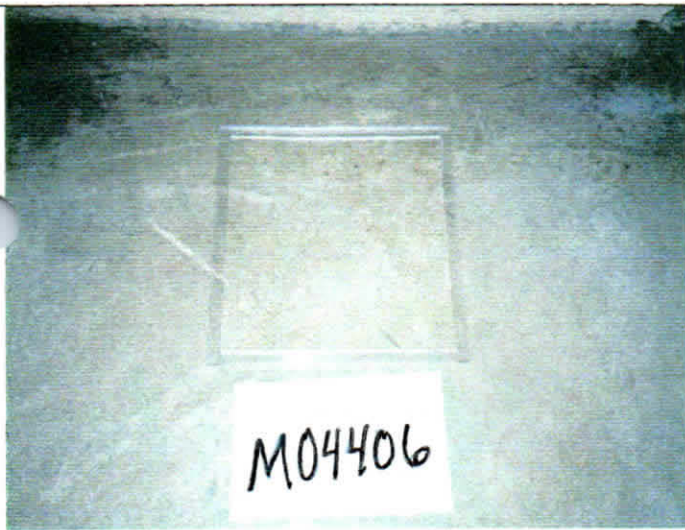


Photo No.15

DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349

NGB-AVN-SI

December 19, 2003

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG, ATTN.: State Safety and Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

SUBJECT: Transmittal of the Survey Reports for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory, in Arkansas.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.
- b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.
- f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, 10 December 1998, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2001, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.

NGB-AVN-SI

SUBJECT: Transmittal of the Survey Reports for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory, in Arkansas.

j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.

k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.

l. Report Survey dated 8 October 2003, Industrial Hygiene Survey, Mr. [Non-Responsive]

[Non-Responsive] New Orleans, LA.

2. General.

a. At the request of the AR ARNG Safety and Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling of the for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory in Arkansas.

b. The surveys were conducted by Mr. [Non-Responsive] 5400 Milne Blvd, New Orleans, LA.

3. Findings. All Health Hazard Information is on the survey findings of the report. (See enclosure 1)

4. Recommendations.

- a. Follow all recommendations made in reference 1.l., requesting industrial hygiene (IH) services where needed to complete the recommendations.
- b. Control water infiltration in the armory and/or replace or repair damaged surfaces or components (ceiling and floor tiles). Building conditions that present IAQ concerns or problems not only exacerbates normally minor health issues but also tend to promote or accelerate building deterioration.
- c. The recommendations given in the comment section and data collected will serve as a baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY-04. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY-04 IHIP.
- d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present survey, especially if this will help eliminate health hazards and reduce medical surveillance cost.

NGB-AVN-SI

SUBJECT: Transmittal of the Survey Reports for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory, in Arkansas.

- e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
 - f. Give special consideration to cleaning light fixtures, increasing the wattage and painting walls a lighter color when upgrading the lighting in the facility.
5. If additional information is needed about the industrial hygiene survey or air sample results, please contact Mr. **Non-Responsive** Regional Industrial Hygienist, NGB-AVN-SI, 1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

NBG-AVN-SH

State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl
as

BASELINE INDUSTRIAL HYGIENE SURVEY FOR:

CO B (-) 875th Engineer Battalion

RECTOR, AR

Conducted: 8 October 2003

ATTN: SFC [Redacted]
600 East 9th Street
Rector, AR 72461

PREPARED BY:

Non-Responsive

5400 Milne Blvd,
New Orleans, LA 70124-1826
(504) 488-6489

CONTENTS

- 1. INTRODUCTION**
- 2. INSTRUMENTATION**
- 3. FINDINGS**
- 4. RECOMMENDATIONS**
- 5. REFERENCES**

Attachment 1: Schematic of the Armory

Attachment 2: Photographs of the facility

Attachment 3: Laboratory Reports: Lead Swipes

Attachment 4: HHIM Field Survey Form(s)

1. INTRODUCTION

At the request of the National Guard Bureau South Region Industrial Hygiene Office **Non-Responsive** performed a Baseline Industrial Hygiene Survey at the Army National Guard Rector, AR Armory. The purpose of the survey was to establish a baseline to evaluate health hazards, identify controls present in the work site, collect lead swipe samples from the renovated/inactive or closed Indoor Firing Ranges (IFR), perform an illumination survey and make recommendations regarding health hazards associated with the work at the Rector, AR Armory.

The building was completed in 1957 with approximately 9,081 square feet. There has never been an IFR at this facility. The facility houses Co B (-) 875th Engineer Battalion with 2 FTS and 50 total assigned.

The full-time personnel are assigned to perform administrative duties Monday thru Friday from 0730 to 1600. The facility contains administrative areas, a drill hall, classrooms, supply room, kitchen, weapons vault, dispatch and retention offices, break area, latrines and locker rooms. A schematic can be found at Attachment 1.

The facility was visually examined and personnel consulted to assess potential hazards present. Lead samples were taken in the drill hall where weapons are cleaned two to three times a year. An illumination survey was performed throughout the facility.

2. INSTRUMENTATION/CALIBRATION

An Extech DLM2 Light Meter, SN # L374324, Calibrated 7/10/03, was used to conduct the illumination survey. It was operated according to the manufacturer's recommendations.

3. FINDINGS

ILLUMINATION

Light readings were taken in various locations throughout the facility with emphasis at desks and/or work stations. The results were compared to guidelines recommended by the Illuminating Engineering Society (IES) and NGB Design Guide 415-1. The results of the survey are shown in Table 1.

Table 1 – Light Readings

Location	Light Reading (foot candles)	IES Recommendation (foot candles)
Orderly Room	4 readings – Avg 79.85	50-100
Recruiting Office	67.2	50-100
Platoon Storage	2 Readings – Avg 17.4	20
Assembly Hall	3 Readings – Avg 69.16	30
Kitchen Serving & Scullery	52.8	30
Kitchen Preparation	90.2	70
Classroom	2 Readings – Avg 88.9	70
Storage	61.2	20
Supply Room	2 Readings – Avg 84.6	50-100
CO's Office	72.7	50-100

ADMINISTRATION

Personnel perform administrative duties that consist of reading, handling and generating paper work. Computer use comprises two to six hours of the work day. This continuous use of computers can lead to eye strain and/or hand/wrist and shoulder soreness.

MOTOR POOL

Only operator maintenance, Prevention Maintenance Checks and Services (PMCS) is performed at the armory. No repair service is performed. When repairs are needed the vehicles are taken to the OMS shop.

ASSEMBLY HALL

The assembly hall is located in the center of the building. It is used primarily as an assembly area. Weapons are cleaned two to three times a year near an open bay door.

LEAD CONTAMINATION

There has never been an IFR at this facility but lead samples were taken in the drill hall to determine if there was any contamination from other activities.

TABLE 2

SAMPLE NUMBER	SAMPLE LOCATION	RESULTS
REC Blank	Assembly Hall	<10 ug/sq ft
REC 1	Assembly Hall	<10 ug/sq ft
REC 2	Assembly Hall	<10 ug/sq ft
REC 3	Assembly Hall	<10 ug/sq ft
REC 4	Assembly Hall	<10 ug/sq ft
REC 5	Vault	<10 ug/sq ft

No results were greater than the EPA recommended concentration limit of 40 ug/sq foot.

WEAPONS VAULT

The Rector, AR Armory has a weapons storage vault located in the Supply Room. Accountability and weapons issuing are performed in this area. There are no weapons cleaned in the area.

HAZCOM

MSDSs were available for chemicals used.

ERGONOMICS

Many workstations were not set up to provide neutral postures and appropriate ergonomically correct positions. Consideration should be given to providing all those full-time employees who spend the majority of their time working at a computer terminal ergonomic training to increase awareness of preventive measures. This training should include the importance of proper posture, recommended exercises, and proper set-up of workstations.

SAFETY AND HEALTH

No findings.

4. RECOMMENDATIONS

ILLUMINATION:

Upgrade lighting as required. Lighting can be upgraded in the following ways:

- Replace blown or broken lighting.
- Paint walls a lighter color.
- Clean existing light fixtures.
- Rearrange furniture to make better use of available lighting.
- Provide supplemental lighting.

LEAD SAMPLES

No recommendations

HAZCOM

Personnel exposed to chemicals should receive initial and annual HAZCOM training.

ERGONOMICS

Complete an ergonomics survey on all work stations and conduct ergonomic training for employees who spend the majority of their time working at a computer terminal.

SAFETY AND HEALTH

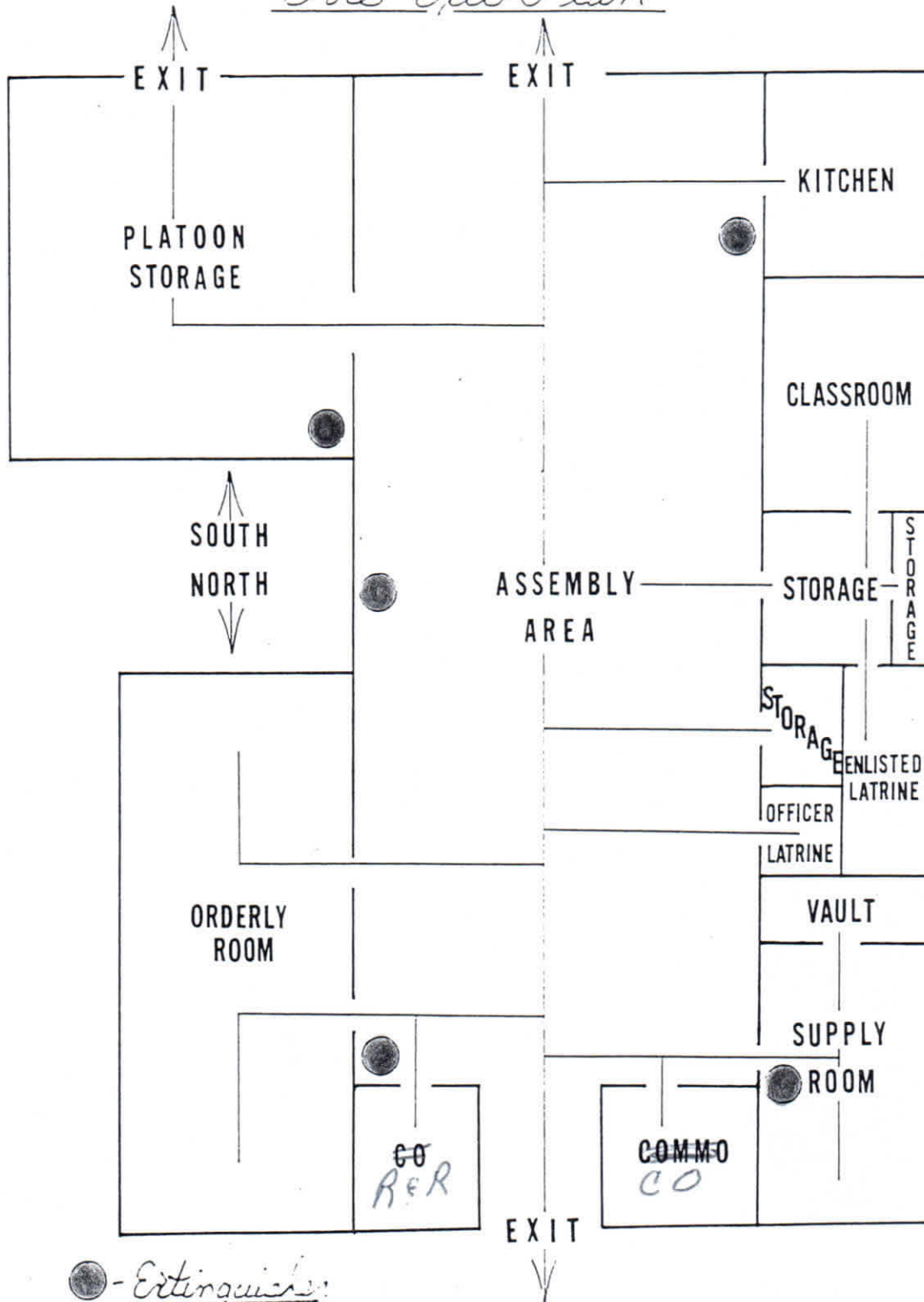
No recommendations.

5. REFERENCES

- Guide to Occupational Exposure 2000, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- American National Standards Institute (ANSI), Illuminating Engineering Society (IES), Industrial Lighting 1991.
- National Institute for Occupational Safety and Health (NIOSH), (76-130), Technical Information, Lead Exposure and Design Considerations for Indoor Firing Ranges GPO, 1975.
- Title 29, Code of Federal Regulations (CFR). 1999 revision, Part 1910. Occupational Safety and Health Standards
- AR 40-5, Preventative Medicine, 15 October 1990.
- AR 385-10, The Army Safety Program,
- National Safety Council, Fundamentals of Industrial Hygiene, 4th Edition, 1996.
- NGB Pamphlet 385-16, Safety Guidelines for Converting Indoor Firing Ranges to Other Uses.
- TB Med 503, The Army Industrial Hygiene Program, February 1985.
- Department of the Army Pamphlet 40-501, August 1991, Hearing Conservation.
- Title 29 CFR, Part 1910.1200, The Hazard Communication Standard.
- NGB Design Guide 415-1
- Title 40 CFR, Part 745.220-238

Rector, AR

Fire Exit Plan



● - Extinguishers

REFLECTOR

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EMSL Analytical

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3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-9551 Email: @emsl.comAttn: 

Inc.

5400 Milne Blvd. (Cell Phone 504-578-6017)

New Orleans, LA 70124

Fax: (504) 488-6489

Phone: (504) 488-6489

Project: REC

Customer ID: TOMO77

Customer PO:

Received: 12/05/03 12:07 PM

EMSL Order: 200314012

EMSL Project ID:

Lead in Wipes by Flame AAS (SW 846, 7420)

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Analyzed</i>	<i>Area Sampled</i>	<i>Lead Concentration</i>
REC Blank	0001	12/9/03	n/a	<10.0 µg/wipe
REC 1	0002	12/9/03	144 in ²	<10.0 µg/ft ²
REC 2	0003	12/9/03	144 in ²	11.0 µg/ft ²
REC 3	0004	12/9/03	144 in ²	<10.0 µg/ft ²
REC 4	0005	12/9/03	144 in ²	<10.0 µg/ft ²
REC 5	0006	12/9/03	144 in ²	<10.0 µg/ft ²


Non-ResponsiveLaboratory Director
or other approved signatory

The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA, unless specifically indicated otherwise in the comment section.

ACCREDITATIONS: NJ-NELAP: 04653, AIHA Environmental Lead Laboratory Approval Program: 100194

Date Printed: 12/9/03 11:13:32 AM

Front page

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ACO ADM DSA LAB LCK
RAD ECB EPL SPR WEL

Back page

Serial	Description
	adequate lighting
	Extended Computer Use

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Administrative work with extended computer.

(comments continued on attached)



NATIONAL GUARD REGION SOUTH
INDUSTRIAL HYGIENE OFFICE
510 PLAZA DRIVE, SUITE 1530
COLLEGE PARK, GA 30349

ARNG-CSG-P (40-5f)

Aug 30, 2010

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG: ATTN: SFC [Non-Responsive]
[Non-Responsive] AR Army National Guard Armory, 1408 W 1st Street, Rogers AR 72756

Thru: LTC [Non-Responsive] Deputy State Surgeon, BLDG 15309 BOX 09, Camp Robinson,
NLR, AR 72199-9600.

SUBJECT: Transmittal of IH Survey of AR ARNG Rogers Armory, Rogers, AR.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 19 August 1998.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1996 rev.
- c. Army Regulation (AR) 40-5, Medical Service, Preventive Medicine, 25 May 2007
- d. AR 385-10, The Army Safety Program, 23 August 2007.
- e. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- f. National Guard Regulation (NGR) 385-10, Army National Guard Safety and Occupational Health Program, 23 May 2008.
- g. TB MED 503, The Army Industrial Hygiene Program, 30 October 2000.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2008, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 26th rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. Title 29, Code of Federal Regulations (CFR), 2001 rev., part 1910, Occupational Safety and Health Standards.
- k. National Guard Pam 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006

ARNG-CSG-P (40-5f)

Aug 30, 2010

SUBJECT: Transmittal of IH Survey of AR ARNG Rogers Armory, Rogers, AR.

1. Report dated August 2010, Industrial Hygiene Survey, Mr. **Non-Responsive** Fayetteville, GA.
2. General.
 - a. At the request of the AR ARNG Safety and Occupational Health Office, an Industrial Hygiene Baseline Survey was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling of the of the ARARNG Rogers Armory, Rogers, AR.
 - b. The survey was conducted by Mr. **Non-Responsive** 583 Ginger Cake Rd, Fayetteville, GA 30214.
3. Findings: The information that follows is based on the findings of the survey performed. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed (See ENCL 1). Operations of very short duration were not sampled due to the requirements of the sampling method. If the operation changes or if the length of the operation is increased, contact this office to schedule sampling if it is deemed needed then.
4. Recommendations. Understand that all findings documented in the enclosed report have been reviewed by the Regional Industrial Hygienist and the following recommendations are the ones to be followed.
 - a. Use the guidance given in the enclosed report as good IH practices, requesting industrial hygiene (IH) services where needed. The recommendations that follow are based on the survey findings as reported for the areas surveyed:
 - i. Ensure to perform semi-annual inventories and updates of MSDS's on all chemicals in the facility. Establish an inventory roll up sheet to be kept and evaluate the chemical inventory and update MSDS when new materials arrive and when old ones are replaced. Ensure employees attend annual Hazard Communication training. Ensure all hazardous materials are stored in appropriate locations **(RAC 3)**
 - ii. Ensure that weapon maintenance and cleaning is done in a well-ventilated area. Practice good personal hygiene by washing hands after handling and cleaning weapons and handling ammunition especially after live fire exercise. Ensure that the weapons are well cleaned before placing them back in the vault. **(RAC 2)**
 - iii. Ensure service is provided to the HVAC system, to provide preventive maintenance to the system to include filter change and periodic cleaning of air vents. **(RAC 3)**
 - b. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY2010. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2011 IHIP.

Aug 30, 2010

SUBJECT: Transmittal of IH Survey of AR ARNG Rogers Armory, Rogers, AR.

- c. Use the report to help in correcting all deficiencies noted.
 - d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.
 - e. Contact the State Occupational Health Office for any medical Surveillance that may be needed.
 - f. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
5. If additional information is needed about the industrial hygiene survey or air sample results, please contact Mr. **Non-Responsive** Regional Industrial Hygienist, NGB-ARS-IHSE, 1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF: NGB-ARS-IH

LTC **Non-Responsive** OHN/SRPO, State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl

as

Non-Responsive

**583 GINGER CAKE RD
FAYETTEVILLE, GA 30214
(770) 461-2684**

August 10, 2010

SFC **Non-Responsive**

AR Army National Guard Armory
1408 W 1st Street
Rogers AR 72756

RE: Baseline Industrial Hygiene Survey

FINAL REPORT
FOR
BASELINE INDUSTRIAL HYGIENE SURVEY

ARKANSAS ARMY NATIONAL GUARD

ROGERS ARMORY

ROGERS, AR

DATE:

AUGUST 10, 2010

PREPARED BY

Non-Responsive

**583 GINGER CAKE RD
FAYETTEVILLE, GA 30214
(770) 461-2684**

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1.0 INTRODUCTION

2.0 INSTRUMENTATION

3.0 FINDINGS

4.0 REFERENCES

Attachment 1 HHIM Forms

Attachment 2 Laboratory Reports: Deactivated Indoor Firing Range
Weapons Vault, Drill Hall
Laboratory Reports: A/C-Heating System Outlet Grills & Filter

Attachment 3 Weapons Vault and IFR Sampling Areas

Attachment 4 Photographs of the Facility

Attachment 5 Schematic Drawing of Facility

1.0 INTRODUCTION

At the request of the National Guard Bureau South Region Industrial Hygiene Office, **Non-Responsive** performed a Baseline Industrial Hygiene Survey at the AR ARNG Rogers Armory. The purpose of the survey was to perform a baseline survey to evaluate health hazards, controls present in the work site, collect lead swipe samples from renovated/inactive or closed Indoor Firing Ranges, Weapons Vault, A/C-Heating System, illumination survey and to make recommendations regarding health hazards associated with the work at the Rogers Armory.

The facility was built in 1970. Personnel reported that about one year ago some improvements were done to the building, including the installation of new ceiling tiles and repainting the armory. The kitchen equipment was removed and the space remodeled and converted to a break room. The facility houses the BTRY C 1 BN 142 FA. Personnel reported that there is another unit using the facility, B Co 217 BSB. Their offices were constructed at the front area inside the drill hall. The armory is used by the troops of the above mentioned units for one weekend drill a year.

The BTRY C 1 BN 142 FA with about 57 troops had four full time AGR personnel at the time of the survey. The AGR employees are assigned to perform administrative duties Monday-Friday 7:00am-3:30pm. The facility houses administrative areas, a drill hall, classroom, a supply room, two weapons vault, a break room, a weight room and a deactivated Indoor Firing Range. Personnel reported that there were no water leaks at the time of the survey. There is a metal building located at the rear of the building in the motor pool area. It is used to store equipment. A schematic drawing of the facility can be found in Attachment 5.

The facility was visually examined and personnel consulted to assess potential hazards present. Health Hazard Information Modules were completed. Illumination survey was performed throughout the facility.

2.0 INSTRUMENTATION/CALIBRATION

The following instrumentation was used to obtain light measurements. The instrument used has been calibrated and was operated according to the manufacturer's recommendations:

- EXTECH INSTRUMENTS Light Meter
- GHOST WIPES, Lead Wipes

3.0 FINDINGS

Illumination

Illumination levels were recorded in administration offices, classroom, the break room, the weight room, drill hall and the supply room. Light measurements were above IES guidelines throughout the facility. See Light Readings Table at the end of this section.

Administration

Personnel perform administrative duties that consist of reading, handling and generating paper work. Computer use comprises a large portion of the working day, four to five hours per day. This continuous use of computers can in the long run lead to eyestrain and hand/wrist soreness. Personnel reported no health problems associated with the job at this time. One personnel takes medication for hyper tension, otherwise healthy.

Motor Pool

The motor pool is located behind the building. It is not a large, about 4-6 vehicles, two 5T trucks and the rest HMMWV. It is fenced and locked. Operator level PMCS are performed before leaving to go to Ft. Chaffee on weekend drills. When major repairs are needed, the vehicles are taken to the shop facility in Ft. Chaffee.

Drill Hall

The Drill Hall is located towards the left side of the building. The Drill Hall has a drop-ceiling built under the roof. It is used for formation on the December weekend drill that is held at the facility. The drill hall is used to eat at that time. The tables are used and cleaned afterwards before they are stored. There were two HMMWV vehicles inside the Drill Hall the day of the survey. Personnel stated that they were there because they unloading equipment after the weekend drill trip to Ft. Chaffee. If a few weapons are used for competition, they are brought back to the armory and cleaned using plastic tables that are cleaned afterwards. The rags used are collected by the Supply NCO and returned to Ft. Chaffee for disposal. There are no air exhaust ventilation fans. The Drill Hall is occasionally rented for outside activities like parties and weddings. Renters bring their own food and are required to clean the area before they leave. One wipe sample was taken from the top of the coke machine in the Drill Hall. The lab results show no lead detected in this sampled area.

Kitchen

The equipment of the kitchen at the facility was removed. The area that comprised the dining room and the kitchen has been converted to a weight room and a break

room. Ceiling tiles were placed with A/C-heating added. The break room has a stove, refrigerator, microwave oven table with chairs and cabinets. The units eat at Ft. Chaffee on weekend drills.

Deactivated Indoor Firing Range

There is a deactivated Indoor Firing Range (IFR) at the facility. Personnel do not know exactly when it was cleaned. It is used now as a storage room. The day of the survey there were riding lawn mower, a fork lift, lots of metal lockers, metal shelves, wood boxes, water bottles and other equipment stored in the room. The backstop had been removed and the pit area filled with concrete. All lead samples were taken using a 10 inch by 10 inch template. The US environmental Protection Agency (EPA), under a new standard issued in 2000, considers lead dust as a hazard if levels are greater than 40 micrograms of lead in dust per square foot on floors. The National Guard Bureau recommends a limit of 200 micrograms per square foot for surface contamination. Three wipe samples were taken from the IFR. None of the three samples were above the clearance level of 200ug/ft². See table 1 for results. See attachment 3 for sampling locations.

Table 1

Sample Number	Sample Location	Results	
21	Top of first front metal locker, right side (Pit Area)	BRL	BRL
22	Floor below the first metal locker, left side(backstop-pit area)	21ug	30ug/ft ²
23	Top of large plastic container in the middle of room	25ug	36ug/ft ²
32	Blank	BRL	BRL

Weapons Vault

The Rogers Armory has two weapon storage vaults. One is located in the Supply Room of the BTRY C 1 BN 142 FA and the other in the Supply Room of the B Co 217 BSB. Weapons are usually cleaned about once a year at Ft. Chaffee. Supply NCO transports the weapons from the armory to the field. The weapons are distributed there. After using them they are cleaned in the field, placed back in the racks and return to the armory. When weapons are used for special occasions (competitions or other), the few weapons used for these purposes are cleaned on a table in the drill hall. Personnel stated that the rags used are collected and placed

in double plastic for proper disposal. The tables used are cleaned with detergent afterwards. The dehumidifier in the weapons vaults were working the day of the survey. It was reported that it is on all the time. The Supply NCO empties the water when full or checks it once a week. All lead samples were taken using a 10 inch by 10 inch template. Three wipe samples were taken from the weapons vaults racks of the BTRY C 1 BN 142 FA and three were taken from the weapons vaults racks of the B Co 217 BSB. None of the samples was above the clearance level of 200ug/ft2. See tables 2 and 3 for results. See attachments 3 and 4 for sampling locations and pictures.

Table 2**BTRY C 1 BN 142 FA**

Sample Number	Sample Location	Results	
15	Weapons Vault, Floor in front of 1 st rack, left wall(See Attachment 3 & 4)	91ug	130ug/ft2
16	Weapons Vault, Floor in front and rack bottom, rear wall 1 st from left (See Attach. 3 & 4)	97ug	138ug/ft2
17	Weapons Vault, Floor in front of 2 nd rack left wall(See Attach. 3 & 4)	86ug	122ug/ft2
32	Blank	BRL	BRL

Table 3**B Co 217 BSB**

Sample Number	Sample Location	Results	
18	Weapons Vault, Floor in front of 1 st rack, right wall (See Attach. 3 & 4)	20ug	28ug/ft2
19	Weapons Vault, Floor in front and bottom of 3 rd rack, right wall, (See Attachment 3 & 4)	39ug	55ug/ft2
20	Weapons Vault, Floor in front of 5 th rack, right wall (See Attach. 3 & 4)	126ug	180ug/ft2
32	Blank	BRL	BRL

A/C System

Central A/C units are used to cool the administration offices, the classroom, supply room, weight room and the break room. Personnel reported that the units cool and heat well. Personnel present did not know how often the filters are changed. There were two A/C filters in the weight room. They were dirty the day of the survey. All lead samples were taken using a 10 inch by 10 inch template. The US environmental Protection Agency (EPA), under a new standard issued in 2000, considers lead dust as a hazard if levels are greater than 40 micrograms of lead in dust per square foot on floors. The National Guard Bureau recommends a limit of 200 micrograms per square foot for surface contamination. Seven wipe samples were collected from the supply air outlet grills in the offices, classroom and weight room. All samples were below the clearance level of 200 ug/ft². See Table 4 for results.

Table 4

Sample Number	Sample Location	Results
24	A/C-Heating Outlet, Readiness NCO Office	BRL
25	A/C-Heating Outlet, Admin NCO Office	BRL
26	A/C-Heating Outlet, Classroom	BRL
27	A/C-Heating Outlet, Training NCO Office)	BRL
28	A/C-Heating Filter, Weight Room, Supply Side	BLR
29	A/C-Heating Filter, Weight Room (Left side), Fan Side	BLR
30	A/C-Heating Outlet, Weight Room	BRL
32	Blank	BLR

Material Safety Data Sheets

There is an MSDS Book in the armory located in the Supply Room. There was another in the hallway. It has been updated. There is a flammables cabinet located

in the Supply Room. It has an MSDS book on top and a Hazardous Materials Inventory List attached to the right side door. It contains mostly household goods, 2 cycle engine oil, penetrating oil, lube oil, rubbing alcohol and silicone lube.

Light Readings

Light measurements were taken in various locations throughout the facility. The results were compared to guidelines recommended by the Illuminating Engineering Society (IES). The results of the survey are shown in Table 5.

Table 5

Location	Light Reading (footcandles)	IES Recommendation (footcandles)
ADO HHD Orderly Room	35-111 (Avg. 72)	50-100
ADO BTRY C Readiness NCO Office	88-165 (Avg. 126)	50-100
ADO BTRY C Admin NCO Office	116-169 (Avg. 139)	50-100
ADO BTRY C Training NCO Office	59-101 (Avg. 80)	50-100
ADO Supply Room Storage Area	62-112 (Avg. 81)	20
Weight Room (Formerly Dining area)	73-113 (Avg. 92)	50-100
Break Room (Formerly Part of Kitchen)	86-120 (Avg. 107)	50-100
Classroom	86-136 (Avg. 101)	50-100
ADO B Co 217 BSB Readiness NCO Office	85-113 (Avg. 99)	50-100
Drill Hall	32-69 (Avg. 53)	30

Light measurements were above IES guidelines throughout the facility. ANSI RP7-1991.

4. REFERENCES

- Guide to Occupational Exposure 2000, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- American National Standards Institute (ANSI), Illuminating Engineering Society (IES), Industrial Lighting 1991.

- Title 29, Code of Federal Regulations (CFR). 1999, revision, Part 1910. Occupational Safety and Health Standards
- AR 40-5, Preventative Medicine, 15 October 1990.
- AR 385-10, The Army Safety Program, 23 May 1988.
- National Safety Council, Fundamentals of Industrial Hygiene, 4th edition, 1996.
- AR 385-16, National Guard Pamphlet, Safety Guidelines for Converting Indoor Firing Ranges to Other uses.
- TB MED 503, The Army Industrial Hygiene Program, February 1985.
- Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- Title 29 CFR, Part 1910.1200, The Hazard Communication Standard.

Non-Responsive



RECOMMENDATIONS

- Recommend that when using computers for extended periods of time, personnel should take occasional breaks and change position to minimize the possibility of eyes and/or hands/wrist injury.
- Continue to ensure that weapon maintenance and cleaning is done in a well-ventilated area. Continue to practice good personal hygiene by washing hands after handling and cleaning weapons and ammunition. Ensure that the weapons racks are well cleaned before placing them back in the vault.
- Recommend the use of disposable plastic table cloth to cover the tables while the weapons are cleaned to prevent contamination of the tables.
- Recommend that A/C filters should be change regularly according to manufacturers' recommendation).
- Ensure that the MSDS book and the Hazardous Materials Inventory Lists are updated when new products are purchased.
- Ensure that personnel and troops have knowledge of the location of the MSDS book. And is enrolled hazardous materials safety training.

SECTION 1.

DEMOGRAPHIC DATA

BEST AVAILABLE COPY

a. ARLOC _____ b. INSTALLATION Roxen, AR Army c. BLDG/RM NUMBER Reading NCO 87B-217ASB
 d. LOCATION/CODE Reading NCO B to 217 B&B e. OPERATION/CODE _____ f. DESCRIPTION _____
 g. MACOM/CODE NS h. SUBMACOM/CODE _____ i. SUPERVISOR Mr. [Redacted] **Non-Responsive**
 j. TELEPHONE/AUTOVON NUMBER 581 212 7720 k. RAC _____ l. FREQUENCY (Hrs Per Day) _____
 m. NO CIV(S) _____ n. NO MIL _____ o. NO CONTRACTOR(S) _____ p. NO LOC(S) _____ q. NO OTHER _____

SECTION 2.

IH STAFFING DATA

a. LAB HOODS _____ b. VAPOR DEGREASERS _____ c. MAINTENANCE BAYS _____ d. SPRAY BOOT-S _____
 e. OPEN SURFACE TANKS _____ f. VENTILATION UNITS _____

SECTION 3.

SURVEY DATA

a. SURVEY DATE 8/10/10 b. EVALUATOR (INITIAL) [Redacted] **Non-Responsive**

c. CONTROLS PRESENT	d. EVALUATION	e. UNIT CODE	f. CONTROLS REQUIRED	g. STATUS
<u>Lighting</u>	<u>85113; Aug. 99</u>	<u>FC</u>	<u>50-100</u>	<u>Adgt</u>

n. PERSONAL PROTECTIVE EQUIPMENT (R=REQUIRED; A=AVAILABLE)

1. RESPIRATOR

DISPOSABLE

FACE AIR PURIFYING

FACE AIR PURIFYING

FULL FACE AIR PURIFYING

POWERED AIR PURIFYING

AIRLINE

SELF-CONTAINED

ABRASIVE BLASTING HOOD

MANUFACTURER

NIOSH FC NO

R/A

2. GLOVES	R/A	3. EYES/FACE	R/A	4. HEARING	R/A	5. BODY	R/A	6. HEAD/FOOT	R/A
ACID	/	CHEMICAL/SPLASH	/	MUFFS	/	APRONS	/	HARD HATS	/
OIL	/	SAFETY/IMPACT	/	EARPLUGS	/	COVERALLS	/	IMPERMEABLE BOOTS	/
SOLVENTS	/	CHEMICAL/SAFETY	/	CANAL CAPS	/	FULL BODY SUIT	/	SAFETY CONDUCT SHOES	/
HOT SURFACES	/	FULL FACE SHIELD	/	HELMETS	/	SAFETY BELT/HARNESS	/	SAFETY/NONCONDUCTIVE SHOES	/
COLD SURFACES	/	WELDING HELMET	/			HEAT REFLECT VEST/SUIT	/		
NBC AGENTS	/								

SECTION 4.

HAZARD INVENTORY DATA

a. CAS CODE	b. HAZARD DESCRIPTION	c. MEDICAL SURVEILLANCE RECOMMENDED (YES or NO)	d. PAC or EPC
<u>PO VDT</u>	<u>Eye/hand strain. Computer work for long periods of time</u>	<u>3</u>	<u>3</u>

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SECTION 1.

DEMOGRAPHIC DATA

BEST AVAILABLE COPY

a. ARLOC

b. INSTALLATION

Rogers, AR Armory

c. BLDG/RM NUMBER

Training NO 50

d. LOCATION/CODE

Training NCO

e. OPERATION/CODE

f. DESCRIPTION

g. MACOM/CODE

NG

h. SUBMACOM/CODE

i. SUPERVISOR

Non-Responsive

j. TELEPHONE/AUTOVON NUMBER

429 636, 3676

k. RAC

l. FREQUENCY (Hrs Per Day)

m. NO CIV(S)

n. NO MIL

o. NO CONTRACTOR(S)

p. NO LOC(S)

q. NO OTH

SECTION 2.

IH STAFFING DATA

a. LAB HOODS

b. VAPOR DEGREASERS

c. MAINTENANCE BAYS

d. SPRAY BOOT-S

e. OPEN SURFACE TANKS

f. VENTILATION UNITS

SECTION 3.

SURVEY DATA

a. SURVEY DATE

8/10/10

b. EVALUATOR (INITIAL)

Non-Responsive

c. CONTROLS PRESENT	d. EVALUATION	e. UNIT CODE	f. CONTROLS REQUIRED	g. STATUS
Lighting	59-101; Avg. 80	FC	56-100	Adg

h. PERSONAL PROTECTIVE EQUIPMENT (H=REQUIRED; A=AVAILABLE)

1. RESPIRATOR

MANUFACTURER

NIOSH TC NO

P.E.

DISPOSABLE

w. FACE AIR PURIFYING

v. FACE AIR PURIFYING

FULL FACE AIR PURIFYING

POWERED AIR PURIFYING

AIRLINE

SELF-CONTAINED

ABRASIVE BLASTING HOOD

2. GLOVES	R/A	3. EYES/FACE	R/A	4. HEARING	R/A	5. BODY	R/A	6. HEAD/FOOT	R/A
ACID	/	CHEMICAL/SPLASH	/	MUFFS	/	APRONS	/	HARD HATS	/
OIL	/	SAFETY/IMPACT	/	EARPLUGS	/	COVERALLS	/	IMPERMEABLE BOOTS	/
SOLVENTS	/	CHEMICAL/SAFETY	/	CANAL CAPS	/	FULL BODY SUIT	/	SAFETY CONDUCT SHOES	/
HOT SURFACES	/	FULL FACE SHIELD	/	HELMETS	/	SAFETY BELT/HARNES	/	SAFETY/NONCONDUCTIVE SHOES	/
COLD SURFACES	/	WELDING HELMET	/			HEAT REFLECT VEST/SUIT	/		
NBC AGENTS	/								

SECTION 4.

HAZARD INVENTORY DATA

a. CAS CODE	b. HAZARD DESCRIPTION	c. PAC or EPC	d. MEDICAL SURVEILLANCE RECOMMENDED (YES or NO)
POVDT	Exp/Hand strain Computer work for long periods of time	3	

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FOIA Requested Record #J-15-0085 (AR)

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[illegible]

SECTION 6.

PERSONNEL DATA

[illegible]

SECTION 7.

COMMENTS (Add blank sheet of paper if necessary)

- ① Training A/C O
- ② Has been here about 1 yrs.
- ③ Computer work 5-6 hrs/day
- ④ No health problems

• **PRIVACY ACT STATEMENT**

Title 5 U.S. Code, Section 301; Executive Order 9397 authorizes the use of your Social Security Number as a identification number. The purpose of this information is to identify and monitor data relating each DA civilian employee exposed to a hazardous workplace in operation. The use of this information is to provide histories of exposure for any given worker.

Disclosure of your Social Security Number is not mandatory; however, nondisclosure may result in untimely provision of proper medical monitoring.

Signature _____

SECTION 1.

DEMOGRAPHIC DATA

BEST AVAILABLE COPY

a. ARLOC _____ b. INSTALLATION Rogers AR Army c. BLDG/RM NUMBER Admin Office
 d. LOCATION/CODE Admin NCO e. OPERATION/CODE _____ f. DESCRIPTION _____

g. MACOM/CODE NK h. SUBMACOM/CODE _____ i. SUPERVISOR SFC **Non-Responsive**
 j. TELEPHONE/AUTOVON NUMBER 479 636, 3676 k. RAC _____ l. FREQUENCY (Hrs Per Day) _____
 m. NO CIV(S) _____ n. NO MIL _____ o. NO CONTRACTOR(S) _____ p. NO LOC(S) _____ q. NO OTHER _____

SECTION 2.

IH STAFFING DATA

r. LAB HOODS _____ s. VAPOR DEGREASERS _____ t. MAINTENANCE BAYS _____ u. SPRAY BOOT(S) _____
 v. OPEN SURFACE TANKS _____ w. VENTILATION UNITS _____

SECTION 3.

SURVEY DATA

x. SURVEY DATE 8-16-10 y. EVALUATOR (INITIAL) **Non-Responsive**

z. CONTROLS PRESENT	aa. EVALUATION	ab. UNIT CODE	ac. CONTROLS REQUIRED	ad. STATUS
<u>Lighting</u>	<u>116-69; Aug-139</u>	<u>FC</u>	<u>50-100</u>	<u>Adgt</u>

e. PERSONAL PROTECTIVE EQUIPMENT (R=REQUIRED; A=AVAILABLE)

1. RESPIRATOR

DISPOSABLE

u. FACE AIR PURIFYING

v. FACE AIR PURIFYING

FULL FACE AIR PURIFYING

POWERED AIR PURIFYING

AIRLINE

SELF-CONTAINED

ABRASIVE BLASTING HOOD

MANUFACTURER

NIOSH TC NO

P. 2

2. GLOVES	R/A	3. EYES/FACE	R/A	4. HEARING	R/A	5. BODY	R/A	6. HEAD/FOOT	P. 2
ACID	/	CHEMICAL/SPLASH	/	MUFFS	/	APRONS	/	HARD HATS	1
OIL	/	SAFETY/IMPACT	/	EARPLUGS	/	COVERALLS	/	IMPERMEABLE BOOTS	1
SOLVENTS	/	CHEMICAL/SAFETY	/	CANAL CAPS	/	FULL BODY SUIT	/	SAFETY CONDUCT SHOES	1
HOT SURFACES	/	FULL FACE SHIELD	/	HELMETS	/	SAFETY BELT/HARNES	/	SAFETY/NONCONDUCTIVE SHOES	1
COLD SURFACES	/	WELDING HELMET	/			HEAT REFLECT VEST/SUIT	/		
NBC AGENTS	/								

SECTION 4.

HAZARD INVENTORY DATA

a. CAS CODE	b. HAZARD DESCRIPTION	c. PAC or EPC	d. MEDICAL SURVEILLANCE RECOMMENDED (YES or NO)
<u>POVDT</u>	<u>Eye/Hand strain Computer work for long periods of time</u>	<u>3</u>	

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FOIA Requested Record #J-15-0085 (AR)

Released by National Guard Bureau

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[illegible]

PERSONNEL DATA

[illegible]

COMMENTS (Add blank sheet of paper if necessary)

- ① Adm. NCO
② Has been at this facility about 1 1/2 yrs.
③ Computer work about 4 hrs.
④ No health problem

• PRIVACY ACT STATEMENT

Title 6 U.S. Code, Section 301; Executive Order 9397 authorizes the use of your Social Security Number as a identification number. The purpose of this information is to identify and monitor data relating each DA civilian employee exposed to a hazardous workplace or operation. The use of this information is to provide histories of exposure for any given worker.

Disclosure of your Social Security Number is not mandatory; however, nondisclosure may result in untimely provision of proper medical monitoring.

Signature _____

Analytical Environmental Services, Inc

Date: 19-Aug-10

Lab Order:	1008C44	LEAD ON WIPES (N9100/7082) N7082
Client:	Non-Responsive	
Project:	Rogers, AR Armory	
Matrix:	Wipe	
Date Received:	8/16/2010 12:55:00 PM	

Laboratory ID	Client Sample ID	Result	Units	Reporting Limit	DF	Qual	Date Collected	Date Analyzed	Analyst
1008C44-001A	15	91	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-002A	16	97	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-003A	17	86	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-004A	18	20	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-005A	19	39	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-006A	20	126	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-007A	21	BRL	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-008A	22	21	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-009A	23	25	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-010A	24	BRL	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-011A	25	BRL	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-012A	26	BRL	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-013A	27	BRL	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-014A	28	BRL	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-015A	29	BRL	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-016A	30	BRL	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-017A	31	BRL	ug. Total	20	1		08/10/2010	08/18/2010	MP
1008C44-018A	32	BRL	ug. Total	20	1		08/10/2010	08/18/2010	MP

Qualifiers: BRL - Not Detected at the Reporting Limit

DF - Dilution Factor

B - Analyte detected in the associated Method Blank

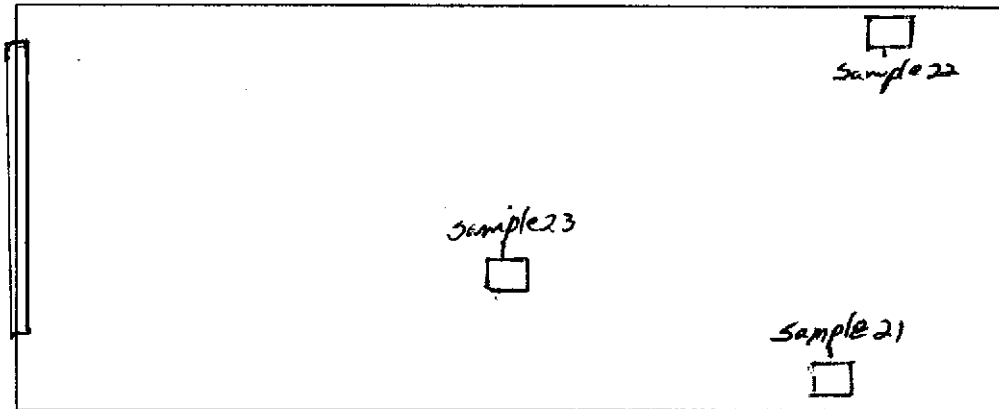
Results are blank corrected where applicable

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (AR)

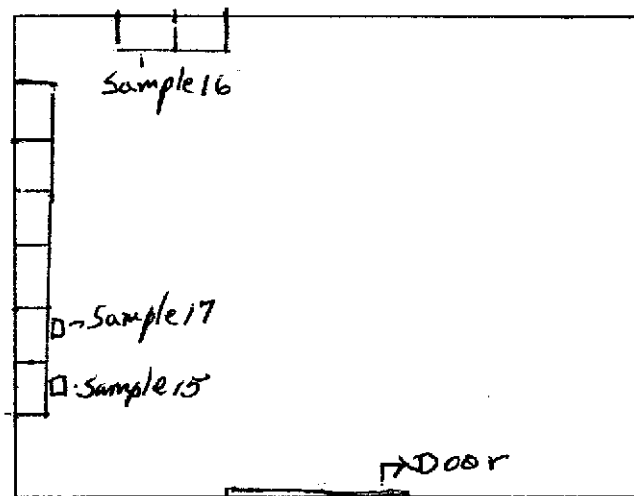
Released by National Guard Bureau

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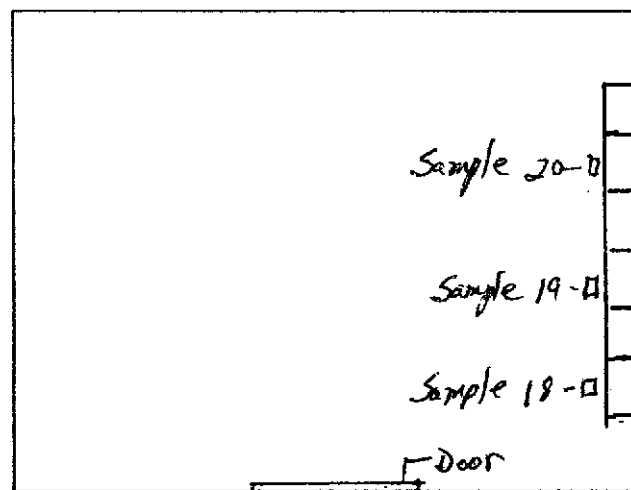


Front

Converted IFR Sampling Areas



Weapons Vault Sampling Areas
BTRY C 1 B N 142 F.A.



Weapons Vault Sampling Areas
B Co 217 BSB

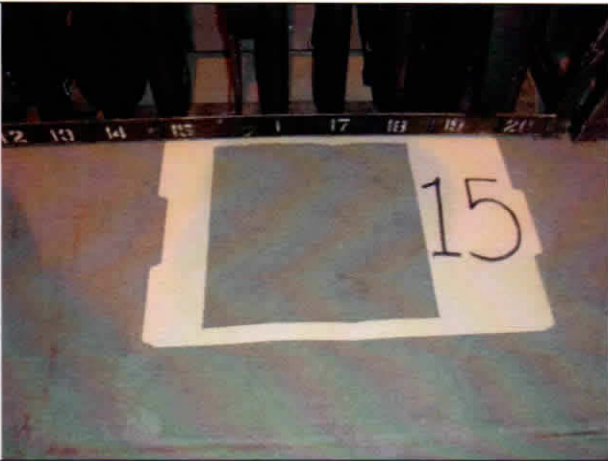
Rogers, AR Armory



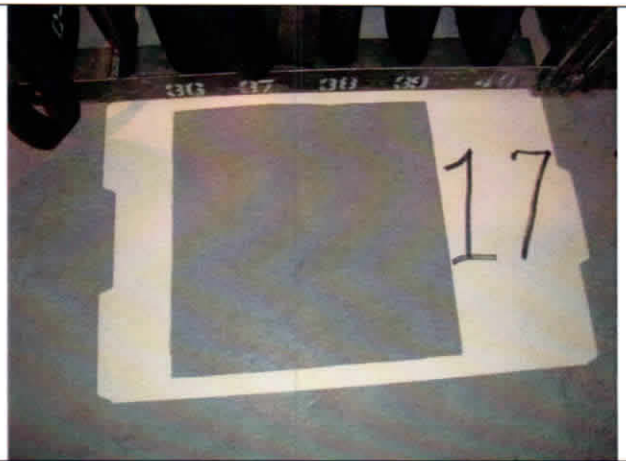
Rogers, AR Armory



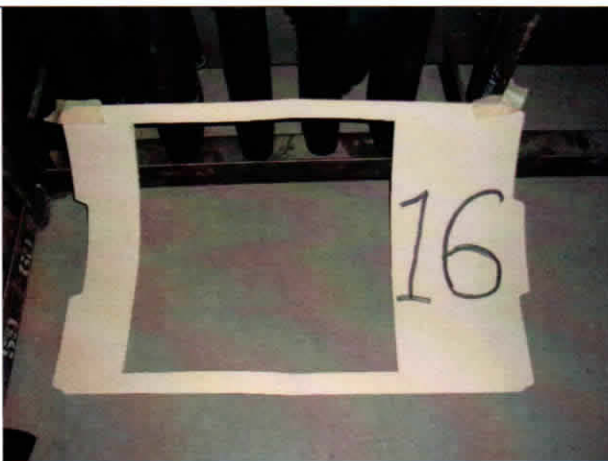
Drill Hall



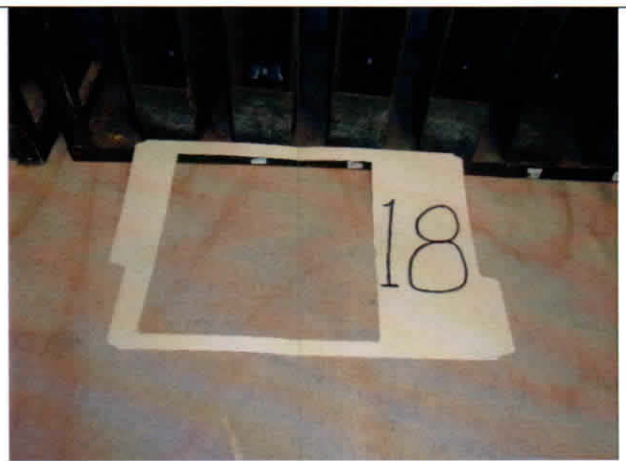
Sample, Weapons Vault, BTRY C



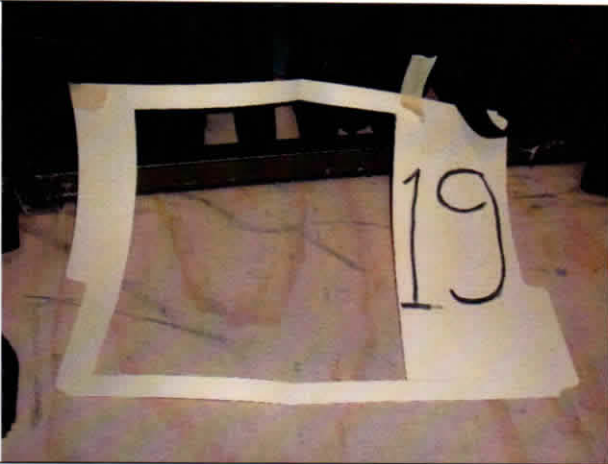
Sample, Weapons Vault, BTRY C



Sample, Weapons Vault, BTRY C



Sample, Weapons Vault, B Co 217 BSB



Sample, Weapons Vault, B Co 217 BSB



Sample, Weapons Vault, B Co 217 BSB



Converted IFR, Front View



Converted IFR, Rear View



Sample, IFR



Sample, IFR



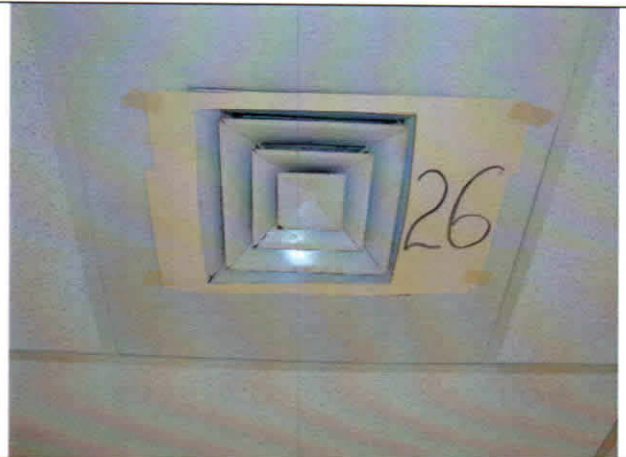
Sample, IFR



Sample, A/C-Heating Outlet



Sample, A/C-Heating Outlet



Sample, A/C-Heating Outlet



Sample, A/C-Heating Outlet



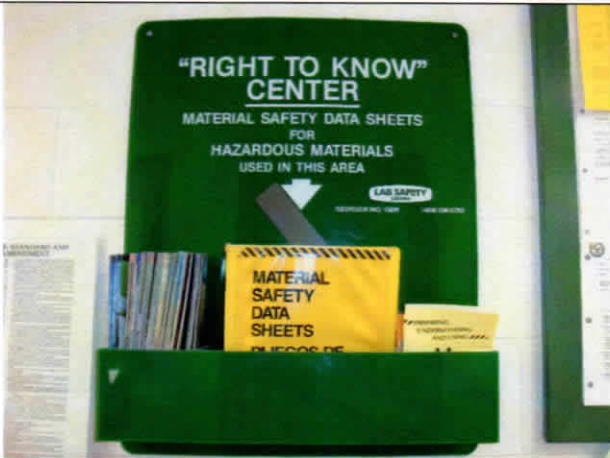
Sample, A/C-Heating Filter, Supply Side



Sample, A/C-Heating Filter, Fan Side



Sample, A/C- Heating Outlet



MSDS Book in Hallway



Flammables Cabinet with Haz Mat Inventory List, Supply Room

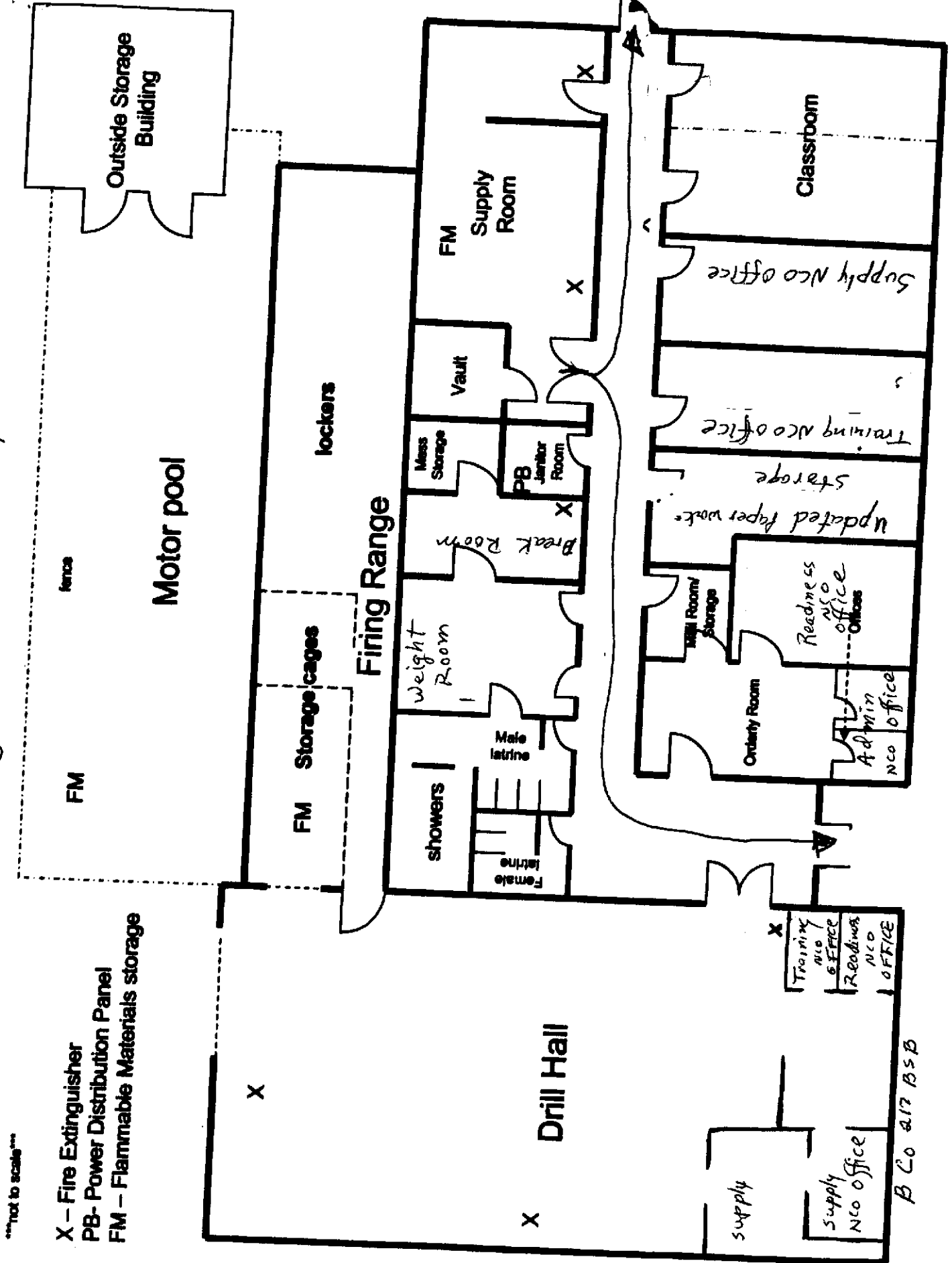


Sample, Top of Coke Machine, Drill Hall



Motor Pool

Rogers, AR Armory



**DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349**

NGB-AVN-SI

December 17, 2003

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG, ATTN.: State Safety and Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

SUBJECT: Transmittal of the Survey Reports for Bentonville Armory, Fayetteville Armory, Rodgers Armory and Springdale Armory, AR in Arkansas.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.
- b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.
- f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, 10 December 1998, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2001, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.

NGB-AVN-SI

SUBJECT: Transmittal of the Survey Reports for Bentonville Armory, Fayetteville Armory, Rodgers Armory and Springdale Armory, AR in Arkansas.

j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.

k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.

l. Report dated 28 November 2003, Industrial Hygiene Survey LAE Consulting, Severn, MD. 21144

2. General.

a. At the request of the AR ARNG Safety and Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling of the for Bentonville Armory, Fayetteville Armory, Rodgers Armory and Springdale Armory, AR in Arkansas.

a. The surveys were conducted by Ms. Non-Responsive of LEA Consulting, 1218 Scattered Pines Ct., Severn, MD.

3. Findings. All Health Hazard information is on the survey findings of the report. (See enclosure 1)

4. Recommendations.

- a. Follow all recommendations made in reference 1.l., requesting industrial hygiene (IH) services where needed to complete the recommendations.
- b. Control water infiltration in the armory and/or replace or repair damaged surfaces or components (ceiling and floor tiles). Building conditions that present IAQ concerns or problems not only exacerbates normally minor health issues but also tend to promote or accelerate building deterioration.
- c. The recommendations given in the comment section and data collected will serve as a baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY-04. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY-04 IHIP.
- d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present survey, especially if this will help eliminate health hazards and reduce medical surveillance cost.

NGB-AVN-SI

SUBJECT: Transmittal of the Survey Reports for Bentonville Armory, Fayetteville Armory, Rodgers Armory and Springdale Armory, AR in Arkansas.

- e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
 - f. Give special consideration to cleaning light fixtures, increasing the wattage and painting walls a lighter color when upgrading the lighting in the facility.
5. If additional information is needed about the industrial hygiene survey or air sample results, please contact Mr. **Non-Responsive** Regional Industrial Hygienist, NGB-AVN-SI, 1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

NBG-AVN-SH

State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl
as

LAE Consulting

1218 Scattered Pines Court, Severn, Maryland 21144
Telephone: (410) 551-2717

28 November 2003

MEMORANDUM FOR: Charlie Battery 1/ 142nd Field Artillery, ATTN: SFC [REDACTED]
[REDACTED] 1408 South 1st Street, Rodgers, Arkansas 72756-5467

SUBJECT: Industrial Hygiene Survey of Rodgers National Guard Armory, Rodgers, Arkansas

1. References.

- a. Title 29, Code of Federal Regulations (CFR) Part 1910, Occupational Safety and Health Administration (OSHA).
- b. AR 40-5, Preventive Medicine, 15 October 1990.
- c. AR 385-10, 23 May 1988, Army Safety Program.
- d. TB MED 503, The Army Industrial Hygiene Program.
- e. Title 29 CFR, Part 1910.1200, The Hazard Communication Standard.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- g. Industrial Ventilation, 22nd, Edition, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- h. IES Lighting Handbook, Application Volume 1981, Illumination Engineering Society of North America.
- i. National Institute for Occupational Safety and Health (NIOSH), (76-130) Technical Information, Lead Exposure and Design Considerations for Indoor Firing Ranges GPO, 1975.
- j. Title 40, Code of Federal Regulations (CFR) Part 745, Lead, Identification of Dangerous Levels of Lead: Final rule.

SUBJECT: Industrial Hygiene Survey of Rodgers National Guard Armory, Rodgers, Arkansas

2. Purpose. The purpose of this survey was to conduct a baseline Industrial Hygiene survey of the Rodgers NG Armory. The facility was visually examined and the Building Custodian was interviewed for historical information related to the building and the operations performed. A diagram of the building can be found in Enclosure 1. Laboratory results of Lead wipe samples at Enclosure 2. Photographs of the facility can be found in Enclosure 3. Health Hazard Inventories can be found in Enclosure 4.

3. Background. At the request of [Non-Responsive] of the National Guard Bureau Region South Industrial Hygiene Office, Ms. [Non-Responsive] of LAE Consulting conducted an industrial hygiene survey at Rodgers National Guard Armory, Rodgers, Arkansas on 7 November 2003.

4. Facility Description. This facility currently houses C Battery 1/142nd FA BDE. The Armory has three full time soldiers. The soldiers perform administrative duties Monday through Friday between 0700 and 1700 hours. The facility was built in 1970. The roof was patched two weeks prior to the survey. The Armory is utilized for drills on the weekend. The facility houses administrative areas, Supply Room, and an Arms Room and a drill hall.

5. Findings.

a. The counter tops around the sink and the food preparation area in the kitchen are made of galvanized metal. The metal is heavily rusted in many areas.

b. The paint on the ceiling in the Men's latrine is blistering and peeling. The exhaust ventilation is not functioning. The exhaust is on the same switch as the light and with the lights on continuously the motor may have burned out on the exhaust. The latrine has a large showering area.

c. A survey was performed on the lighting within the Armory. Lighting was measured in foot-candles (FC). All areas measured were above the recommended 50 FC stated in reference h except: SFC Backus office 18.0 FC; orderly room 21.2 FC, Supply room 11.0 FC, Conference room 20.9 FC, Food preparation sink 16.1,

d. Water leak marks are seen along the wall in the Drill Hall. The facility has had previous water leaks from the roof and the roof has been patched. The Drill Hall is rented frequently for community parties.

e. A storage building is located outside the Armory. The building is used for storage of field equipment. The building is mentioned in this survey for a building inventory only.

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Telephone: (410) 551-2717

Page 2

SUBJECT: Industrial Hygiene Survey of Rodgers National Guard Armory, Rodgers, Arkansas

f. A deactivated Indoor Firing Range is located within the Armory. Currently range is used to store excess items, tentage, chairs and tables. Two sets of metal cages one used for the maintenance platoon and the other for used for excess books are in the range. An overhead rolling door located off the Drill Hall serves as an entrance to the maintenance cage. All associated range materials are still present (i.e. backstop). The pit has water in it. Water seems to be wicking from the outside foundation into the pit. The soil behind the outside behind the range is clay. Three days of continuous rains have saturated the ground. Paint is blistering and peeling from the ceiling. The ceiling of the range is a painted galvanized metal. Lead wipe samples taken by the State Safety office showed the range to be contaminated (encl).

g. Thirteen Lead wipe samples and one blank were taken in various locations throughout the Drill Hall and the Armory. Two of the thirteen samples were above the EPA standard of 40 ug/ft² (Table 1).

TABLE 1

Sample Number	Sample Location	Results
1	Outside range door in Drill hall 2ft	<12 ug/ft ²
2	Right corner Drill Hall floor 5 ft	<12 ug/ft ²
3	Right side of Drill Hall floor	<12 ug/ft ²
4	Drill Hall floor center of entrance door 30	<12 ug/ft ²
5	Floor under thermostat /2 ft from wall	<12 ug/ft ²
6	Drill hall 11 ft from wall in front of soda machine	<12 ug/ft ²
7	Top of Coke machine	440 ug/ft ²
8	Admin Office on top of file cabinet #1	<12 ug/ft ²
9	Exhaust vent in the orderly room	60 ug/ ft ²
10	Floor outside the Drill Hall floor(lobby)	<12 ug/ ft ²
11	Blank	<12 ug/ ft ²
17	Outside rolling door 4 ft Drill Hall	<12 ug/ ft ²
18	Center of drill Hall floor	<12 ug/ft ²

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Page 3

SUBJECT: Industrial Hygiene Survey of Rodgers National Guard Armory, Rodgers, Arkansas

6. Recommendations.

a. Galvanization is applying zinc on a metal such as steel or iron to prevent corrosion. The zinc on the metal should not be around food or on food contact surfaces. The zinc could leech from the metal and cause a zinc poisoning. Recommend removing all surfaces made of this material and replacing it with a stainless steel material.

b. Recommend repairing the exhaust fan. Place the fan on its own switch to eliminate future fan motor repairs.

c. Consider purchasing supplemental lighting such as desk lamps and a floor lamp. If monies are available, recommend upgrading the lighting fixtures in the areas below 50 FC to meet the required 50 FC recommended [IES/ANSI RP1-1993].

d. Roof has been patched in many areas. If monies become available, consider a total reroofing.

e. There are no deficiencies associated with this building. Building was identified in this report for Health Hazard Information purposes only.

f. Recommend grading the area behind the range to improve the drainage. Contact the Arkansas Safety and Occupational Health office in interrupting the Lead wipe results they obtained.

g. Recommend that the Texas Safety and Occupational Health office review the Lead wipe sample results of this facility.

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Telephone: (410) 551-2717

Page 4

SUBJECT: Industrial Hygiene Survey of Rodgers National Guard Armory, Rodgers, Arkansas

7. Technical Assistance. For technical assistance, regarding information found in this report, please contact Etienne Rodriguez of the Southeast Regional Industrial Hygiene Office, 1-800-326-0262.

Non-Responsive

4 Encl

1. Building Diagram
2. HHIM
3. Facility Photos
4. Lead Wipe Results

LAE Consulting

CF: Arkansas Army National Guard, Safety Occupational Health Office,
Little Rock, Arkansas

LAE Consulting
1218 Scattered Pines Court, Severn, Maryland 21144
Telephone: (410) 551-2717

Page 5



Views of Galvanized metal countertops in the kitchen





View of storage building located outside the Armory



View of water in the pit area of the range



Views of paint blistering on the ceiling in the Men's latrine





Views of water leakage from the roof
in the Rodgers, Arkansas Drill Hall





View of Lead wipe sample location #6,
11 Ft from wall in front of the soda machine



View of Lead wipe sample location #7,
Top of Coke machine in the Drill Hall

HEALTH HAZARD INFORMATION MODULE: INDUSTRIAL HYGIENE SURVEY

(For use of this form, see HHIM User's Guide)

ARLOC	INSTALLATION Rogers, ARKANSAS NG Armory		BLDG/RM NO. 1408 S. 1st ST ROGERS, AR 72756	
LOCATION/CODE AA	OPERATION/CODE ADD			
SURVEY DATE 7 Nov 03		EVALUATOR LAE Consulting		
MACOM/CODE		SUBMACOM/CODE		SUPERV SFC
TELEPHONE/DSN NO. (479) 636-3676		UNIT/ORGANIZATION C Battery 1/142nd FA		RAC 4
NO. CIV(S)	NO. MIL 3	NO. CONTRACTORS	NO. LOC(S)	FREQUENCY (hrs/day) 8 hrs/day

Non-Responsive

Non-Responsive

SECTION 2: FACILITY DATA

LAB HOODS	VAPOR DEGREASERS	SPRAY BOOTHS
MAINTENANCE BAYS	OPEN SURFACE TANKS	VENTILATION UNITS

SECTION 3: SURVEY DATA

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS

PERSONAL PROTECTIVE EQUIPMENT (R= REQUIRED; U = UTILIZED)

GLOVES	R/U	RESPIRATOR	NIOSH TC NO.	MANUFACTURER	R/U
ACID	/	AIR LINE			/
COLD SURFACES	/	ABRASIZE BLASTING HOOD			/
HOT SURFACES	/	DISPOSABLE			/
NBC AGENTS	/	FULL FACE AIR PURIFYING			/
OIL	/	1/2 FACE AIR PURIFYING			/
SOLVENTS	/	1/4 FACE AIR PURIFYING			/
SURGICAL GLOVES	/	SELF CONTAINED			/

EYES/FACE	R/U	HEARING	R/U	BODY	R/U	HEAD/FT	R/U
CHEMICAL SPLASH	/	CANAL CAPS	/	APRONS	/	COLD WEATHER BOOTS/HATS	/
FACE SHIELD	/	EARPLUGS	/	COLD WEATHER CLOTHING	/	HARD HATS	/
CHEMICAL/SAFETY	/	HELMETS	/	COVERALLS	/	IMPERMEABLE BOOTS	/
SAFETY/IMPACT	/	MUFFS	/	FULL BODY SUIT	/	SAFETY/CONDUCTIVE SHOES	/
WELDING HELMET	/	MUFF/EARPLUG COMBO	/	HEAT REFLECTIVE VEST/SUIT	/	SAFETY/NCN-CONDUCTIVE SHOES	/
		MUFF/EARPLUG W/TIME LIMIT	/	SAFETY BELT/HARNES	/		/

SECTION 4: HAZARD INVENTORY DATA

CAS CODE	HAZARD DESCRIPTION	PAC	EPC
7439-92-1	Lead, INORGANIC Dust + Fumes		
POLIGHTIN	LIGHTING, INADEQUATE		

SECTION 5: PERSONNEL DATA

LAST NAME	FIRST NAME	MI	SEX	SSN	CATEGORY

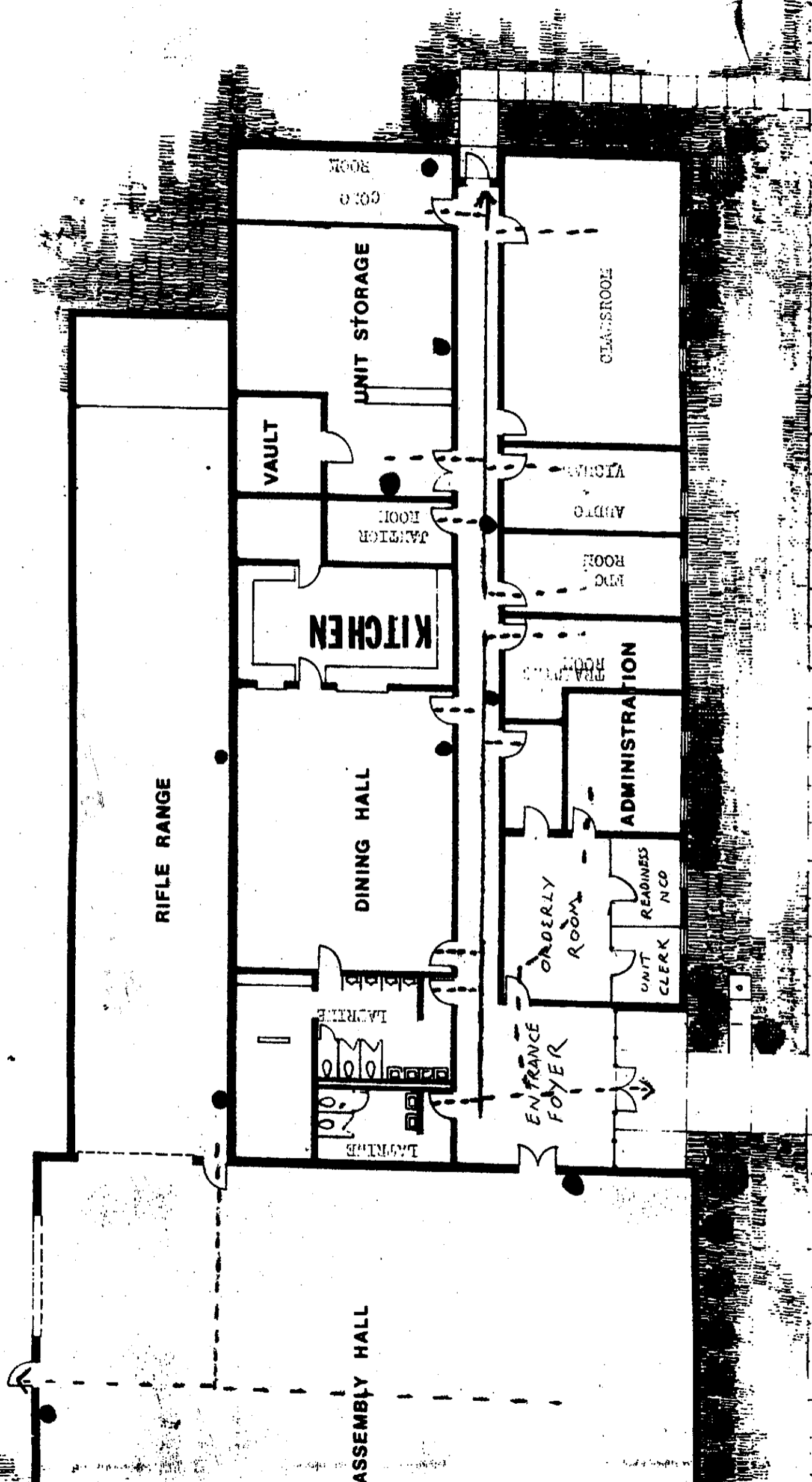
SECTION 6: COMMENTS

☐ No comments

☐ See attached sheet

FIRE EVACUATION PLAN

BEST AVAILABLE COPY





DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349

NGB-ARS-IHSE (40-5f)

November 18, 2005

MEMORANDUM FOR: Adjutant General AR ARNG, ATTN: MA. **Non-Responsive** State
Occupational Health Office, Camp Robinson North Little Rock, AR 72118-2200.

SUBJECT: Transmittal of the Survey Reports for Augusta Armory, Bebe Armory, Sercey Armory and Herber Armory in AR.

I. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.
- b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.
- f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, 10 December 1998, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2003, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienists, Cincinnati, Ohio.
- j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.
- k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.

NGB-ARS-IHSE (40-5f)

November 18, 2005

SUBJECT: Transmittal of the Survey Reports for Augusta Armory, Bebe Armory, Sercey Armory and Herber Armory in AR.

1. Industrial Hygiene Survey Report, OSHEA II, Industrial Hygiene Consulting, Fayetteville, NC.
2. General.
 - a. At the request of MAJ **Non-Responsive** AR ARNG Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling at the Combined Support Maintenance Shop, Camp Robinson, North Little Rock, Arkansas, 22 May -2 June 2000.
 - b. The surveys were conducted by OSHEA II, Industrial Hygiene Consulting, P.O. Box 35669 Fayetteville, N.C. 28303
3. Findings. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed (See ENCL 1). The afford mentioned report has been designed, by this office, to extract personal data from the report which is enclosed. Additionally three Hearing Conservation Program Notification Letters were generated based on the noise dosimetry performed.
4. Recommendations.
 - a. Follow all recommendations made in paragraph 6 of the enclosed report. Request industrial hygiene (IH) services where needed to complete the recommendations.
 - b. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY2005. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2006 IHIP.
 - c. Have all HHIM data entered into the HHIM computer module.
 - d. Use the report to help in correcting all deficiencies noted.
 - e. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.
 - f. Contact the State Occupational Health Nurse, MAJ **Non-Responsive** for any medical Surveillance that may be needed.
 - k. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

NGB-ARS-IHSE (40-5f)

November 18, 2005

SUBJECT: Transmittal of the Survey Reports for Augusta Armory, Bebe Armory, Sercey Armory and Herber Armory in AR.

5. The present report addressed to the local facility commanders was divided in such a way that personal data can be detached and kept by the OHM or blocked when forwarding these reports to other entities within the appropriate offices of AR ARNG. If additional information is needed please contact Mr. Non-Responsive
Non-Responsive Regional Industrial Hygienist, NGB-AVN-SI, COMM. (404) 559-4174 OR 1 (800) 326-0262.

Non-Responsive

Regional Industrial Hygienist

CF: NGB-AVN-SH

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

ENCL.

as

OSHEA II
IH CONSULTING

Arkansas Army National Guard
Searcy Armory



OSHEA II IH CONSULTING PO BOX 35669 FAYETTEVILLE, NC 28303

MEMORANDUM FOR: Illinois Army National Guard: ATTN: SFC [REDACTED] Non-Responsive
Armory Supervisor HHC 2/153rd Infantry Battalion, Searcy, Arkansas 72143

SUBJECT: Baseline Industrial Hygiene Health Hazard Information Module
(HHIM) Survey of, HHC 2/153rd Infantry Battalion, 3150 South Main Street
Searcy, Arkansas 72143
October 23, 2005

1. REFERENCES

a. Title 29 Code of Federal Regulations (CFR) part 1910, Occupational Safety and Health Administration (OSHA).

b. Army Regulation 385-10, The Army Safety Program, 29 February 2000.

c. Army Regulation 11-34, The Army Respiratory Protection Program, 15 February 1990

d. DA PAM 40-503, The Army Industrial Hygiene Program, 30 October 2000

e. Industrial Ventilation, 25th Edition, The American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.

f. National Guard Regulation 385-10, Army National Guard Safety and Occupational Health Program 20 December 1989

g. IES Lighting Handbook, Application Volume 2000, Illumination and Engineering Society of North America.

h. DA PAM 40-501, Hearing Conservation Program, 10 December 1998

i. Technical Bulletin (TB MED) 503, The Army Industrial Hygiene Program, 1 February 1985,

j. Army Regulation (AR) 40-5, Preventive Medicine, 22 July 2005

OSHEA II Industrial Hygiene Consulting
IH Survey, Arkansas Amory
October 2005

2. **GENERAL:** At the request of Mr. **Non-Responsive** National Guard Bureau South, Regional Industrial Hygienist, Atlanta, Georgia, a Health Hazard Information Module Baseline Survey was performed at HHC 2/153rd Infantry Battalion, Searcy, Arkansas. The purpose of this survey was to evaluate health hazards, existing controls in the work site to perform a baseline survey in accordance with references 1a through 1j and collect bulk samples.

3. FINDINGS:

Armory Site Description: The armory is occupied by HHC 2/153rd Infantry Battalion. Fifteen full time individuals perform daily administrative duties six to seven hours a day. Construction of this armory began in 1995 and was completed in 1996. It contains several offices/ seven administrative areas, a kitchen, supply rooms, and a weapons room/vault. No tile was found friable on the floors or in the ceilings. The armory was not equipped with an indoor firing range.

This armory had problems with leaks in several areas. There were fish and turtles in the water and oil separator. There was rusty water coming from the water heater. The toilet in the men's bathroom released hot water when it was flushed and water leaked from the light in the one of the other men's bathroom. Illumination levels were recorded in all administrative areas, classrooms, training rooms and supply areas throughout the Armory.



Illumination levels in hall ways ranged from 47.0 to 51.1 foot candles.



Illumination in administrative areas was 60.0 to 66.4 foot candles.





Ceiling tile in the hall way of the armory stained with water circles from leaks.



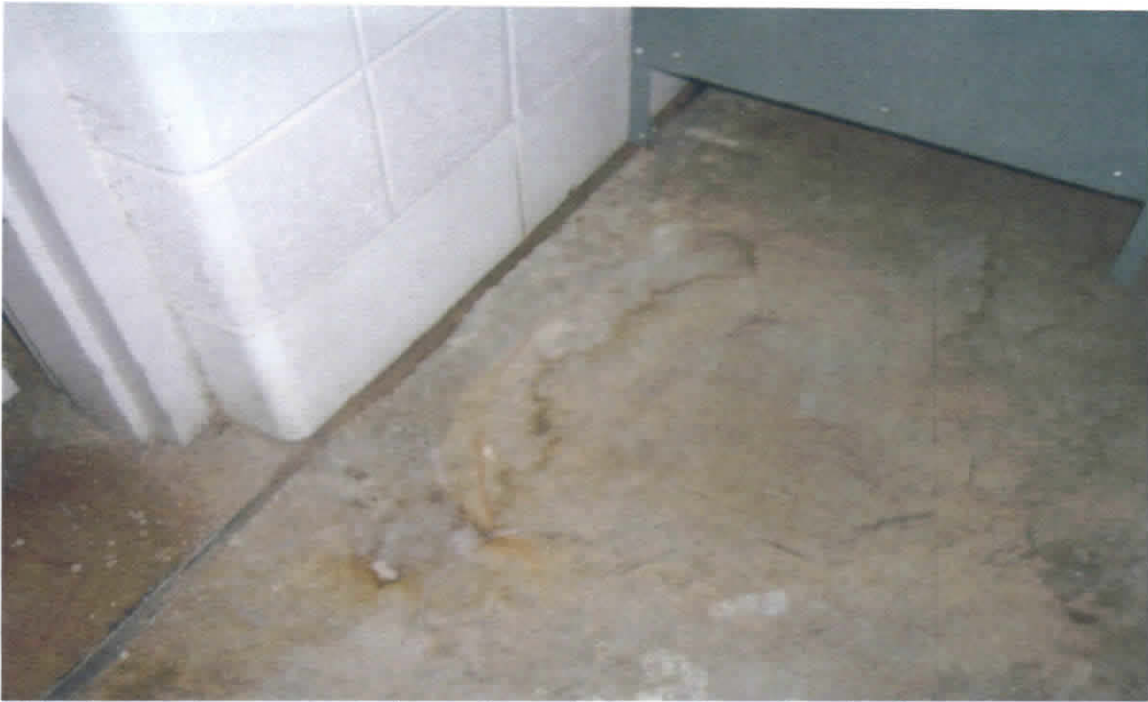
There were several leaks along this hall way.



This water stain tile was found in one of the administrative offices.



This is the hallway of armory and it contains several ceiling tiles with leak stains.



This shows where water leaks and travels down the wall to the floor.



The water is rusty coming out of the hot water heater.



The kitchen is not used for meal prep. Meals are catered.



It was stated that this crack appeared in the ceiling after it leaked.



This room is used for training. No water circles or leaks were noted



The vehicles are usually stored here. They had not arrived from Fort Carson.

a. **Hearing Conservation Program:** All employees are enrolled in the Hearing Conservation Program and receive annual audiograms.

b. **HAZCOM:** HAZCOM training had been performed prior to this survey. MSDS were available for their inventory.

c. **Administrative Areas:** Personnel perform administrative duties that consist of reading, handling and generating paper work. Employees use computers and answer phones also.

d. Wipe sampling was performed in the drill hall area, kitchen and vault. All sample taken from the drill hall and kitchen showed no presence of lead.

e. **Military Vehicle Area:** Military vehicles are used to run errands or transport supplies on drill weekends. Armory's personnel perform no maintenance operations or vehicle repairs.

f. A noise level survey was not performed, because the vehicles had not yet returned from Fort Carson. Noise hazard caution signs are posted on vehicles and hearing protection is available and easily assessable for personnel and visitors. A noise level survey should be performed when all vehicles and equipment returns from Fort Carson

g. **Arms Room/Weapons Vault:** Weapons stored in the armory's vault. It is reported that no weapons cleaning is performed inside of the weapons storage vault. Wipe sampling was performed in the vault. Two samples taken off the weapon's rack to the left of the door's entrance showed the presence of lead.

Sample No. 101096-----(*6.8 micrograms of lead*)

Sample No. 101907-----(*10 micrograms of lead*).

All other samples were none detected.

h. **Solvent Bath:** During drill training the solvent bath is used. The fluid in the solvent bath tank is warmed and weapons are cleaned on the drill hall floor. Full time Personnel place their weapon in the cleaning solution for a few minutes, remove it and finish the cleaning process. The cleaning process takes less than thirty minutes.

4. Technical Assistance:

For further assistance concerning this survey, you may contact Mr. [Non-Responsive]
[Non-Responsive] NGB Regional Industrial Hygienist at 1-800-326-0262.

Non-Responsive

Industrial Hygienist

CF: State Safety and Occupational Health Office
ATTN: LTC [Non-Responsive]
Camp Robinson, Arkansas

CF: State Safety and Occupational Health Office
ATTN: Major [Non-Responsive]
Camp Robinson, Arkansas

RECOMMENDATIONS

- a. Hearing Conservation Program. Continue with annual audiometric testing for relevant personnel in accordance with reference 1h.
- b. Hazardous communication or HAZCOM refresher training. Continue with annual HACOM training. Dated and signed records should be maintained of all HAZCOM training administered.
- c. Repair of the leaking roof will help eliminate future problems of mold and spore growth from moisture and the other conditions that add to indoor air problems.
- d. Weapons are never to be cleaned inside the weapon's storage vault or any other enclosed area without adequate ventilation in accordance with references 1a and 1c. Personal Protective equipment, such as goggles, should be worn to protect eyes from splash hazards and gloves should be worn to prevent solvent absorption through the skin.
- e. Based on the limited, short duration, nature, of contact cleaners, and solvents used at this armory, there is no need for a Respiratory Protection Program, neither is there a need to perform atmospheric monitoring during weapons cleaning if windows and doors are open to circulate air during weapons cleaning.

Enclosure No. 1

INSTRUMENTATION: The following survey instrumentation was utilized to obtain noise, illumination or ventilation measurements. All equipment was used according to manufacturer/ manual recommendations. All equipment was calibrated prior to and after use.

Nomenclature	Serial No.
Extech Light Meter	L595339
Extech Sound Level Meter	6134582
Extech Sound Calibrator	5431625
Extech Thermo Anemometer	9184009
Metrosonic Dosimeters	5427-5436

Enclosure No. 2

Hazardous Material inventory

Scouring powder

Razor green

General purpose Detergent

Windex glass cleaner

Enclosure No. 3

OSHEA II Industrial Hygiene Consulting
IH Survey, Arkansas Amory
October 2005

ARLOC_05000

INSTALLATION_ARARNG

BLDG_____

ROOM_____

LOCATION	OPERATION	SURVEY DATE	EVALUATOR	MACOM
MN	ADO	YR 05/10/17	Non-Responsive	NG

SUPERVISOR	ORGANIZATION	RAC
Non-Responsive SFC	3105 South Main Street, Searcy, Arkansas	3

PH NO.	COMMERICAL/DSN	FREQUENCY	# CIV	#MIL	#CONTRACT	# LOC
501-268-2881	x /	7-8 hours/ day	15 /			/

LAB HOODS	VAPOR/DEGREASERS	PAINTBOOTH	SANDBLASTING BOOTH	OPEN SURFACE
0	0	0	0	0
NO VENTILATION UNITS				

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED

PPE	REQUIRED	UTILIZED			
<u>GLOVES</u>	R	U	<u>RESPIRATOR</u>	R	U
ACID			AIRLINE		
COLD SURFACE			ABRASIVE BLASTING HOOD		
HOT SURFACE			DISPOSABLE		
NBC AGENTS			FULL FACE AIR PURIFYING		
OIL			1/2 FACE AIR PURIFYING		
SOLVENTS			POWERED AIR PURIFYING		
SURGICAL GLOVES			1/4 FACE AIR PURIFYING		
OTHER			SCBA		

<u>EARS/ HEARING</u>	R	U	<u>BODY</u>	R	U	<u>HEAD AND FEET</u>	R	U
CANAL CAPS			APRONS			COLD WEATHER BT&HAT		
>85-108 STDY EPLG	x	x	COLD WEATHER CL			HARD HAT		
" " HLMT/PLG			COVERALLS			IMPERMEABLE BOOTS		
" " MUFF ONLY			FULL BODY SUIT			SAFETY SHOE CONDUCT		
108-118 MUFF/PLG			HEAT REFLECTIVE			SAFETY NON CONDUCT	x	x
118 OR> MUFF/PLG			VEST/SUIT			OTHER		
W/ TIME LIMIT			SAFETY BELT/ HARNESS					
OTHER			SPECIAL PURPOSE CLO					
			OTHER BDU	x	x			

	CAS CODE	PAC	EPC	HAZARD DESCRIPTION
PONOISECO	POnoisecco	2	0	Noise, continuous
POFOOTHAZ	P0stress	3	0	Mental / physical stress
POFLYPROJ	P0lifting	3	D	Heavy lifting
POEYEHZA	P0eyehaza	2	A	Eye Hazards
POFLAMMHAZ				
POLIFTING				
POSHARPOBJE				
POELSHOCK				
COLUBEOL				

DESCRIBED OPERATION

Administrative duties are performed six to eight hours a day which consists of answering phones, using computers, generating paper work and running errands for supplies.

Enclosure No. 5

DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349

NGB-AVN-SI

June 2, 2003

MEMORANDUM FOR: The Adjutant General of Arkansas, ATTN : COL
Non-Responsive Safety & Occupational Health Manager,
Camp Robinson North Little Rock, AR 72118-2200.

SUBJECT: Transmittal of State Stuttgart, Amory, Indoor Firing
Range wipe sample results.

1. References.

- a. 385-10, Army Safety Program
- b. National Guard Regulation, AR 385-15, Policy,
Responsibilities, and Procedures for
Inspection/Evaluation and use of ARNG Indoor Firing
Ranges, Draft March 2000
- c. Army National Guard Guidelines for Housekeeping,
Rehabilitation and Conversion of Indoor Firing Ranges,
Draft NGB Pam 385-15
- d. OSHA Standards 29 CFR (Code of Federal Regulations),
1910.1025, Lead Standard
- e. OSHA Standards 29 CFR (Code of Federal Regulations),
1926.62, Construction Standard

2. General. The sample results from samples taken at the
State Stuttgart, Amory Indoor Firing Range by SFC **Non-Responsive**
are enclosed.

3. Findings.

- a. A review of the sampling results showed low levels of lead dust present at the time of the survey.
- b. All samples except two were below detection limit. The samples 12.5 μg and 25 μg were above reporting limit, and these values are below the 40 μg level set as an acceptable standard.

4. Recommendations.

- a. Follow all other requirements of the references above when converting this area for other use.
- b. Ensure that this area is appropriately labeled and that it is removed from any of the state's IFR lists.

4. If additional information is needed about the industrial Hygiene survey or lead wipe sample results; please contact Mr. **Non-Responsive** Regional Industrial Hygienist, NGB-AVN-SI, 1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

ENCL.
as

Reservoirs Environmental, Inc.

2059 Bryant St. Denver, CO 80211
(303) 964-1986 Fax (303) 477-4275 Toll Free (866) RESI-ENV

March 25, 2003

Project Description:
RES 91608-1
Contract # 78-287
State Stuttgart, AR

Non-Responsive

Army National Guard IH - West
3401 Quebec Street
Denver CO 80207

Dear Customer,

Reservoirs Environmental, Inc. is an environmental analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the American Industrial Hygiene Association, Lab ID 101533 - Accreditation Certificate #480. The laboratory is currently proficient in both PAT & ELPAT programs respectively.

Reservoirs has analyzed the following sample(s) using Atomic Absorption (AA) / Atomic Emission Spectroscopy - Inductively Coupled Plasma (AES-ICP) per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in Table I. Results have been faxed to your office.

RES 91608-1 is the job number assigned to this study. This report is considered highly confidential and property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those authorized by the client. Samples will be disposed of after sixty days unless longer storage is requested. If you should have any questions about this report, please feel free to call me at 303-964-1986.

Sincerely,

Non-Responsive

President

2059 Bryant St., Denver CO 80211

RESID JON #2

Due Date: 3/21 - 3/25

Due Time: 11:00 AM

PHONE: (303) 964-1995 FAX: (303) 477-4275 WATS: 1-888-RES ENV (737-4368)

PAGER: ONCALL, PAGER NUMBER AVAILABLE AT LAB. ALTERNATE PAGER: PLM/TEM 509-2187 PCM/METALS 509-2099 (AFTER HOURS USE ONLY)

NAME OF COMPANY/PROJECT: Company: Army National Guard NGB-H-S Address: 510 Plaza Drive Suite 1530		INVOICE TO THE ORDERER: Army National Guard H-W 3401 Quebec, Ste 7200, Denver, CO 80207 Attn: R. Fritz	
Contact: Non-Responsive Phone: 404-558-4174	Contact: Phone: col	Fax: 404-559-4175 Fax:	Page: Page:
Project Number and/or P.O. # Contract # 78-287		Project Description/location State Stuttgart AR	

AFTER HOURS / WEEKEND CHARGE: AMOUNT \$ _____ AUTHORIZED BY: _____

Additional fees apply for after hours and holidays for all analysis types. Samples will be analyzed during normal laboratory hours unless otherwise arranged and specified on the chain of custody. Turnaround is subject to laboratory volume. You will be notified if delays are expected.

ASBESTOS LABORATORY HOURS: WEEKDAYS: 7AM - 7PM		ANALYTICAL METHOD		
PCM/PLM <input type="checkbox"/> 2 HOUR RUSH <input type="checkbox"/> 24 HOUR <input type="checkbox"/> 3-5 WEEKDAYS TEM <input type="checkbox"/> 6 HOUR RUSH <input type="checkbox"/> 24 HOUR <input type="checkbox"/> 3-5 WEEKDAYS Prior Notice REQUIRED for TEM 6 Hour RUSH	AIR <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> PCM 7400A, 7400B, OSHA TEM AMERA Level II, 7402, ISO, Pres/Abs ISO-Indirect Preps Chalkless </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> AA / ICP _____ Metal _____ RCRA 8 Dust Total, Respirable </div>			
METALS LABORATORY HOURS: WEEKDAYS: 8AM - 5PM AA <input type="checkbox"/> SPECIAL RUSH <input type="checkbox"/> 24 HOUR <input checked="" type="checkbox"/> 3-5 DAY RCRA 8 <input type="checkbox"/> SPECIAL RUSH <input type="checkbox"/> 5 DAY <input type="checkbox"/> 10 DAY TCLP <input type="checkbox"/> SPECIAL RUSH <input type="checkbox"/> 5 DAY <input type="checkbox"/> 10 DAY Prior Notice REQUIRED for SPECIAL RUSH AA, RCRA or TCLP RCRA and TCLP SPECIAL RUSH is 3 DAY TURNAROUND		BULK: <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> PLM Short report, Long report, Point Count TEM +/- Quant, Semi-quant AA / ICP _____ PB Paint, Soil, Dust, <u>Wipes</u> TCLP (ASTM E 1792 approved wipes only.) </div>		
		WATER <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> TEM Drinking, Waste Water AA Water _____ Metal _____ RCRA 8 Drinking, Waste Water </div>		
		OTHER <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> Specify _____ </div>		

SPECIAL INSTRUCTIONS: Contract # 78-287

CLIENT SAMPLE NUMBER	VOLUME	EM#
1. Top Left Wall		758 002
2. Middle left wall		03
3. Bottom left wall		04
4. Top left bullet stop		05
5. Middle bullet stop end		06
6. Bottom right bullet stop end		07
7. Top Right wall		08
8. Middle Right wall		09
9. Bottom Right Wall		10
10. Bottom Rear Wall		11
11. Middle rear wall		12
12. Top Rear Wall		13
13. Floor Right Bullet Stop		14
14. Floor Center		15
15. Floor Left Rear Wall		16

Number of samples received: 28 (Use as many additional sheets as needed.)

NOTE: If the package has sustained substantial damage or the custody seal is broken, stop and contact project manager and shipper. REISI will analyze incoming samples based upon information received with those samples. REISI is not responsible for errors or omissions in calculations resulting from the inaccuracy of original data. Turnaround times are based upon times of receipt by Laboratory. Cell Laboratory for number of samples guaranteed in short turnaround

[illegible]

Page 2 of 2

RESERVOIRS ENVIRONMENTAL SERVICES, INC.

259 Bryant St., Denver CO 80211

RESI Job #: 91608Due Date: 3-21/3-25Due Time: 11:00 AM

PHONE: (303) 954-1096 FAX: (303) 477-4275 WATER/1-800-RESI ENV (737-4356)

PAGER: ONCALL PAGER NUMBER AVAILABLE AT LAIR ALTERNATE PAGER: PLM/TEM 509-2187 PCM/METALS 509-2188 (AFTER HOURS USE ONLY)

SAMPLES SUBMITTED BY:		INVOICE TO: (IF DIFFERENT)	
Company: Army National Guard MGB-44-S		Army National Guard IM-W	
Address: 510 Plaza Drive Suite 1530		3401 Quebec, Ste 7200, Denver, CO 80207	
Contact: Non-Responsive		AR: R. FRIE	
Phone: 404-559-4174		Fax: 404-559-4175	
Contact:		Page:	
Project Number and/or P.O. #: Contract # 78-287		Page:	
Project Description/Location: State Stutgard AR			

AFTER HOURS/WEEKEND CHARGE: AMOUNT \$	AUTHORIZED BY:
---------------------------------------	----------------

Additional fees apply for after hours and holidays for all analysis types. Samples will be analyzed during normal laboratory hours unless otherwise arranged and specified on the chain of custody. Turnaround is subject to laboratory volume. You will be notified if delays are expected.

ASBESTOS LABORATORY HOURS: WEEKDAYS: 7AM-7PM

PCM/PLM 2 HOUR RUSH 24 HOUR 3-5 WEEKDAYSTEM 6 HOUR RUSH 24 HOUR 3-5 WEEKDAYS

Prior Notice REQUIRED for TEM 6 Hour RUSH

METALS LABORATORY HOURS: WEEKDAYS: 8AM-5PM

AA SPECIAL RUSH 24 HOUR 3-5 DAYRCRA 8 SPECIAL RUSH 5 DAY 10 DAYTCLP SPECIAL RUSH 5 DAY 10 DAY

Prior Notice REQUIRED for SPECIAL RUSH AA, RCRA or TCLP

RCRA AND TCLP SPECIAL RUSH IS 3 DAY TURNAROUND

ANALYTICAL METHOD

AIR

PCM 7400A 7400B, OSHA
 TEM AHERA Level II, 7402, ISO
 Bio/Abx ISO-Indirect Preps Chatfield
 AA/ICP Metal RCRA 8
 Dust Total Respirable

BULK:

PLM Short report, Long report, Point Count
 TEM +/- Quant, Semi-quant
 AA/ICP PB
 Pair Soil, Dust, Wipe, TCLP
 (ASTM 1792 approved wipes only)

WATER

TEM Drinking Water
 AA Waste Metal RCRA 8
 Drinking Waste Water

OTHER

Specify

SPECIAL INSTRUCTIONS: Contract # 78-287

CLIENT SAMPLE NUMBER	VOLUME	EM#
16 Ceiling L Left Rear Wall		758 017
17 Ceiling Cooler		18
18 Ceiling Right Rear Wall		19
19 Locker 137 Door		20
20 Ice Box Top		21
21 Staff Unit		22
22 Weight Bench		23
23 Obs room West Wall		24
24 Obs room East Wall		25
25 Obs room Locker		26
26 Blank 1		27
27 Blank 2		28
28 Blank 3		29

Number of samples received: 28 (Use as many additional sheets as needed.)

NOTE: If the package has sustained substantial damage or if custody seal is broken, stop and contact project manager and shipper. RESI will analyze incoming samples based upon information received with those samples. RESI is not responsible for errors or omissions in calculations resulting from the inaccuracy of analytical data. Turnaround times are based upon times of receipt by Laboratory. Call Laboratory for number of samples guaranteed in short turnaround.

REUNQUISHED BY:

Date/Time:

LABORATORY USE ONLY		Non-Responsive	
Received By:	Date/Time:		
Center:	Signature of package/custody seal upon receipt:		
RESULTS:	Contact	Page	Phone Fax
	Date	Time	Initials
SPLITS:		LAB BENCH/COMPARISON RECEIVED	
rev 5/201	Authorization By/Time:	Time Date	
	Analytical Method/Turnaround		
	Results Due:	Results Out:	

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Accredited Laboratory #101896
 AIHA Certificate of Accreditation #480 LAB ID 101533

TABLE I. ANALYSIS: LEAD BY WIPE SAMPLING

RES Job Number: RES 91608-1
 Client: Army National Guard IH - West
 Client Project Number / P.O.: Contract # 78-287
 Client Project Description: State Stuttgart, AR
 Date Samples Received: March 18, 2003
 Analysis Type: USEPA SW846 3050B / AA(7420)
 Turnaround: 3-5 Day
 Date Samples Analyzed: March 25, 2003

Client ID Number	Lab ID Number	Sample Area (sq.ft.)	LEAD (µg)	Detection Limit (µg/sq.ft.)	LEAD CONCENTRATION (µg/sq.ft.)
#1	EM 758002	0.11	BDL	114	BDL
#2	EM 758003	0.11	BDL	114	BDL
#3	EM 758004	0.11	BDL	114	BDL
#4	EM 758005	0.11	BDL	114	BDL
#5	EM 758006	0.11	BDL	114	BDL
#6	EM 758007	0.11	BDL	114	BDL
#7	EM 758008	0.11	BDL	114	BDL
#8	EM 758009	0.11	BDL	114	BDL
#9	EM 758010	0.11	BDL	114	BDL
#10	EM 758011	0.11	BDL	114	BDL
#11	EM 758012	0.11	BDL	114	BDL
#12	EM 758013	0.11	BDL	114	BDL
#13	EM 758014	0.11	BDL	114	BDL
#14	EM 758015	0.11	BDL	114	BDL
#15	EM 758016	0.11	12.5	114	114
#16	EM 758017	0.11	BDL	114	BDL
#17	EM 758018	0.11	BDL	114	BDL
#18	EM 758019	0.11	BDL	114	BDL
#19	EM 758020	0.11	BDL	114	BDL
#20	EM 758021	0.11	25.0	114	227
#21	EM 758022	0.11	BDL	114	BDL
#22	EM 758023	0.11	BDL	114	BDL
#23	EM 758024	0.11	BDL	114	BDL
#24	EM 758025	0.11	BDL	114	BDL
#25	EM 758026	0.11	BDL	114	BDL
#26	EM 758027	0.11	BDL	130	BDL
#27	EM 758028	0.11	BDL	114	BDL
#28	EM 758029	0.11	BDL	114	BDL

*Calculations Based On A 1 sq.ft. Sample Area Unless Otherwise Noted

BDL = Below Detection Limit

Page 2 of 2

Data Qa

RK
 11/11/03

BULK SAMPLE DATA

For use of this form see: USARH IT 141; the proponent is USARH-LO.

Return Address (complete address including Zip Code) National Guard ATRAHQ-HS-AR, PUEB P.O. Box 1255 Stuttgart Army, AR 70354-0555		Point of Contact (name/AUTOCALL) SFC Non-Responsive DSU 962-5095 / SO-212-5095		
Sampled Installation Stuttgart Army, AR	Project Number ARSHU030304	ARLOC [] [] [] [] [] []		
Samples Collected By SFC Non-Responsive	Date Collected 4 MAR 03 207C	Date Shipped 5 MAR 03		
Description of Operation LEAD SAMPLING OF INDOOR FIRING RANGE		Location (ALOG/AREA)		
Associated Complaints (be specific):				
Associated Air Samples <input type="checkbox"/> Yes <input type="checkbox"/> No				
Label Information				
Trace Name	Lot	Manufacturer		
Address		SDS Attached <input type="checkbox"/> Yes <input type="checkbox"/> No		
Analysis Desired LEAD				
Lab Use Only	Sample No.	Constituents	Results	Remarks
	1	Top Left Wall		
	2	Middle left Wall		
	3	Bottom Left Wall		
	4	Top Left Bullet Stop End		
	5	Middle Bullet Stop End		
	6	Bottom Right Bullet Stop End		
	7	Top Right Wall		
Comments to Lab:				
Lab Use Only				
Analyst (Signature)	Reviewed by (Signature)	Date Received	Date Reported	
Procedures Performed		Comments:		

USARH Form 5-8 1 Oct 94

BULK SAMPLE DATA

For use of this form use: **USARMC TO 1-11**; the proponent is **USARMC-10**.

Return Address (complete address including Zip Code)

National Guard
ATKINS-10 AIR FILLER
P.O. Box 1258Point of Contact (Name/Title)
SFC **Non-Responsive**

DSN 962-5095 (611) 212-5095

Sampling Instructions 3035-0045

Project Number

ARLOC

Shuttart Army, AR

ARSHU030304

--	--	--	--

Sampling Collection by

Non-Responsive

Date Collected

11 MAR 03

Date Shipped

5 MAR 03

Description of Operation

LEAD SAMPLING OF FIRING RANGE

Location (Bldg/Area)

Associated Complaints (be specific)

Associated Air Samples

if yes, list sample numbers

☐ Yes ☐ No

Label Information

Trace Name

N/A

Manufacturer

Address

MSDS Attached

☐ Yes ☐ No

Analysis Desired

LEAD

Lab Use Only	Sample No.	Constituents	Results	Remarks
	8	Middle Right Wall		
	9	Bottom Right Wall		
	10	Bottom Rear Wall		
	11	Middle rear Wall		
	12	Top Rear Wall		
	13	Floor Right Bullet Stop		
	14	Floor Center		

Comments to Lab:

Lab Use Only

ANALYST (Signature)

Reviewed by (Signature)

DATE RECEIVED

DATE REPORTED

Procedures Performed

Comments:

BULK SAMPLE DATA

For use of this form see USARMC TO 141; the proponent is HSHB-LO.

Return Address (complete address including Zip Code)

National Guard
ATTENDING-HSAR PULEY
B/A Bldg 1000

Point of Contact (Name/AUTOCALL)

SPC Non-Responsive

DSU962-SOAS / 601-212-SOAS

Samples Inspected (Date Range)

Stuttgart Army, AR

Project Number

ARSTUD30304

ARLOC

--	--	--	--

Samples Collected By

Non-Responsive

Date Collected

4 MAR 03

Date Shipped

5 MAR 03

Description of Operation

LEAD SAMPLING OF FIRING RANGE

Location (ALLEG/AREA)

Associated Complaints (be specific)

Associated Air Samples

If yes, list sample numbers

☐ Yes☐ No

Label Information

Trace Name

NSA

Manufacturer

Address

SOS Attached

☐ Yes☐ No

Analysis Desired

LEAD

Lab Use Only

Sample No.

Constituents

Results

Remarks

15

Floor Left Rear Wall

16

Ceiling Left Bullet Stop

17

Ceiling Center

18

Ceiling Right Rear Wall

19

Locker 137 Door

20

Ice box Top

21

Shelf unit

Comments to Lab:

Lab Use Only

ANALYST (Signature)

Reviewed by (Signature)

Date Received

Date Reported

Procedures Performed

Comments:

BULK SAMPLE DATA

For use of this form see DSAR 10 141; the proponent is ASD-LO.

Return Address (complete address including Zip Code)

National Guard
ATTN: WING-10 AIR FILLER
PO Box 1000Point of Contact (Name/Title)
SFC Non-Responsive

DSN 962-5095 / 501-212-5095

Sampling Instructions 3025-0055

Non-Responsive

Project Number

Shutland AR ARST2103D304

ARLOC

--	--	--	--	--

Sampling Collection Date

Non-Responsive

Date Collected

4 MAR 03

Date Shipped

5 MAR 03

Description of Operation

LEAD SAMPLING OF FIRING RANGE

Location (BEG/AREA)

Associated Complaints (be specific)

Associated Air Samples

If yes, list sample numbers

☐ Yes ☐ No

Label Information

Trade Name

USA

Manufacturer

Address

MSDS Attached

☐ Yes ☐ No

Analysis Desired

LEAD

Lab Use Only

Sample No.

Constituents

Results

Remarks

22

Weight bench

23

Obs room W WALL

24

Obs room E WALL

25

Obs room locker

26

Blank 1

27

Blank 2

28

Blank 3

Comments to Lab:

Lab Use Only

Analyst/Analysts

Reviewed by/Analysts

Date Received

Date Reported

Procedures Performed

Comments:



BEST AVAILABLE COPY
DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349

NGB-ARS-IHSE (40-5f)

April 4, 2006

MEMORANDUM FOR: Adjutant General AR ARNG, ATTN: MAJ **Non-Responsive** State
Occupational Health Office, Camp Robinson North Little Rock, AR 72118-2200.

Thru: LTC **Non-Responsive** Deputy Chief Surgeon, DET 4 MED JTFHQ, PO BOX 011 BLDG 6401
RMTC, NLR, AR 72199-9600

SUBJECT: Transmittal of the Survey Reports for Jonesboro Armory, Paragould Armory, Rector Armory and
Walnut Ridge Armory in AR.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.
- b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.
- f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, 10 December 1998, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2003, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.

NGB-ARS-IHSE (40-5f)

April 4, 2006

SUBJECT: Transmittal of Industrial Hygiene Report, Field Maintenance Shop (FMS) No. 1, Jonesboro, Arkansas, February 3, 2006.

j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.

k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.

l. Industrial Hygiene Survey Report, Industrial Hygiene Technician, Colorado Springs, CO. 80915.

2. General.

a. At the request of MAJ **Non-Responsive** AR ARNG Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling at the FMS No. 1, Jonesboro, Arkansas 23 January 2006.

b. The surveys were conducted by **Non-Responsive** of Industrial Hygiene Technician, 1503 Zaiger Dr., Colorado Springs, CO. 80915

3. Findings. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed. Additionally one noise dosimetry notification letter was generated based on the data collected during the survey. Operations of very short duration were not sampled due to the requirements of the sampling method. If the operation changes or if the length of the operation is increased, contact this office to schedule sampling if it is deemed needed then. (See ENCL 1).

4. Recommendations.

a. Follow the guidance given in reference 1.1. as good IH practices, requesting industrial hygiene (IH) services where needed. The recommendations that follow are based on the survey findings as reported.

1. Continue to train employees in the Federal Hazardous Communication Program. Ensure that the welding rod MSDS's are included in the binder and on the inventory list. Also, inventory the MSDS's on a semi-annual basis. **(RAC 3)**
2. Due to the large cubic inch displacement diesel engines (379-855 CID range) which are serviced in this maintenance facility, a work request should be submitted requesting that a new exhaust system be installed which is capable of providing at least 2200 CFM at the terminal end of the exhaust duct. Consideration should be given to both the high exhaust temperatures and the fact that many of the serviced engines are turbo charged when selecting branch/duct construction materials. Reduction/elimination of sharp 90-degree angles in the exhaust branch/ducts will also greatly increase its overall effectiveness. Continue to open bay doors, turn on the general ventilation exhaust system and use local exhaust ventilation hoods while the vehicles are running inside the motor pool. Attached as enclosure 10 are copies of engineering design guidelines/plates, which should help the design of an effective system. **(RAC 2)**
3. Lighting in the motor pool (bays 1-4) should be upgraded to 100 foot candles (50-100 FC nominal). Continue to keep the bay doors open to increase the illumination levels. NOTE: Ventilation upgrades throughout the facility maintenance bays could limit the amount of available

April 4, 2006

NGB-ARS-IHSE (40-5f)

SUBJECT: Transmittal of Industrial Hygiene Report, Field Maintenance Shop (FMS) No.1, Jonesboro, Arkansas, February 3, 2006.

lighting in critical work areas unless consideration is given to exhaust branch/duct placement. Lighting levels in those critical work areas (under vehicle hoods, wheel cylinder areas, undercarriages and etc.) should be at least 100 FC's (50-100 FC nominal range). To provide adequate lighting while working underneath vehicles continue to use the fluorescent droplights. A brighter color on the walls and ceiling would also enhance the illumination levels in the motor pool. **(RAC 3)**

4. Eye wash/shower stations must be flushed weekly for at least 3 minutes to rid of the harmful bacteria *acanthamoeba*. Also, continue to keep a weekly register on the date and times the flushing occurred. Get new eyewash bottle solutions in the battery room and add water to the 5 gallon portable eyewash container and flush weekly. A 16 gallon portable gravity fed eyewash (see encl.11) would be the best solution in that a weekly 1 minute flushing would suffice and replacement of the chemical solution and water would be every 4 months. **(RAC 3)**
5. Ensure that all personal protective equipment (i.e. respirators, goggles, face shields, and gloves) are cleaned with soap and water after use and properly stored. Replace rubber gloves due to deterioration. **(RAC 3)**
6. Consider using a transformer for the three phase motor on the portable 50 ton lift. The transformer would increase or decrease the voltage which is directly proportional to the amperage. The phase converter, which was initially going to be installed, could do both but usually at a more than 10 % loss. Also, the phase converter is more expensive and less efficient than the transformer. **(RAC 3)**
7. Continue all employees in the Hearing Conservation Program and make sure that the workers have an annual audiogram. A DD Form 2214 (noise survey) was performed for impact noise sources such as pneumatic wrenches, drills, and hammers (see encl.4 for results). Also, strictly enforce hearing protection during engine run times and when using pneumatic power tools. **(RAC 3)**
8. Submit a request for a new updated carbon monoxide detector in the motor pool area. The Nighthawk CO monitor is recommended. The manufacture recommends that the Nighthawk carbon monoxide detector be checked once per week. The Nighthawk should be replaced with either model no. 900-0056 (110 volt) or model 900-0076 (110 volt outlet plus battery). The manufacture suggested replacing the unit every 5 to 6 years. Ensure that the CO detector is calibrated annually. **(RAC 3)**
9. Replace the filter in the break room's AC unit. This will help in circulating cool air to the area. Add a grease filter to the bottom of the kitchen stove exhaust fan. **(RAC 3)**
10. Due to possible ice contamination from the vehicle exhaust and welding fumes, consider moving the ice machine (ice is considered a food) to the break area. **(RAC 2)**
11. The battery charger should be located in the battery room and not the POL bulk storage room due to the electrical fire hazard. Contact the safety office for further guidance. The switch for the

April 4, 2006

NGB-ARS-IHSE (40-5f)

SUBJECT: Transmittal of Industrial Hygiene Report, Field Maintenance Shop (FMS) No.1, Jonesboro, Arkansas, February 3, 2006.

mechanical exhaust fan and the battery charger should be interconnected. This action will ensure its operation when personnel are most likely to be present and contaminants are being generated. Although not a regulatory requirement, this action is beneficial in maintaining exposures at the lowest practical level. The battery room lighting should supply a uniform 50 FC in all servicing/charging areas as recommended by reference 1i. (RAC 3)

b. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY2006. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2007 IHIP.

c. Have all HHIM data entered into the HHIM computer module.

d. Use the report to help in correcting all deficiencies noted.

e. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.

f. Contact the State Occupational Health Nurse, MAJ **Non-Responsive** for any medical Surveillance that may be needed.

k. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. The present report addressed to the local facility commanders was divided in such a way that personal data can be detached and kept by the OHM or blocked when forwarding these reports to other entities within the appropriate offices of AR ARNG. If additional information is needed please contact Mr. **Non-Responsive** **Non-Responsive** Regional Industrial Hygienist, NGB-AVN-SI, COMM. (404) 559-4174 OR 1 (800) 326-0262.

Non-Responsive

Regional Industrial Hygienist

CF: NGB-ARS-IHSE

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

MA **Non-Responsive** State Occupational Health Office, Camp Robinson North Little Rock, AR 72118-2200.

ENCL.

as

BEST AVAILABLE COPY
Industrial Hygiene Report
For
Arkansas National Guard
(ARARNG)
At
Walnut Ridge Armory
Company A (-)
2nd Battalion 153rd Infantry
1121 South East Front Street
Walnut Ridge, Arkansas 72476-3019



Prepared for:
Department of the Army and Air Force
National Guard Bureau
Regional Industrial Hygiene Office
Region South
510 Plaza Drive, Suite 1530
College Park, Georgia 30349
By
Non-Responsive
DBA: **Non-Responsive** & Associates
26 January 2006

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Enclosures:

1. Health Hazard Information Module (HHIM) Survey Form
2. Listing of hazardous chemicals/materials at the facility
3. Analytical Lead Wipe Results
4. Personnel Roster
5. Design Floor Plan and Illumination Readings of the Walnut Ridge Armory
6. Recommendations
7. Lead Clean up Procedures
8. References
9. Pictures: 1-17

February 11, 2006

MEMORANDUM FOR: Arkansas Army National Guard, Attn: 1SG Danny Gifford, Company A (-), 2nd Battalion 153rd Infantry, 1121 South East Front Street, Walnut Ridge, Arkansas 72476-3019

SUBJECT: Industrial Hygiene Consultation and Health Hazard Information Module (HHIM) Survey, Company A (-), 2nd Battalion 153rd Infantry, 1121 South East Front Street, Walnut Ridge, Arkansas 72476-3019

1. REFERENCES: See Enclosure 8
2. BACKGROUND: At the request of Mr. **Non-Responsive** National Guard Bureau Regional Industrial Hygienist, Atlanta, Georgia, an Industrial Hygiene Consultation and Health Hazard Information Module Field Survey were performed at the Walnut Ridge Armory, Army National Guard, Walnut Ridge, Arkansas on January 26, 2006. The POC was 1SG **Non-Responsive** at 870-886-2711. His address was Company A (-), 2nd Battalion 153rd Infantry, 1121 South East Front Street, Walnut Ridge, Arkansas 72476-3019. The primary unit's mission was that of a light infantry highly mobile unit. Mr. **Non-Responsive** assisted in the survey. The purpose of the survey was to perform lead wipe samples; a ventilation survey, an Illuminations survey, and complete HHIM field survey forms on all industrial operations at the facility (see encl 1 for completed HHIM Survey Form).
3. INSTRUMENTATION: The following survey instrumentation was provided by the contractor and was used to obtain lead wipe dust samples and illumination measurements. All other instrumentation was operated according to manufacture recommendations.
 - a) Reed LM-81LX, Light Meter, S/N: Q225589, calibrated: 11/15/2005
 - b) Ghost Lead Dust Wipes, Manufactured: December 1, 2003, Expiration: 06/06
 - c) TSI, Model 8386, SN: 00100166
 - d) Bascom Turner, Gas Sentry, Model CGC-301
4. Findings:
 - a) Company A.(-), 2nd Battalion 153rd Infantry:
 - i) Administrative duties included pay, promotions, schools, family support, assignments, and supplies. The class 2 supply area had items such as clothing and equipment. The supply area was also responsible for maintaining TA 50.
 - ii) Eighty-four M-Day soldiers trained at the facility.
 - b) General Area Armory Information:
 - i) Material Safety Data Sheets (MSDS) were located in the facility. All employees must be initially trained in the Federal Hazardous Communication Program IAW 1910.1200 (see enclosure 2 for a listing of hazardous chemicals/materials at the facility).

- ii) Twelve lead dust wipe samples were taken, using a 10 inch by 10 inch template. Three samples were above the federal standard of $40\mu\text{g}/\text{ft}^2$. One sample was above the Army National Guard standard of $200\mu\text{g}/\text{ft}^2$. Pictures of the lead sample wipes were taken (see encl.9, photo's M04606 to M05706). The analytical lead result sheet included the sampled locations and corrected results. Also, the sample submission sheets were enclosed in the report (see enclosure 3). The following table notes where the samples were taken, the surveyor's field number, and the lead results:

Location:	Surveyor's Field No:	Results:
Vault Floor	M04606	$90\mu\text{g}/\text{ft}^2$
West End Drill Hall Floor	M04706	$<14\mu\text{g}/\text{ft}^2$
South Vent Door, Drill Hall	M04806	$20\mu\text{g}/\text{ft}^2$
West End Locker Room Floor	M04906	$32\mu\text{g}/\text{ft}^2$
Heat Vent, Classroom	M05006	$<14\mu\text{g}/\text{ft}^2$
Display Case Shelf, East End Drill Hall	M05106	$25\mu\text{g}/\text{ft}^2$
Supply Room Floor	M05206	$17\mu\text{g}/\text{ft}^2$
Portable Fan Surface, Kitchen	M05306	$350\mu\text{g}/\text{ft}^2$
Indian Chief, Bottom Stand	M05406	$58\mu\text{g}/\text{ft}^2$
Company's 1SG Office Vent Surface	M05506	$<14\mu\text{g}/\text{ft}^2$
South End Floor, Drill Hall	M05606	$<14\mu\text{g}/\text{ft}^2$
Top of Refrigerator Surface, Kitchen	M05706	$39\mu\text{g}/\text{ft}^2$

Note 1: $\mu\text{g}/\text{ft}^2$ refers to micrograms or one millionth of a gram per square foot

Note 2: BDL means below detection level

- iii) Drill Hall: Conducting drill and ceremonies in the large hall was its main purpose (see encl.9, photo 1). It was also used as a community service area such as Boy Scout events. Illumination levels ranged from 18 to 39 FC's.
- iv) Furnace/General Mechanical Ventilation: The furnace filters were clogged; however, the supervisor changed them out. An air conditioning unit in the supply room was going to be replaced due to a broken bracket (see encl.9, photo 2).
- v) The following table identifies area deficiencies:

AREA	DEFICIENCIES
Recruiter's Office	4 fluorescent tubes were burned out
Kitchen	7 fluorescent tubes were out.
Supply Room	16 fluorescent tubes were burned out
Female Latrine	4 fluorescent tubes were out
NCO Locker Room	12 fluorescent tubes were out
Training, Unit Clerk	3 fluorescent tubes were out
Entrance, Hallway	2 fluorescent tubes were out

- vi) Due to an evident gas odor at the entrance to the drill hall, the supervisor called the fire department to check the drill hall heaters and the floor furnace for leaks. Both the drill hall ceiling heaters and the floor heater in the locker room (see encl.9, photos 2 & 3) had carbon monoxide (CO) readings between 15 and 20 ppm (see encl.9, photo 4). The fire department used a Gas Sentry, Model No.CGC-301, to test for CO and they said anything between 5-10 ppm poses a health problem. The facility supervisor was going to contact city utilities, Facility Maintenance Office and the environmental/safety office for further guidance on the situation. After talking with 1SG [REDACTED] two weeks after the survey, the FMO located a gas leak in the ceiling drill hall heater. The heater unit was shut off while a plumbing contractor was in the process of fixing the leak.
- vii) Asbestos analysis on the drill hall and supply room floors and overhead pipe was performed in the mid-nineties. At that time areas were confirmed positive for asbestos. No removal or additions were made due to cost. Presently, only mopping and non-polishing floor cleaner was used on the floors. No buffers were allowed in the area. If chunks of tile are removed from vehicle or human traffic then the environmental/safety office called to remove the broken tile. No parking of equipment is permitted on floor. A supply room floor sample was taken and the results were positive for asbestos in the tile but not in the mastic. The sample submission sheet was enclosed in the report (see enclosure 3). The following table notes where the samples were taken, the surveyor's field number, and the asbestos result:

			OSHA 1910.1001
Location	Surveyor's Field No.	Results:	Standards
Supply Room Floor-Tile	M05906	Chrysotile >1<3 %	>1%
Supply Room Floor-Mastic	M05906	None Detected	>1%

- viii) A squirrel cage bracket on the supply room AC unit was broken. Facility Maintenance Office (FMO) out of Little Rock was going to order a new unit (see encl., photo 5).
- ix) Due to the low noise levels (administrative areas) there was no requirement for a Hearing Conservation Program. The only requirement would be when the M-Day troops were firing their weapons. M-Day and permanent party soldiers had earplugs.
- x) A listing of Company A.(-) personnel was attached as encl. 4
- xi) A design floor plan with illumination levels of the armory was attached as encl. 5.

ILLUMINATION SURVEY RESULTS:

- a) Illumination Levels: The following additional illumination level readings were taken during the survey and are reported below in foot candles (FC's).

AREA/LOCATION	FOOT CANDLES (FC)
Drill Hall (garage door closed)	18-39
Kitchen	18-29
Classroom	13-36
Entrance, Hallway	10-31
NCO Locker Room	7-47
Vault	34-52
Supply Room	30-42
Recruiter's Office	17-26
1SG's Office	49-66
Side Office	18-41
Training, Unit Clerk Office	9-51
NBC Room	9-23
Women's Latrine	10-55
Men's Latrine	21-69
Motor Pool Office	9-14
Outside Storage Building	4-13

As indicated in the IES Lighting Handbook, Application Volume 1987, Offices: 20-50 FC's, Supply and Publication Areas: 20-50 FC's, Assembly 20-50 FC's, Restrooms: 5-10 FC's, Classrooms: 50-100 FC's, Kitchen: 20-50 FC's, FC's, Library: 50-100 FC's, Storage Rooms: 10-20 FC's, Mail Room: 20-50 FC's.

6. RECOMMENDATIONS: See Enclosure 6

7. TECHNICAL ASSISTANCE::

POC for further assistance concerning this evaluation is **Non-Responsive**

Non-Responsive

Industrial Hygiene Technician

CF:

Office of the Adjutant General, Arkansas Army National Guard,
ATTN: TAG-DZ-SO (MAJ **Non-Responsive**)
Bldg. #3000, Camp Robinson,
North Little Rock, AR 72199-9600

BEST AVAILABLE COPY
SEE PRIVACY ACT STATEMENT ON REVERSE
(For use of this form, see FORM User's Instructions)

SECTION 1.

DEMOGRAPHIC DATA

1. ARLOC 05000 2. INSTALLATION ARK NAT GUARD 3. BLDG/RM NUMBER WALNUT RIDGE ARMOR
 4. LOCATION CODE AD 5. OPERATION CODE ADD 1 SAH 6. DESCRIPTION A. COMPANY C-7
10 BN, 153RD INF BN CONDUCTED TRAINING, ADMINISTRATION, DUTIES, SCHOOLS,
AND PROMOTIONS FOR 84 M-DAY SOLDIERS.
 7. MACOM CODE N6 8. SUBMACOM CODE XX-1 9. SUPERVISOR ISG **Non-Responsive**
 10. TELEPHONE/AUTOVON NUMBER 1-870-88612711 11. RAC 3 12. FREQUENCY (HR Per Day) 1700 UT
 13. NO CIV(S) 3 14. NO MIL 15. NO CONTRACTOR(S) 16. NO LOC(S) 17. NO OTHER

SECTION 2.

HH STAFFING DATA

1. LAB HOODS 0 2. VAPOR DECREASERS 0 3. MAINTENANCE BAYS 0 4. SPRAY BOOTHS 0
 5. OPEN SURFACE TANKS 0 6. VENTILATION UNITS 0

SECTION 3.

SURVEY DATA

1. SURVEY DATE 1-26-2006 2. EVALUATOR (INITIALS) TLM

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS
OTH (DRILL HALL)	18-39 FTE adequate	ETC	50 FTE (20-50 nominal range)	ACCOM
OTH (SUPPLY)	30-42 FTE adequate	ETC	50 FTE (20-50 nominal range)	ACCOM
OTH (KITCHEN)	18-39 FTE adequate	ETC	50 FTE (20-50 nominal range)	ACCOM
OTH (CLASSROOM)	18-36 FTE adequate	ETC	100 FTE (50-100 nominal range)	RECMD

1. PERSONAL PROTECTIVE EQUIPMENT (R=REQUIRED; A=AVAILABLE)

1. RESPIRATOR

DISPOSABLE

☒ FACE AIR PURIFYING

☒ FACE AIR PURIFYING

FULL FACE AIR PURIFYING

POWERED AIR PURIFYING

AIRLINE

SELF-CONTAINED

ABRASIVE BLASTING HOOD

MANUFACTURER

NIOSH TC NO

R/A

2. GLOVES	R/A	3. EYES/FACE	R/A	4. HEARING	R/A	5. BODY	R/A	6. HEAD/FOOT	R/A
ACID	/	CHEMICAL/SPLASH	/	MUFFS	/	APRONS	/	HARD HATS	/
OIL	/	SAFETY/IMPACT	/	EARPLUGS	XIX	COVERALLS	/	IMPERMEABLE BOOTS	/
SOLVENTS	/	CHEMICAL/SAFETY	/	CANAL CAPS	/	FULL BODY SUIT	/	SAFETY CONDUCT SHOES	/
HOT SURFACES	/	FULL FACE SHIELD	/	HELMETS	/	SAFETY BELT/HARNES	/	SAFETY/HORCONDUCTIVE SHOES	/
COLD SURFACES	/	WELDING HELMET	/			HEAT REFLECT VEST/SUIT	/		
NO AGENTS	/					BDU'S	XIX		

SECTION 4.

HAZARD INVENTORY DATA

1. CAS CODE	2. HAZARD DESCRIPTION	3. PAC # EPC	4. MEDICAL SURVEILLANCE RECOMMENDED (YES or NO)
7439-92-1	LEAD, INORGANIC DUSTS, AS PB	2B	NO

**MATERIAL SAFETY DATA SHEETS
(MSDS)**

INDEX

TAB A - - - Hazard Communication 29 CFR 1910.1200 (Standard) AR ARNGR 385-5 (Program)	
TAB B - - - Floor Finish, Non-buffing Floor Finishes Sealer Surface Floor Water Emulsion Floor Polish Remover	7930-01-183-8585 7930-00-298-1947 8010-00-530-8371 7930-00-045-6912
TAB C - - - Sand Base Sweeping Compound	7930-00-132-5265
TAB D - - - Dishwashing Compound Dishwashing Soap Hand Simple Green Toilet Soap Detergent Pine Oil Detergent, General Purpose (Wipe-Off) Glass Cleaner	7930-00-899-9534 7930-00-880-4454 7930-01-306-8369 8520-00-228-0598 6840-00-687-7904 7930-00-926-5280 7930-00-664-6910
TAB E - - - Windshield Cleaner	6850-00-926-2275
TAB F - - - Metal Polish Plastic Polish (Anti-Static Cream)	7930-00-266-7137 7930-00-935-3794
TAB G - - - Vinyl Cement (Adhesive) Tile Adhesive	8040-01-340-1575 8040-00-558-4050
TAB H - - - Corrosion Preventive	8030-00-251-5048
TAB I - - - Insect Block Repel Lotion Chigg-Away Insect Repellent (Cutter Evergreen) Insecticide, government Issue	6840-01-288-2188 6505-01-137-8456 6840-00-142-8965 6840-01-067-6674
TAB J - - - Silicone Lube	9150-00-N08-4104
TAB K - - - Antifreeze, Ethylene Glycol	6850-00-181-7933
TAB L - - - Silicone Brake Fluid	9150-01-102-9455
TAB M - - - Lubricating Oil, General Purpose Lubricating Oil	9150-00-273-2389 9150-00-889-3522
TAB Mc- - - Penetrating Oil Type II	9150-00-529-9718

MATERIAL SAFETY DATA SHEETS (MSDS)

INDEX

TAB N - - -	Motor Oil 15W/40	9150-00-N00-6533
	Motor Oil 15W/40	9150-01-178-4726
	Motor Oil 15W/40	9150-00-186-6709
TAB O - - -	Dextron II (Automatic Transmission Fluid)	9150-00-698-2382
	Dextron III (Automatic Transmission Fluid)	9150-00-N05-7511
TAB P - - -	2-Cycle Engine Oil (50-1)	9150-00-117-8791
	Motor Oil GL 80W/90	9150-01-035-5393
TAB Q - - -	Decon Training & Refill Kits	6910-01-101-1768
TAB R - - -	Plastic Pipe Primer	8010-00-N03-9406
TAB S - - -	Olive Green Spray Paint	8010-00-584-3149
		8010-00-598-5936
		8010-00-936-8367
	Flat Black Spray Paint	8010-00-582-5382
	Black Spray Paint	8010-00-910-8154
	Red Spray Paint	8010-00-721-9743
		8010-00-935-7064
	White Spray Paint	8010-00-584-3150
	Gray Spray Paint	8010-00-721-9749
	Fluorescent Spray Paint	8010-00-958-8148
	Brown Spray Paint	8010-01-229-7544
	Deck Gray, Enamel	8010-00-527-0216
	Alum. Spray Paint	8010-00-721-9751
TAB T - - -		
TAB U - - -		
TAB V - - -		
TAB W - - -		
TAB XYZ - -		



Submitted To: **Non-Responsive**
Associates
1503 Zaiger Drive
Colorado Springs, CO 80915

Reference Data:	Lead
Client Sample No.:	M04606 through M05806
P.O. No.:	Not Available
Sample Location:	Walnut Ridge Armory
Sample Type:	Ghost Wipe
Method Reference:	3050B/6010B
DCL Set ID No.:	06-S-0369
DCL Sample ID No.:	06-01957 through 06-01969
Sample Receipt Date:	1/30/2006
Preparation Date:	1/30/2006
Analysis Date:	1/31/2006

The samples were prepared in accordance with EPA method 3050B. Sample condition was acceptable upon receipt except where noted. The samples were then analyzed in accordance with EPA method 6010B using a Thermo Jarrell Ash Trace (ICP) purged spectrometer.

The results are provided in the enclosed data table. Results relate only to the items tested and are not blank corrected unless indicated in the data table.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Non-Responsive

Analyst

CINCINNATI OFFICE
4388 GLENDALE-MILFORD ROAD
CINCINNATI, OHIO 45242-3706
513 733-5336, FAX 513 733-5347

Non-Responsive

Reviewer

WEST COAST OFFICE
11 SANTA YORMA COURT
NOVATO, CALIFORNIA 94945
800 280-8071, FAX 415 893-9469

Results Lead

Client #	DCL #	Total Area (ft ²)	µg/Wipe	µg/ft ²
M04606	06-01957	0.69	62.	90.
M04706	06-01958	0.69	ND	<14.
M04806	06-01959	0.69	14.	20.
M04906	06-01960	0.69	22.	32.
M05006	06-01961	0.69	ND	<14.
M05106	06-01962	0.69	17.	25.
M05206	06-01963	0.69	12.	17.
M05306	06-01964	0.69	220.	320.
M05406	06-01965	0.69	40.	58.
M05506	06-01966	0.69	ND	<14.
M05606	06-01967	0.69	ND	<14.
M05706	06-01968	0.69	27.	39.
M05806	06-01969	-	ND	-
	Prep Blank		ND	
% Recovery	LCS 1		97.	
% Recovery	LCS 2		97.	
RPL			10.	

ND = not detected at or above the reporting limit (RPL).

LCS = laboratory control sample.

Non-Responsive

Analyst

Non-Responsive

Reviewer


**DATA
CHEM**
LABORATORIES, INC.

ANALYTICAL REQUEST FORM

☒ **REGULAR** Status (5 working days from receipt)

☐ **RUSH** Status Required - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____

DATE _____

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES

Date 1-26-06 Purchase Order No. _____
 Company Name Non-Responsive & Associates
 Address 1503 ZAIGER DRIVE
Colorado Springs CO 80915
 City _____
 Person to Contact Non-Responsive
 Telephone (719) 510-9517
 Fax Telephone (509) 757-4846

Billing Address (if different from above)
MR Non-Responsive
ARMY NATIONAL GUARD, COLLEGE PARK

Quote No. _____

Sample Collection _____

Sampling Site Walnut Ridge ArmoryIndustrial Process AdministrativeDate of Collection 1-26-06Time Collected 08:30-11:00Date of Shipment 1-26-06QC Requirements ☒ Standard ☐ Other _____

Collector's Name _____

Signature _____

REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Media Type	Sample Volume (Liters)	ANALYSES REQUESTED - Use Method Number if Known
01957	M04606	GHOST WIPES	10" X 10"	LEAD; VAULT FLOOR
01958	M04706	"	"	" ; WEST END DRILL FLOOR
01959	M04806	"	"	" ; SOUTH VENT DOOR, DRILL HALL
01960	M04906	"	"	" ; WEST END LOCKER RM FLOOR
01961	M05006	"	"	" ; HEAT VENT, CLASSROOM
01962	M05106	"	"	" ; DISPLAY CASE SHELF, EAST END DRILL HALL
01963	M05206	"	"	" ; SUPPLY ROOM FLOOR
01964	M05306	"	"	" ; PORTABLE FAN SURFACE, KITCHEN
01965	M05406	"	"	" ; INDIAN CHIEF STAND, DRILL HALL
01966	M05506	"	"	" ; Co. 156's OFFICE VENT SURFACE
01967	M05606	"	"	" ; SOUTH END FLOOR, DRILL HALL
01968	M05706	"	"	" ; TOP OF REFRIGERATOR SURFACE, KITCHEN
01969	M05806	"	blank	" ; BLANK

CHAIN OF CUSTODY

Relinquish (Signature)	Date / Time	Received by (Signature)	Date / Time
<u>Non-Responsive</u>	<u>1-26-06</u>	<u>Non-Responsive</u>	<u>1-26-06</u>
Relinquish (Signature)	Date / Time	Received by (Signature)	Date / Time

4388 Glendale Milford Road / Cincinnati, OH 45242 • 800-458-1493 or 513-733-5336 / Fax: 513-733-5347

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30/06 13:30
Non-Responsive



1/31/06
Page 1 of 2

SUBMITTED TO:**Non-Responsive**

Associates
1503 Zaiger Drive
Colorado Springs, CO 80915

REFERENCE DATA:

Client Sample No.:	M05908
P.O. No.:	Not Available
Sample Location:	Walnut Ridge Armory, Ark.
Sample Type:	Bulk
Method Reference:	EPA-600/R-93/116
DCL Set ID No.:	06-A-0370
DCL Sample ID No.:	06-01970
Sample Receipt Date:	1/30/06
Analysis Date:	1/31/06

We certify that the following samples were prepared and analyzed by Polarized Light Microscopy for asbestos and other fibrous constituents using EPA-600/R-93/116. The samples were acceptable upon receipt except where noted. The samples were examined under a stereomicroscope in a laboratory fume hood for general composition and phase separation. If needed, portions of the sample were removed and ground with a mortar and pestle before being mounted on a glass microscope slide. Mountings of representative portions of the material are prepared in one or more appropriate refractive index liquids (1.550, 1.605, 1.680) and examined by Polarized Light Microscopy*. Estimates of concentration are made on an area basis. The results of the analysis apply only to the materials analyzed and are summarized on the attached bulk asbestos analysis data sheets. DataChem Laboratories will dispose of all bulk samples after 60 days unless other arrangements are made.

Non-Responsive

Analyst

Non-Responsive

Reviewer

*Floor tiles, decorative paints, joint compounds, and cement materials require additional treatment in order to evaluate the concentration of small asbestos fibers bound in the material. Some samples may contain fibers that are not visible by PLM and can only be detected by electron microscopy techniques. Floor tiles are analyzed as homogeneous materials if insufficient mastic is present or if phases have been cross contaminated.

DataChem Laboratories NVLAP Lab ID: 101917. Laboratory accreditation by the National Institute of Standards and Technology does not in any way constitute approval or endorsement by NVLAP, NIST, or any agency of the federal government..

CINCINNATI OFFICE
4388 GLENDALE-MILFORD ROAD
CINCINNATI, OHIO 45242-3706
513 733-5336, FAX 513 733-5347

WEST COAST OFFICE
11 SANTA YORMA COURT
NOVATO, CALIFORNIA 94945
800 280-8071, FAX 415 893-9469

1/31/06

**DataChem Laboratories
Polarized Light Microscopy
Asbestos Analytical Report**

Client: Minckler & Associates
Location: Walnut Ridge Armory, Ark.
Set ID: 06-A-0370

Client Sample ID:	M05908	M05908
DCL Sample ID:	06-01970A	06-01970B
Macroscopic Examination		
Accepted/Rejected:	Accepted	Accepted
Homogeneity:	Layered	Layered
Color:	Brown	Black
Texture:	Compact	Resinous
Description:	Tile	Mastic
Analysis:	PLM	PLM
Asbestiform Minerals		
% Chrysotile:	$>1 \leq 3$	
% Amosite:		
% Crocidolite:		
% Tremolite - Actinolite:		
% Anthophyllite:		
% Total Asbestos:	$>1 \leq 3$	ND
Other Materials		
Cellulose:		
% Fiberglass:		
% Other Fibers:		
% Resin/Binder:	$>10 \leq 20$	$>70 \leq 80$
% Non Fibrous:	$>70 \leq 80$	$>10 \leq 20$

ND = None Detected Trace = <1%

Special Prep Procedures: None.

*Notes: P. O. #: Not Available.

Non-Responsive

Microscopist

All values are in area percent by visual estimate. The Federal Register Vol. 55 No. 224 Tuesday Nov. 20 1990 Rules and Regulations states "... If the asbestos content is estimated to be less than 10% by a method other than point counting,... (the analysis) be repeated using the point counting technique by PLM." Any of the above samples can be reanalyzed by point counting at the client's request. Wherever possible, separate phases are analyzed and reported individually.

**DATA
CHEM**
LABORATORIES, INC.

☒ **REGULAR** Status (5 working days from receipt)☐ **RUSH** Status Required - ADDITIONAL CHARGE

DATE _____

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES

Company Name **Non-Responsive** & ASSOCIATES

Colorado Springs CO 80915

Person to Contact **Non-Responsive**

Telephone (719) 510-9517

Fax Telephone (509) 757-4846

Billing Address (if different from above)

MR Non-Responsive

ARMY NATIONAL GUARD, COLLEGE PARK

Quote No. _____

Sample Collection

Sampling Site WALNUT RIDGE ARMORY, ARK.

Industrial Process Administrative

Date of Collection 1-26-06

Time Collected 10:00 am

Date of Shipment 1-26-06

QC Requirements ☒ Standard ☐ Other

Collector's Non-Responsive

Signature _____

REQUEST FOR ANALYSES

6A 06-03-10

[illegible]

Non-Responsive

Relinquish (Signature)	[Redacted]	1-26-06 11:15 Date / Time	Non-Responsive [Redacted] (Signature)	Date / Time 1/30/06 9:51 Date / Time
---------------------------	------------	---------------------------------	---	---

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Enclosure 4

DEPARTMENT OF THE ARMY
Company A (-) 2nd Battalion 153rd Infantry
1121 South East Front Street
Walnut Ridge, Arkansas 72476-3019

Non-Responsive

MSG, ARARNG
Readiness NCO
870 886-2711
501 212-7222

Non-Responsive

SSG, ARARNG
Admin. NCO
870 886-2711
501 212-7221

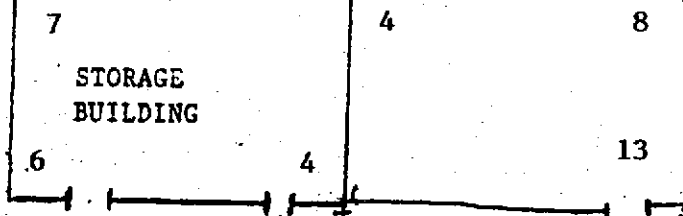
Non-Responsive

SSG, ARARNG
Supply NCO
870 886-2711
501 212-7224

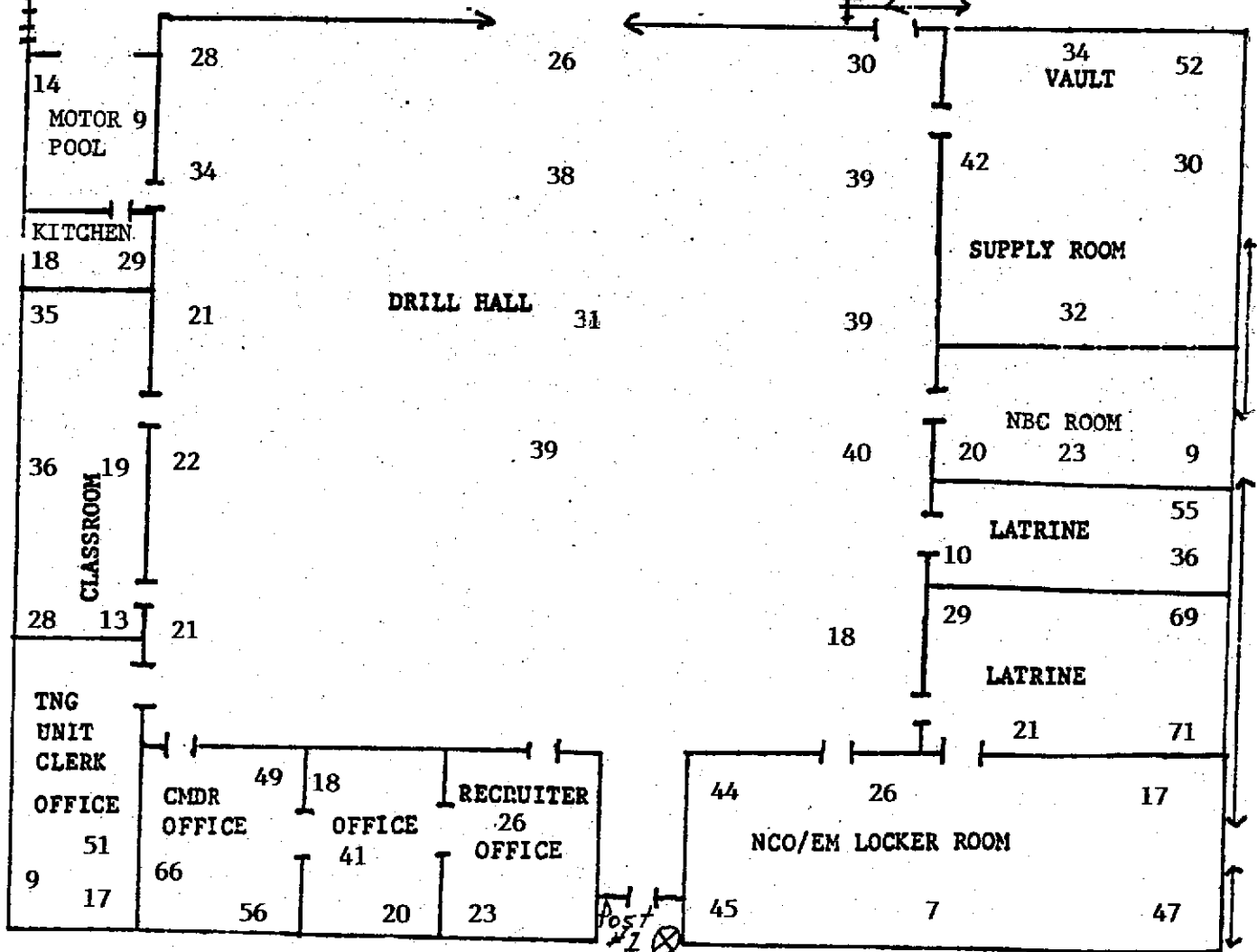
Non-Responsive

SFC, ARARNG
Unit Recruiter
870 886-1913
800 685-4009

Enclosure 5
BEST AVAILABLE COPY



Walnut Ridge Armory
Illumination Levels Posted



Co A (-), 2-153d Infantry

Walnut Ridge, Arkansas

FOR OFFICIAL USE ONLY

Enclosure 6**Recommendations:**

- a) Conduct semi-annual inventories and update MSDS's on all chemicals in the facility. **(RAC 3)**
- b) Replace the fluorescent tubes/bulbs in the recruiter's office, the kitchen, the supply room, the female latrine, the NCO locker area, the unit training room, and the hallway entrance. Also, ensure that all facility light covers are wiped down and cleaned to increase illumination levels. **(RAC 3)**
- c) Due to the lighting readings in the classroom, increase the illumination levels to at least 100 FC's (50-100 nominal range). **(RAC 3)**
- d) Due to the lead dust wipe results, it is recommended that the vault floor, the portable kitchen fan, the Indian Chief stand, and the top of refrigerator be thoroughly wiped down and or wet mopped with an industrial cleaner using tri-phosphates, Mr. Kleen or Spic-n-Span. For additional lead cleaning measures, see enclosure 7. **(RAC 3)**
- e) Periodically check for gas leaks from the overhead drill hall heaters and floor furnaces. **(RAC 3)**
- f) Change out furnace filters monthly. **(RAC 3)**
- g) Perform monthly checks on fire extinguishers. Each month, ensure that the devices are turn upside down and tapped with a rubber mallet to loosen any material at the bottom. **(RAC 3)**
- h) If work practices change, a new assessment should be made on the controls in place.

Enclosure 7

6. Armory Cleanup.**6.1 High Test Result.**

6.1.1 If the public utilizes your facility and the results came back above 40 ug/ft² you are responsible for cleaning this area and adjoining areas to meet the 40 ug/ft² or less.

6.1.1.1 Unless you can guarantee no children under the age of 7 will come into your facility.

6.1.1.2 Unless your state public health has other guidance, e.g., post signage to warn personnel who are pregnant or of child bearing age, or under the age of 7 y/o.

6.1.1.3 Signs stating "No smoking, drinking or eating, application of make-up without washing of hands prior to activity."

6.2 Cleaning of Building. Before proceeding into the cleanup mode, first, discuss with your Environmental office what procedures they would recommend and then coordinate your efforts with local agencies, if warranted.

6.2.1 The building, and dusty materials and equipment in it should be cleaned one time to reach the dust lead levels appropriate for the function of this facility, e.g., used by full-time personnel only, utilized by adults or children 7 y/o, or ~~order~~ ^{older} children only, or utilized by pregnant individuals and/or children under the age of 7. **NOTE:** This type cleaning implies that this is not a facility that has an active Indoor Firing Range. For facilities with active ranges, these facilities should be monitored with wipe samples taken over the drill floor area by the Range Custodian quarterly, to ascertain the level of lead is at the required level for your particular facility and situation.

6.2.1.1 This cleanup can be accomplished using a HEPA vacuum (a very tedious and long operation) and then by utilizing a wet method with "Spic n Span" or something equivalent to this detergent - using wet rags to wipe down surfaces and mops soaked in this solution to do floor area. **NOTE:** Personal protective gloves, rubber boots or protective disposable shoe/boot covers should be used during this procedure and personnel's

clothing should be washed separately from their families, if they have young children at home. Personnel should wash their hands after performing this operation to assure lead contaminants are not ingested.

6.2.1.2 Frequent changing out of the water used is vital. Disposal of this hazardous waste water and rags/mop heads, Personal Protective Equipment (PPE), etc., should be coordinated with your Environmental office.

6.2.2 Clean all ductwork where lead was found. EPA has a protocol specifically for replacing or cleaning lead in dust form in HVAC systems. EPA Office of Pollution Prevention and Toxics, "*Reducing Lead Hazards When Remodeling Your Home*" www.epa.gov/opptintr/lead/rrpamph.pdf.

6.2.3 Continue to enforce good housekeeping and hygiene practices. These measures make good sense to minimize exposures to any toxic chemicals in the workplace.

6.2.4 Provide lead awareness training to the general workforce and any occupants of your facility.

NOTE: Before you start any new procedures or practices be aware of the local city and state regulations in your area.

ARMORY

CLEANUP & FOLLOW-UP HOUSEKEEPING RECOMMENDATIONS

Materials Needed:

1. Cloth Mop head (s) & Mop head holder(s) with handle.
2. Mop bucket (s) with wringer.
3. Clean cotton rags and sponges.
4. Disposable gloves
5. Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water.
6. Disposable overshoes or rubber boots. Personnel conducting cleaning operations should not take clothes, boots, etc., home for laundering.
7. HEPA vacuum
8. Six (6) mill plastic bags to dispose of waste.
9. Waste water containers.

Disposal of Waste Water and Cleaning Materials:

1. **NOTE:** Consult with Local Army National Guard Environmental Office prior to taking any collection, disposal or wiping activities commence. Each state and territory may have additional regulatory guidance on collection, storage and disposal of wastewater.
2. Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: thorough cleaning of mop heads may be sufficient enough to reuse on future Armory cleanups but check with local Environmental Office.
3. Disposable gloves should be treated as hazardous waste.
4. Soiled cotton rags should be treated as hazardous waste.
5. Wash water contaminated with Lead can be collected and allowed to slowly evaporate leaving Lead deposits/sludge that may be collected in plastic containers, placed in metal drums, and stored for future delivery to an authorized hazardous waste disposal site.

- a. Drums shall be properly labeled to identify contents In-Accordance With (IAW) Federal, State and local regulatory guidance.
- b. Disposal of containerized waste shall be coordinated IAW State hazardous waste program requirements.
- c. The Environmental Office shall coordinate removal and disposal of all containerized hazardous waste through established waste streams.

Post-Cleanup Precautionary Measures:

1. Thoroughly wash hands with soap and water.
2. Rinse off rubber boots with soap and water, capturing wastewater for collection into established waste stream. If personnel choose to use over shoes for protection, dispose of overshoes into waste stream. NOTE: This recommendation is for initial clean up activities and PPE requirements may be reduced after it has been determined non-hazardous levels have been achieved.
3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted

Initial Armory Cleanup:

1. Use a vacuum cleaner equipped with a HEPA exhaust filter. HEPA vacuum all surfaces in the room (ceiling, walls trim, and floors). Start with the ceiling and work down, moving toward the entry door. Completely clean each room before moving on.
2. Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

3. Wet wipe, with cotton rags or sponge, any horizontal, diagonal or vertical surfaces up six (6) feet from floor surfaces using hot water and "Spic-n-Span" or an equivalent product.
 - a. Rinse out cleaning cloths thoroughly and frequently.
 - b. Change out cleaning water as necessary.

NOTE: If walls to be cleaned show signs of deterioration, e.g., chipping or crumbling paint, in which wiping, scrubbing, or disrupting might potentially increase or spread contamination, then this portion of the clean up should be avoided.

4. Now prepare water and detergent (e.g. Spic N Span, Mr. Clean, Pine Sol) for the mopping phase, according to manufactures recommendations, which should be found on the products label for general clean up.
 - a. Change out water frequently (when water appears dirty)
 - b. Rinse out mop heads frequently to prevent contamination of dirty water.
5. Cover entire drill floor surface with above prescribed water and detergent.
6. Final rinse should be with clean water only - -after mop heads have been cleaned.

Recommended Follow-up Housekeeping Practices after Clearance sampling of cleaned area is performed by certified personnel:

1. Floor cleaning and dusting should be accomplished using the wet method described in Initial Armory Cleanup SOP.

Note: Only exception to these wet cleaning procedures would be the use of a chemically treated dust floor mop. This can be used for follow-up armory cleaning by sweeping of large particles of dirt and paper.

- a. Pre-treated (chemically treated) dust floor mop will limit dust particles from being disbursed into the surround atmosphere.

- b. If treated dust mop is used - -Do Not Shake Mop head - - have mop head laundered after use. Always keep used dust mop heads in sealed double plastic bags when stored at armory/facility. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
2. Frequency of Cleanup- Armories will vary, according to usage and how often they should be cleaned. The following general cleaning schedule is provided:
 - a. Only full-time technicians and traditional soldiers using facility during the month. (*Cleaned Monthly*)
 - b. Occasional activities taking place during the month, e.g., 1-2 classes or volleyball games, etc. (*Cleaned 2x's Monthly*)
 - c. Used regularly by soldiers or outside agencies/personnel. (*Cleaned Regularly - -at least Weekly*)

NOTE: Armories with adjoining Indoor Firing Ranges (IFR) should be cleaned more than weekly, again depending on use of Armory and IFR.

NOTE: Clearance sampling/testing is to be accomplished by certified personnel after these cleanup procedures are followed. If the area is an average Armory, occupied by adults only, for which you are cleaning and **is not a Converted IFR space**, you may continue to utilize the Armory space before the officials re-test this space. Please notify your Safety and/or Occupational Health personnel of the completion of this cleaning regime and they will notify the proper officials of the sampling/testing requirements needed.

If work is contracted out, a third party should do the clearance sampling.

Young children and females who are pregnant, there should be posted signs on all facilities, warning of the potential danger of exposure to lead dust.

Enclosure 8

REFERENCES:

- a) Title 29, Code of Federal Regulations (CFR) Part 1910, Occupational Safety and Health Administration (OSHA).
- b) ARNG PAM 385-16, Guidelines for Converting Indoor Firing Ranges to Other Uses, 31 January 1994.
- c) NGR 385-15, Policy and Responsibilities for Inspection/Evaluation and Use of National Guard Indoor Firing Ranges.
- d) Army Regulation (AR) 40-5, 15 October 1990, Medical Service, Preventive.
- e) AR 11-34, 15 February 1990, The Army Respiratory Program.
- f) AR 385-10, 23 May 1988, Army Safety Program.
- g) FC-Reg. 385-2, 1 July 1999, Ionizing and Nonionizing Radiation Protection Program
- h) Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- i) Technical Bulletin Medical (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program.
- j) Technical Bulletin Medical (TB MED) 530, 1 January 1991, Food Service Sanitation
- k) National Guard Regulation (NGR) 385-10, 20 December 1989, Army National Guard Safety and Occupational Health Program.
- l) Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- m) IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.



Photo No.1

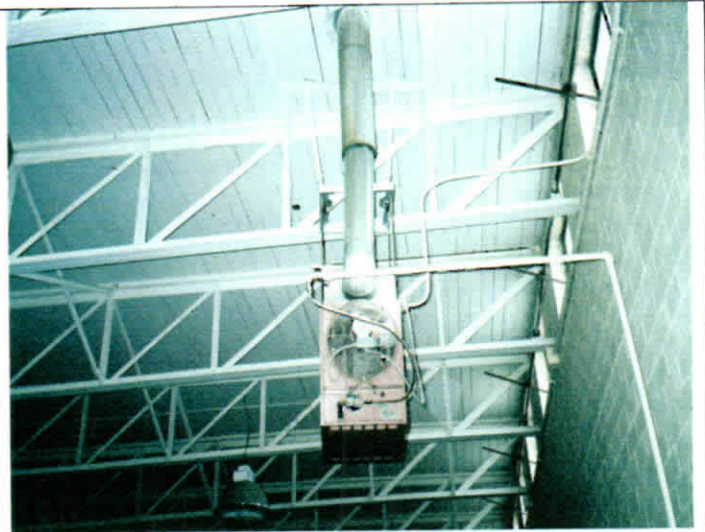


Photo No.2

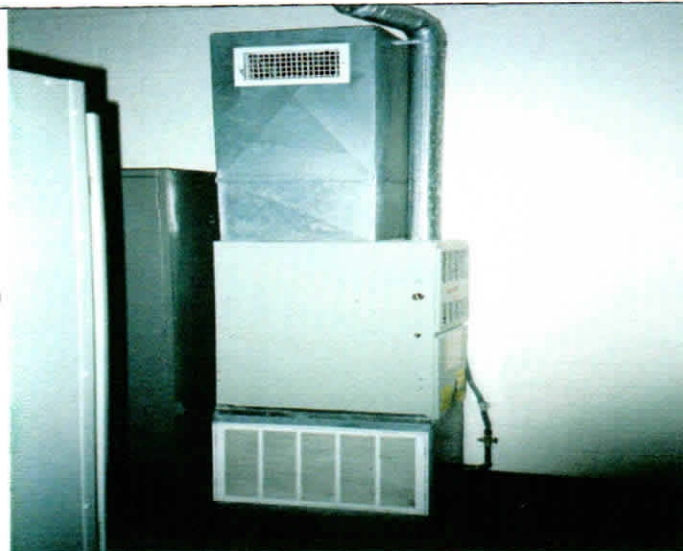


Photo No.3



Photo No.4



Photo No.5



Photo No.6



Photo No.7



Photo No.8



Photo No.9



Photo No.10



Photo No.11



Photo No.12



Photo No.13



Photo No.14



Photo No.15



Photo No.16



Photo No.17

**DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349**

NGB-AVN-SI

December 19, 2003

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG, ATTN.: State Safety and Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

SUBJECT: Transmittal of the Survey Reports for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory, in Arkansas.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.
- b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.
- f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, 10 December 1998, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2001, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.

NGB-AVN-SI

SUBJECT: Transmittal of the Survey Reports for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory, in Arkansas.

j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.

k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.

l. Report Survey dated 8 October 2003, Industrial Hygiene Survey, Mr. Non-Responsive

Non-Responsive New Orleans, LA.

2. General.

a. At the request of the AR ARNG Safety and Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling of the for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory in Arkansas.

b. The surveys were conducted by Mr. Non-Responsive 5400 Milne Blvd, New Orleans, LA.

3. Findings. All Health Hazard information is on the survey findings of the report. (See enclosure 1)

4. Recommendations.

- a. Follow all recommendations made in reference 1.l., requesting industrial hygiene (IH) services where needed to complete the recommendations.
- b. Control water infiltration in the armory and/or replace or repair damaged surfaces or components (ceiling and floor tiles). Building conditions that present IAQ concerns or problems not only exacerbates normally minor health issues but also tend to promote or accelerate building deterioration.
- c. The recommendations given in the comment section and data collected will serve as a baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY-04. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY-04 IHIP.
- d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present survey, especially if this will help eliminate health hazards and reduce medical surveillance cost.

NGB-AVN-SI

SUBJECT: Transmittal of the Survey Reports for Piggott Armory, Jonesboro Armory, Rector Armory, Paragould Armory and Walnut Ridge Armory, in Arkansas.

- e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
 - f. Give special consideration to cleaning light fixtures, increasing the wattage and painting walls a lighter color when upgrading the lighting in the facility.
5. If additional information is needed about the industrial hygiene survey or air sample results, please contact Mr. **Non-Responsive** Regional Industrial Hygienist, NGB-AVN-SI, 1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

NBG-AVN-SH

State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl
as

BASELINE INDUSTRIAL HYGIENE SURVEY FOR:

CO A 2ND BN 153RD INFANTRY BDE

WALNUT RIDGE, AR

Conducted: 7 October 2003

ATTN: SSC **Non-Responsive**
1121 South East Front Street
Walnut Ridge, AR 72476

PREPARED BY:

Non-Responsive

5400 Milne Blvd.
New Orleans, LA 70124-1826
(504) 488-6489

CONTENTS

- 1. INTRODUCTION**
- 2. INSTRUMENTATION**
- 3. FINDINGS**
- 4. RECOMMENDATIONS**
- 5. REFERENCES**

Attachment 1: Schematic of the Armory

Attachment 2: Photographs of the facility

Attachment 3: Laboratory Reports: Lead Swipes

Attachment 4: HHIM Field Survey Form(s)

1. INTRODUCTION

At the request of the National Guard Bureau South Region Industrial Hygiene Office, **Non-Responsive** performed a Baseline Industrial Hygiene Survey at the Army National Guard Walnut Ridge, AR Armory. The purpose of the survey was to establish a baseline to evaluate health hazards, identify controls present in the work site, collect lead swipe samples from the renovated/inactive or closed Indoor Firing Ranges (IFR), perform an illumination survey and make recommendations regarding health hazards associated with the work at the Walnut Ridge, AR Armory.

The building was completed in 1955 with approximately 12,246 square feet. There has never been an IFR at this facility. The facility houses Co A 2nd BN 153Rd Inf Bde with 4 FTS and a total of 156 assigned.

The full-time person is assigned to perform administrative duties Monday thru Friday from 0730 to 1600. The facility contains administrative areas, a drill hall, classrooms, supply room, kitchen, weapons vault, dispatch and retention offices, break area, latrines and locker rooms. A schematic can be found at Attachment 1.

The facility was visually examined and personnel consulted to assess potential hazards present. Lead samples were taken in the drill hall where weapons are cleaned four to five times a year. An illumination survey was performed throughout the facility.

2. INSTRUMENTATION/CALIBRATION

An Extech DLM2 Light Meter, SN # L374324, Calibrated 7/10/03, was used to conduct the illumination survey. It was operated according to the manufacturer's recommendations.

3. FINDINGS

ILLUMINATION

Light readings were taken in various locations throughout the facility with emphasis at desks and/or work stations. The results were compared to guidelines recommended by the Illuminating Engineering Society (IES) and NGB Design Guide 415-1. The results of the survey are shown in Table 1.

Table 1 – Light Readings

Location	Light Reading (foot candles)	IES Recommendation (foot candles)
Drill Hall	3 Readings – Avg 53.67	30
CO's Office	70.4	50-100
Orderly Room	68.2	50-100
Recruiting Office	57.3	50-100
NBC Room	2 Readings – Avg 49.4	50-100
Supply Room	2 Readings – Avg 37.25	30
Kitchen Storage	13.2	20
Kitchen	58.2	50-100
Classroom #1	54.7	50-100
Classroom #2	35.7	50-100
Training Office	3 Readings – Avg 48.93	50-100

ADMINISTRATION

Personnel perform administrative duties that consist of reading, handling and generating paper work. Computer use comprises two to six hours of the work day. This continuous use of computers can lead to eye strain and/or hand/wrist and shoulder soreness.

MOTOR POOL

Only operator maintenance, Prevention Maintenance Checks and Services (PMCS) is performed at the armory. No repair service is performed. When repairs are needed the vehicles are taken to the OMS shop.

DRILL HALL

The drill hall is located in the center of the building. It is used primarily as an assembly area. Weapons are cleaned four or five times a year near an open bay door.

LEAD CONTAMINATION

There has never been an IFR at this facility but lead samples were taken in the drill hall to determine if there was any contamination from other activities.

TABLE 2

SAMPLE NUMBER	SAMPLE LOCATION	RESULTS
WR Blank	Assembly Hall	<10 ug/sq ft
WR 1	Maintenance Bay	<10 ug/sq ft
WR 2	Assembly Hall	<10 ug/sq ft
WR 3	Assembly Hall	<10 ug/sq ft
WR 4	Assembly Hall	<10 ug/sq ft
WR 5	Assembly Hall	<10 ug/sq ft
WR 6	Vault	<10 ug/sq ft

No results were greater than the EPA recommended concentration of 40 ug/sq ft.

WEAPONS VAULT

The Walnut Ridge, AR Armory has a weapons storage vault located in the Supply Room. Accountability and weapons issuing are performed in this area. There are no weapons cleaned in the area.

HAZCOM

MSDSs were available for chemicals used.

ERGONOMICS

Many workstations were not set up to provide neutral postures and appropriate ergonomically correct positions. Consideration should be given to providing all those full-time employees who spend the majority of their time working at a computer terminal ergonomic training to increase awareness of preventive measures. This training should include the importance of proper posture, recommended exercises, and proper set-up of workstations.

SAFETY AND HEALTH

No findings.

4. RECOMMENDATIONS

ILLUMINATION:

Upgrade lighting as required. Lighting can be upgraded in the following ways:

- Replace blown or broken lighting.
- Paint walls a lighter color.
- Clean existing light fixtures.
- Rearrange furniture to make better use of available lighting.
- Provide supplemental lighting.

LEAD SAMPLES

No recommendations.

HAZCOM

Personnel exposed to chemicals should receive initial and annual HAZCOM training.

ERGONOMICS

Complete an ergonomics survey on all work stations and conduct ergonomic training for employees who spend the majority of their time working at a computer terminal.

SAFETY AND HEALTH

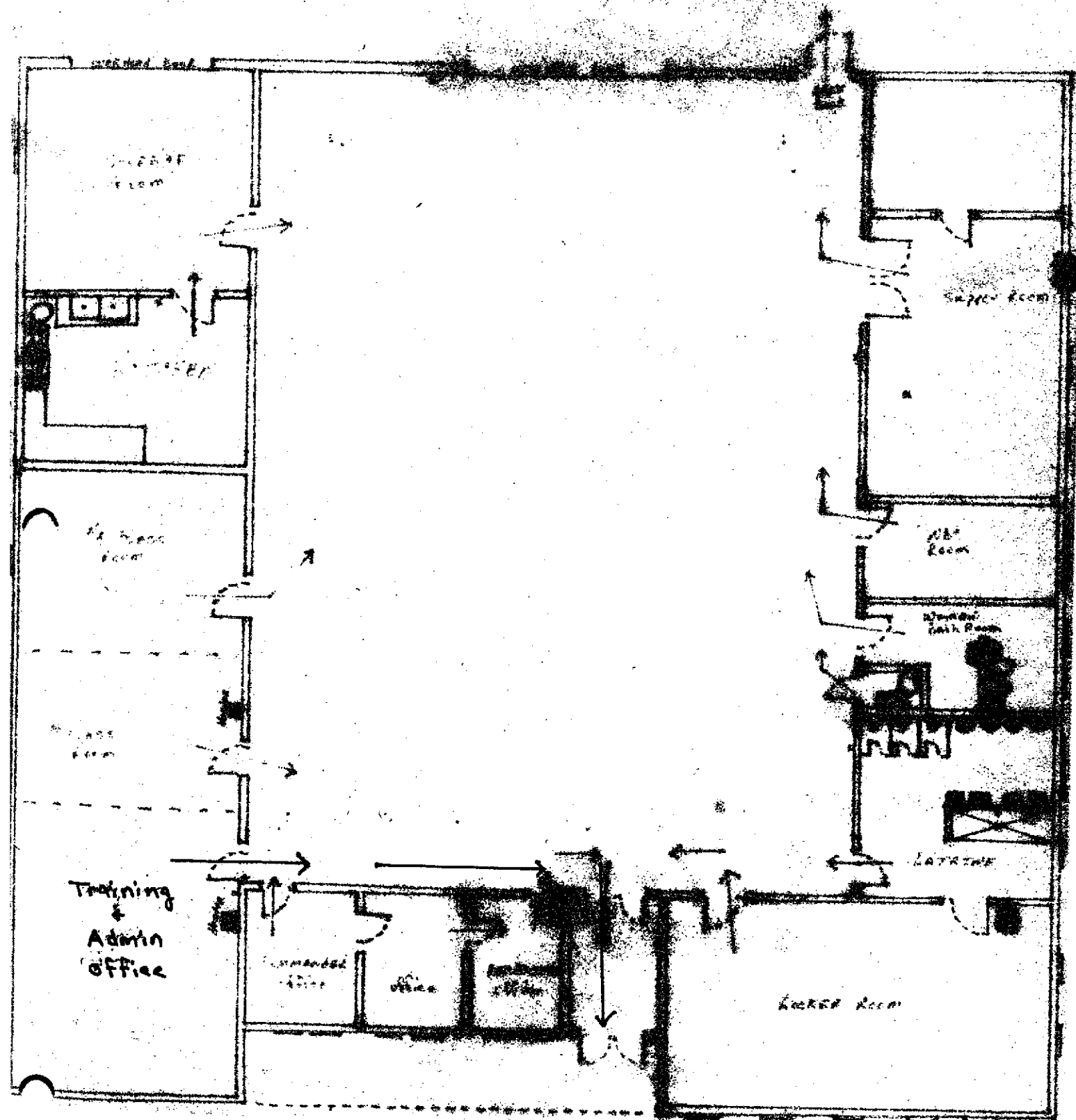
No recommendations.

5. REFERENCES

- Guide to Occupational Exposure 2000, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- American National Standards Institute (ANSI), Illuminating Engineering Society (IES), Industrial Lighting 1991.
- National Institute for Occupational Safety and Health (NIOSH), (76-130), Technical Information, Lead Exposure and Design Considerations for Indoor Firing Ranges GPO, 1975.
- Title 29, Code of Federal Regulations (CFR). 1999 revision, Part 1910. Occupational Safety and Health Standards
- AR 40-5, Preventative Medicine, 15 October 1990.
- AR 385-10, The Army Safety Program,
- National Safety Council, Fundamentals of Industrial Hygiene, 4th Edition, 1996.
- NGB Pamphlet 385-16, Safety Guidelines for Converting Indoor Firing Ranges to Other Uses.
- TB Med 503, The Army Industrial Hygiene Program, February 1985.
- Department of the Army Pamphlet 40-501, August 1991, Hearing Conservation.
- Title 29 CFR, Part 1910.1200, The Hazard Communication Standard.
- NGB Design Guide 415-1
- Title 40 CFR, Part 745.220-238, Lead Standard

UNIT FINE PLAN

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WALNUT RIDGE

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EMSL Analytical

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3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-9551 Email: [Redacted]@emsl.com

EMSL

Attn: [Redacted]

Inc.

5400 Milne Blvd. (Cell Phone 504-578-6017)
New Orleans, LA 70124

Fax: (504) 488-6489

Phone: (504) 488-6489

Project: **WR**

Customer ID: TOMO77

Customer PO:

Received: 12/05/03 12:07 PM

EMSL Order: 200314013

EMSL Project ID:

Lead in Wipes by Flame AAS (SW 846, 7420)

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Analyzed</i>	<i>Area Sampled</i>	<i>Lead Concentration</i>
WR Blank	0001	12/9/03	n/a	<10.0 µg/wipe
WR 1	0002	12/9/03	144 in ²	<10.0 µg/ft ²
WR 2	0003	12/9/03	144 in ²	<10.0 µg/ft ²
WR 3	0004	12/9/03	144 in ²	<10.0 µg/ft ²
WR 4	0005	12/9/03	144 in ²	<10.0 µg/ft ²
WR 5	0006	12/9/03	144 in ²	<10.0 µg/ft ²
WR 6	0007	12/9/03	144 in ²	<10.0 µg/ft ²

Non-ResponsiveLaboratory Director
or other approved signatory

The QC data associated with the sample results included in this report meet the recovery and precision requirements established by the AIHA, unless specifically indicated otherwise in the comment section.

ACCREDITATIONS: NJ-NELAP: 04653, AIHA Environmental Lead Laboratory Approval Program: 100194

Data Printed: 12/9/03 10:50:14 AM

HHIMS Industrial Hygiene Survey Form

Front page

ARLOC	Installation	Building	Evaluator - Macom Submacom	RAC	No. CIVs	No. MIL	Contractors	No. LOCs
05000 Location AA Supervisor Mr.	Precast Panel Survey Date 03/00/07 Ms. Operation AD0 Mr.	WALNUT RIDGE Macom NG Submacom AR	TTO RAC DS		-/-	04	-/-	-/-
Supervisor or Point of Contact Telephone Number			DSN Commercial	Ventilation Units	Frequency (hrs/day)			
870	886	2711	X		.08			
Controls Present (If > 6, continue in comments) [25]			Unit code			NIOSH TC # or Foreign equivalent (10 characters max)		
OTHER			Inadequate Lighting FTC			20-100 FFC		
			Ergonomic Stress					

Gloves	e*	R	U	Respirator	Hearing	BODY	Head and Feet	e*	R	U
acid cold surfaces hot surfaces NBC agents oil solvents surgical gloves leather / cotton other				airline abrasive blasting hood disposable full face air purifying 1/2 face air purifying powered air purifying 1/4 face air purifying self-contained other	<-85-108 dBA steady earplugs " helmets w/ muffs muffs alone (108-118)muff/earplug comb muffs and earplugs (118 or >) with time limit other other	cold weather clothing aprons coveralls full body suit heat reflective vest/suit safety belt/harness special purp. clothing other	cold weather boots/hat impermeable boots safety shoes (conductive) safety (nonconductive) other other other			

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e* = evaluator's recommendation or agreement

Reminders: ergonomics - dermatitis - physical agents - flammable storage
EYE (permanent) ____ - EYE (portable) ____ - SHW - GMV - LEV

ACO ADM DSA DSN LAB LCK
RAD ECB EPL RHS SPR WEL.

DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349

NGB-AVN-SI

April 2, 2003

MEMORANDUM FOR: The Adjutant General of Arkansas, ATTN : COL
Non-Responsive Safety & Occupational Health Manager,
Camp Robinson North Little Rock, AR 72118-2200.

SUBJECT: West Helena, AR Indoor Firing
Range wipe sample results.

1. References.

- a. 385-10, Army Safety Program
- b. National Guard Regulation, AR 385-15, Policy, Responsibilities, and Procedures for Inspection/Evaluation and use of ARNG Indoor Firing Ranges, Draft March 2000
- c. Army National Guard Guidelines for Housekeeping, Rehabilitation and Conversion of Indoor Firing Ranges, Draft NGB Pam 385-15
- d. OSHA Standards 29 CFR (Code of Federal Regulations), 1910.1025, Lead Standard
- e. OSHA Standards 29 CFR (Code of Federal Regulations), 1926.62, Construction Standard

2. General. The sample results from samples taken at the Indoor Firing Ranges in West Helena, AR and Hot Springs, AR by SFC Joe Teed are enclosed.

3. Findings. A review of the sampling results show high concentrations of lead dust present at the time of the survey. The high levels of the wipe sampling require further decontamination of the firing range and equipment in West

Helena, AR and Hot Springs, AR. See the attached enclosures for the swipe sample results.

4. Recommendations.

a. Use the sample results as a guide when determining which ranges and what items stored in the ranges must be cleaned.

b. Closely follow all recommendations in Ref. 1. b. when decontaminating ranges. After decontamination perform a complete re-sampling following the same protocol.

c. Provide scheduled cleaning and maintenance to those firing ranges new, old or retrofitted to preclude the accumulation encountered in the present study.

d. Follow the provisions of reference 1.e above for any construction or re-modeling project for Building 225 in Fort Allen, or any firing range to be renovated for other use..

5. If additional information is needed about the industrial hygiene survey or lead wipe sample results, please contact Mr.

Non-Responsive

Regional Industrial Hygienist, NGB-AVN-SI,
1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

ENCL.
as



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

March 13, 2003

Non-Responsive

National Guard Bureau Region-South IH
510 Plaza Drive
Suite 1530
Atlanta, GA 30349

TEL: (404) 559-4174
FAX (404) 559-4175

RE: West Helena AR

Order No.: 0303208

Dear Non-Responsive

Analytical Environmental Servs, Inc. received 22 samples on 3/7/2003 12:00:00 PM for the analyses presented in the following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative. AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water, effective 07/01/02-06/30/03.
- AIHA Certification number 505 for analysis of Air, Paint Chips, Soil and Dust Wipes, effective until 03/01/03.

These results relate only to the items tested. This report may only be reproduced in full and contains 8 total pages (including cover letter).

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Non-Responsive

Project Manager

0303208

BULK SAMPLE DATA*For use of this form see USARHA TG 141; the proponent is HSHB-LO.***Return Address** (complete address including Zip Code)National Guard
ATTN: ARNG-HS (MR. FULLER)
P.O. Box 17885**Point of Contact** (Name and Title)

SFC Non-Responsive

DSN 962-5095

Sampled Instrument 3035-6965**Project Number****ARLOC**

West Helena, AR

Samples Collected By

Non-Responsive

Date Collected

18 Feb 03

Date Shipped

28 Feb 03

Description of Operation

LEAD SAMPLING OF FIRING RANGE

Location (Bldg/Area)

Closed IIR

Associated Complaints (be specific)**Associated Air Samples**

If yes, list sample numbers

☐ Yes☐ No**Label Information****Trace Name**

ASN

Manufacturer**Address****MSDS Attached**☐ Yes☐ No**Analysis Desired**

LEAD

Lab Use Only	Sample No.	Constituents	Results	Remarks
	15	Floor Left Rear Wall		
	16	Ceiling Left Bullet Stop		
	17	Ceiling Center		
	18	Ceiling Right Rear Wall		
	19	Top of Refrigerator		
	20	Old Cabinet		
	21	Blank 1		

Comments to Lab:**Lab Use Only****Analyst/Inspector****Reviewed by****Date Received****Date Reported****Procedures Performed****Comments:**

0303208

BULK SAMPLE DATA

For use of this form see USARMA TO 141; the proponent is USAB-LG.

Return Address (complete address including Zip Code) National Guard ATTN: ARMS - HQ (M. FULLER) P.O. Box 7265		Point of Contact (Name/Phone/AUTOVON) 3c Non-Responsive 962-5095		
Sampled Installation 3035-0965 West Helena, AR	Project Number	ARLOC		
Non-Responsive	Date Collected 18 Feb 03	Date Shipped 28 Feb 03		
Description of Operation LEAD SAMPLING OF FIRING RANGE		Location (BSCG/AREA) Closed IFR		
Associated Complaints (be specific)				
Associated Air Samples <input type="checkbox"/> Yes <input type="checkbox"/> No				
Label Information				
Trade Name	NSN	Manufacturer		
Address		MSDS Attached <input type="checkbox"/> Yes <input type="checkbox"/> No		
Analysis Desired LEAD				
Lab Use Only	Sample No.	Constituents	Results	Remarks
	8	Middle Right Wall		
	9	Bottom Right Wall		
	10	Bottom Rear Wall		
	11	Middle rear Wall		
	12	Top Rear Wall		
	13	Floor Right Bullet Stop		
	14	Floor Center		
Comments to Lab:				
Lab Use Only				
Analyst (Signature)	Reviewed By (Signature)	Date Received	Date Reported	
Procedures Performed		Comments:		

ARMA Form 8-8 Oct 94

ARMA Form 8-8 Oct 94 (Rev. 10-94)

For use of this form see USARMA IG 141; the proponent is BSHB-10.

27th Street N.E. 1 Oct 34

Red Record # 15-0085 (AR)
Red by National Guard Bureau
Page 658 of 709

BULK SAMPLE DATA

For use of this form use USAFRA TO 141; the proponent is USAB-LD.

Return Address (complete address including Zip Code)

National Guard
ATTN: MS MR. FULLER
P.O. Box 1085

Point of Contact (Name/AUTOVON)

Non-Responsive

962-5095

Sampled Instrumentation 3035-0965

Project Number

ARLOC

West Helena, AR

Samples Collected By

Non-Responsive

Date Collected

19 Feb 03

Date Shipped

28 Feb 03

Description of Operation

LEAD SAMPLING OF FIRING RANGE

Location (BLDG/AREA)

Associated Complaints (be specific)

Associated Air Samples

If yes, list sample numbers

☐ Yes ☐ No

Label Information

Trade Name

NSN

Manufacturer

Address

MSDS Attached

☐ Yes ☐ No

Analysis Desired

LEAD

Lab Use Only	Sample No.	Constituents	Results	Remarks
	22	Blank, 2		
	23			
	24			
	25			
	26			
	27			
	28			

Comments to Lab:

Lab Use Only

Analyst/Inspector

Reviewed by (signature)

Date Received

Date Reported

Procedures Performed

Comments:

Analytical Environmental Services, Inc.

Sample Receipt Checklist

Client GA NGBDate and Time 3/7/03 1200Work Order Number 0303208Received by Non-ResponsiveChecklist completed by Non-Responsive 3/7/03Reviewed by Non-Responsive 3/7/03Carrier name: FedEx ☐ UPS ☐ Courier ☐ Client ☐ US Mail ☒ Other ☐

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Was TAT marked on the COC? Yes ☐ No ☒

Proceed with Standard TAT as per project history? Yes ☒ No ☐ Not Applicable ☐

Container/Temp Blank temperature in compliance? Yes ☒ No ☐

Cooler #1 ambient Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler #5 ☐ Cooler #6 ☐

Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐

Water - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒

Adjusted? ☐ Checked by ☐

Any No and/or NA (not applicable) response must be detailed in the comments section below:

Client contacted ☐ Date contacted: ☐ Person contacted ☐Contacted by: ☐ Regarding ☐

Comments:

Corrective Action

 **Analytical Environmental Servs, Inc.**

Date: 3/13/2003

TOTAL LEAD IN WIPE SAMPLES N7082

CLIENT: National Guard Bureau Region-South IH
Project: West Helena AR
Project No: West Helena AR
PO No:

Lab Order: 0303208
Date Received: 3/7/2003 12:00:0
Matrix: Wipe
Analyst: Non-Responsive

Laboratory ID	Client Sample ID	Results	Units	MDL	DF	Date Collected	Date Analyzed
0303208-001A	1	332	µg, Total	2.83	1	2/28/2003	3/10/2003
0303208-002A	2	605	µg, Total	2.83	1	2/28/2003	3/10/2003
0303208-003A	3	986	µg, Total	2.83	1	2/28/2003	3/10/2003
0303208-004A	4	825000	µg, Total	2280	804	2/28/2003	3/10/2003
0303208-005A	5	61300	µg, Total	283	100	2/28/2003	3/10/2003
0303208-006A	6	182000	µg, Total	283	100	2/28/2003	3/10/2003
0303208-007A	7	605	µg, Total	2.83	1	2/28/2003	3/10/2003
0303208-008A	8	468	µg, Total	2.83	1	2/28/2003	3/10/2003
0303208-009A	9	137	µg, Total	2.83	1	2/28/2003	3/10/2003
0303208-010A	10	284	µg, Total	2.83	1	2/28/2003	3/10/2003
0303208-011A	11	227	µg, Total	2.83	1	2/28/2003	3/10/2003
0303208-012A	12	220	µg, Total	2.83	1	2/28/2003	3/10/2003
0303208-013A	13	16200	µg, Total	36.4	12.85	2/28/2003	3/10/2003
0303208-014A	14	1240	µg, Total	2.83	1	2/28/2003	3/10/2003
0303208-015A	15	291	µg, Total	2.83	1	2/28/2003	3/10/2003
0303208-016A	16	202	µg, Total	2.83	1	2/28/2003	3/10/2003
0303208-017A	17	212	µg, Total	2.83	1	2/28/2003	3/10/2003
0303208-018A	18	94.0	µg, Total	2.83	1	2/28/2003	3/10/2003
0303208-019A	19	4720	µg, Total	9.25	3.27	2/28/2003	3/10/2003
0303208-020A	20	8790	µg, Total	24.1	8.52	2/28/2003	3/10/2003
0303208-021A	21	25.0	µg, Total	2.83	1	2/28/2003	3/10/2003
0303208-022A	22	39.0	µg, Total	2.83	1	2/28/2003	3/10/2003

Qualifiers: MDL - Method Detection Limit
ND - Not Detected at the Reporting Limit

DF - Dilution Factor



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**DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349**

ARNG-CSG

November 25, 2014

MEMORANDUM FOR: ADJUTANT GENERAL AR ARNG: ATTN: SFC [Non-Responsive] AR
ARNG Forrest City Armory, 437 Phillips in West Helena, Arkansas 72390.

Thru: LTC [Non-Responsive] AR ARNG Deputy State Surgeon, BLDG 15309 BOX 09, Camp
Robinson, NLR, AR 72199-9600.

SUBJECT: Industrial Hygiene Survey of AR ARNG West Helena Armory, West Helena ,
Arkansas.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program.
- b. Army Regulation (AR) 40-5, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program.
- f. DA PAM 40-503, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2011, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. USAEHA TG-141, January 2007, Guidelines for Air Sampling and Bulk sample Collection.
- k. Title 29, Code of Federal Regulations (CFR), 2011 rev., part 1910, Occupational Safety and Health Standards.

2. General. At the request of the AR ARNG Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling at the AR ARNG West Helena Armory, West Helena , Arkansas.

ARNG-CSG

November 25, 2014

SUBJECT: Industrial Hygiene Survey of AR ARNG West Helena Armory, West Helena, Arkansas.

3. Findings. The information that follows is based on the findings of the survey performed. All HHIM field survey forms, industrial hygiene sampling and survey findings of the report are enclosed (See ENCL 1). Operations of very short duration were not sampled due to the requirements of the sampling method. If the operation changes or if the length of the operation is increased, contact this office to schedule sampling if it is deemed needed.
4. Recommendations. Follow the recommendations made in the enclosed report, requesting industrial hygiene (IH) services where needed to complete the recommendations.
 - a. The recommendations given in the comments section of the HHIM data sheets and data collected will serve as an update of the baseline for the Industrial Hygiene Action Plan (IHAP) for FY2015. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY2016 IHAP.
 - b. Have all HHIM data entered into the HHIM computer module.
 - c. Use the report to help in correcting all deficiencies noted.
 - d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present visits, especially if this will help eliminate health hazards and reduce medical surveillance cost.
 - e. Contact the State Occupational Health Office for any medical Surveillance that may be needed.
 - f. To execute your responsibilities in correcting all deficiencies, coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
5. The present report addressed to the local facility commanders was divided in such a way that personal data can be detached and kept by the OHM or blocked when forwarding these reports to other entities within the appropriate offices of AR ARNG. If additional information is needed please contact Mr. **Non-Responsive** Regional Industrial Hygienist, (404) 559-4174 OR 1 (800) 326-0262.

Non-Responsive

Regional Industrial Hygienist

CF:

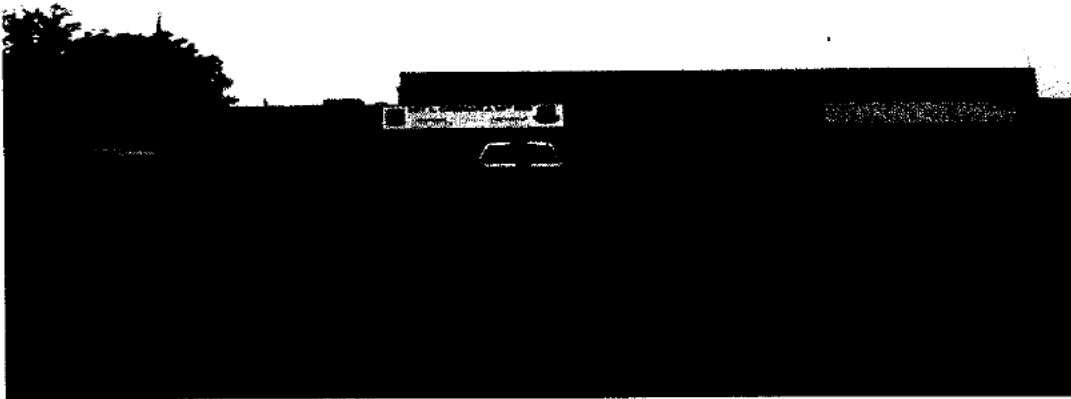
1st LT **Non-Responsive** State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl

as

**INDUSTRIAL HYGIENE SURVEY REPORT
FOR
WEST HELENA ARMORY
ARKANSAS ARMY NATIONAL GUARD
(ARARNG)
437 PHILLIPS 204
WEST HELENA, AR 72390**



Thru

**Mr. Non-Responsive Region South
Industrial Hygiene Office, 510 Plaza Drive, Suite 1530,
College Park, GA 30348**

By:

**Non-Responsive IHT
Non-Responsive IH Surveying, Inc.
1481 Center Street Extension
Unit 1805
Mount Pleasant, SC 29464
Ph. 845-701-1155**

06 November 2014

INTRODUCTION:

At the request of Mr. [Non-Responsive] of the National Guard Bureau (ARNG) Region South Industrial Hygiene Office, [Non-Responsive] IHT of [Non-Responsive] H Surveying Inc. conducted a Baseline Industrial Hygiene Survey and walk through evaluation at the Arkansas ARNG armory located at 437 Phillips 204 in West Helena, AR on November 6, 2014. The purpose of the survey was to evaluate health hazards and controls present in the workplace, collect bulk samples and or wipe samples (if necessary) to determine lead or asbestos exposures, perform illumination, ventilation and noise surveys, and make recommendations regarding health hazards associated with work at the site.

The facility was visually examined and site personnel interviewed regarding work activities, and type of materials/chemicals used during typical/atypical workdays, or stored on site.

Pre and Post Industrial Hygiene survey reports were held with SGT [Non-Responsive] was the POC at the time of the survey. The building POC was SFC [Non-Responsive] SFC [Non-Responsive] could not be present at the time of the survey.

The writer would like to acknowledge the assistance and cooperation extended to him by site's population in general, and takes this opportunity to express his gratitude to all personnel.

FACILITY DESCRIPTION

This is a one story building which was constructed of concrete blocks with a brick outer layer for walls and concrete flooring in most areas. The building contains offices, a classroom, a weapons vault, a male and female latrine, and a kitchen, a storage area that used to be an indoor firing range, a supply room and utility closet. Flooring throughout the building is a combination of carpeting, tiles and concrete. All walls are either painted or have paneling on them.

INSTRUMENTATION

The following instrumentation and/or sampling media were provided by the contractor and where necessary were used to obtain lead wipe samples, asbestos bulk samples, paint chip samples illumination and noise measurements.

TSI 8551	IAQ Meter	S/N 47116	calibrated on 05/26/2011
EXTECH 401025	Light Meter	S/N L570331	calibrated on 09/08/2011
"Ghost wipes"	lead dust wipes	no expiration date	

FINDINGS

Office Spaces

Offices spaces are mostly equipped with the same furnishings, which are a desk, chair and a computer station. While interviewing the employees at the armory that day, it appears that the temperature and humidity are satisfactory working conditions. There is no sign of mold or water damage on the floors or walls. The HVAC system effectively monitors and controls temperature and humidity. The offices appeared to be neat and orderly. Ceiling tiles in some of the work areas needed to be replaced due to staining and damage from water.

Bathrooms

The bathrooms seemed in fair condition at the time of the survey. No outstanding issues needed to be addressed

Kitchen

The kitchen was in need of general housekeeping.

Classroom

The classroom was in need of general housekeeping. Some ceiling tiles had damage and stains to them. Floor tile appeared damaged at the time of the survey. A sample of broken tile was sent to AES labs for possible asbestos.

Supply room

The supply room needed some general housekeeping. Lead swipe samples were taking in this area, since it is where weapons are issued and access to the vault is obtained.

Vault

The weapons vault at West Helena had no weapons in it at the time of the survey. Lead swipe samples were taking inside and outside the immediate area of the weapons vault. As well as in the drill hall where the weapons were said to be cleaned when there was inclement weather.

Drill Hall

The facility's drill hall has a concrete floor and concrete block walls. The ceiling appeared in good condition at the time of the survey. No damage by water was apparent. Between the lighting fixtures and the windows, illumination standards were met or exceeded for a space this large.

Maintenance Building

The maintenance building is a brick building attached to the main building. The POC states there is no maintenance performed in this building. This is where the indoor firing range was built. According to the POC's knowledge, the firing range has not been used in years. Lead swipe samples were taken inside this building. The results are presented later in this report. This building is in need of general housekeeping.

Noise Level

Not applicable

Radiation

Not applicable

Asbestos

Samples were taken from the classroom floor. Lab results below show no evidence of asbestos. Laboratory report from AES attached to report

Location	CH	AM	CR	AN	TR	TAC
Classroom Layer 1 Floor tile	2	ND	ND	ND	ND	ND
Classroom layer 2 Black Mastic	3	ND	ND	ND	ND	ND

Lead Sampling Results

Weapons Vault: The weapons vault was tested for lead levels. Lead swipe samples were taken and sent to AES Inc. Any result over the NGB Standard of 200ug must be reported. During this survey the indoor firing range registered above the reporting limit. Results of the samples are listed below.

<i>Sample Site</i>	<i>Result/Units ug.</i>	<i>Reporting Limits ug.</i>
Vault floor inside	43	200
Vault wall front	BRL	200
Vault door inside	BRL	200
Floor outside vault	37	200
Flat surfaces in vault	68	200
Supply area	89	200
<i>IFR floor center</i>	<i>677</i>	<i>200</i>
<i>IFR floor by door</i>	<i>271</i>	<i>200</i>
IFR paint chips	BRL	200
<i>IFR bullet stop 1</i>	<i>35900</i>	<i>200</i>
<i>IFR bullet stop 2</i>	<i>18100</i>	<i>200</i>

Illumination

The average illumination in the offices, conference room and classrooms was 43. See the table below for illumination values. These values show that some areas do not meet the recommended illumination standard. The following table reflects foot candle measurements noted during this survey.

Location		Foot Candles		IES Recommended Values
Offices, classrooms/Library		Average 43		50-100
Latrine avg		Average 20		05/10/10
Kitchen		Average 34		50/100
Drill Hall		Average 37		10/20/10
Vault		Average 31		10/20/11
Supply Rooms		Average 43		10/20/11

Recommended values from IES Lighting Handbook Application Volume 1987

Indoor Air Quality (IAQ)

Based on interviews, measurements and observations overall there is no technical or instrumental basis for IAQ concerns in this facility. No evidence of mold, extreme particulate build up or condensation on walls or floors. There are obvious roof leaks. Throughout the building the average temperature was 71.3 (DF) and the average humidity was 58.4. Many factors such as personal activity may affect personal comfort. Acceptable relative humidity levels can range from 30 to 60% year round. Elevated humidity could promote growth of mold, bacteria and dust mites which can aggravate allergies and asthma. Carbon dioxide levels were very low and are a measure as to whether adequate volumes of fresh outdoor air are being introduced to indoor air. Outdoor levels of Carbon dioxide are usually 300-400 parts per million and indoor levels should be between 600-800 parts per million. The carbon dioxide levels in this facility did not exceed 546 parts per million. The ventilation system is in good working condition and maintains a comfortable working environment.

Hazardous Materials

Materials used at this armory are standard in most armory sites. Haz-mat inventories are posted appropriately.

Indoor Firing Range

This facility has an indoor firing range and uses it for cold storage.

Technical Assistance

For technical assistance regarding information found in this report, please contact Mr. [Non-Responsive] of the Southeast Regional Industrial Hygiene office at 404-559-4174. [Non-Responsive]

References

Title 29, Code of Federal Regulations (CFR) Part 1910, Occupational Safety and Health Administration (OSHA)

AR 40-5, Preventive Medicine, 25 May 2007.

AR 385-10, 29 February 2000, Army Safety Program.

TB MED 503, The Army Industrial Hygiene Program, 30 October 2000.

Title 29 CFR, Part 1910.1200, The Hazard Communication Standard.

The IES Lighting Handbook, Tenth Edition; Illuminating Engineering Society / 2011

Threshold Limit Values (TLV's) For Chemical Substances and Physical Agents, And Biological Exposure Indices (BEI's), 2009, ACGIH, Cincinnati Ohio

Industrial Ventilation, 25th Edition, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio

AR 11-34 Army Respiratory Protection Program, 15 February 1990

DA Pam 40-501, Hearing Conservation Program, 10 December 1998

NFPA 10: Standard for Portable Fire Extinguishers

ATTACHMENT 1

RECOMMENDATIONS

Based on interviews with the POC and other personnel as well as observations by [REDACTED] [REDACTED] H Surveying Inc. staff and IAQ measurements, it appears the overall condition of this facility is in good condition, except for the indoor firing range and some ceiling tiles damage/stained by roof leaks.

The indoor firing range needs to be cleaned thoroughly **RAC 1**

Ceiling tiles that are damaged need to be replaced **RAC 3**

General housekeeping is needed in some areas **RAC 3**

ATTACHMENT 2

LAB RESULTS



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 14, 2014

Non-Responsive

National Guard Bureau Region-South IH
510 Plaza Drive
Atlanta GA 30349

TEL: (404) 559-4174

FAX: (404) 559-4175

RE: West Helena Armory

Dear **Non-Responsive**

Order No: 1411763

Analytical Environmental Services, Inc. received 11 samples on 11/10/2014 3:05:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.

-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Non-Responsive

Project Manager

CHAIN OF CUSTODY

ANALYTICAL ENVIRONMENTAL SERVICES
3785 Presidential Parkway, Atlanta GA 30340-3704
TEL: (770) 457-8177 / TOLL-FREE (800) 972-4889

Work Order. 1911467

TEL: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

Date: 11/6/14 Page 1 of

[illegible]

IF YOU ARE CURRENTLY A SUBSCRIBER TO THE NEXT BUSINESS DAY, IF NO TAT IS MARKED ON COC AS WILL PROCEED WITH STANDARD TAT.

THESE TERMS AND CONDITIONS APPLY TO ALL ORDERS AND PURCHASES OF ANY KIND, INCLUDING BUT NOT LIMITED TO, THE PURCHASE OF ANY OF THE FOLLOWING PRODUCTS:

SAMPLES ARE SUBMITTED UP TO 10 DAYS AFTER COLLECTION OF DATA AT THE COLLECTION POINT.
 SE = Sediment SW = Surface Water W = Water (Blank) WW = Wastewater DW = Drinking Water O = Other (specify)
 GW = Groundwater SZ = Sediment S-H = Sulfuric acid + ice S/M-H = Sodium Bisulfite/Methanol + ice O = Other (specify) NA = None
 MATRIX CODES: A = Air L = Ice only N = Nitric acid S-H = Sulfuric acid + ice S/M-H = Sodium Bisulfite/Methanol + ice O = Other (specify) NA = None
 PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S-H = Sulfuric acid + ice S/M-H = Sodium Bisulfite/Methanol + ice O = Other (specify) NA = None

Analytical Environmental Services, Inc

Date: 14-Nov-14

Lab Order: 1411763
Client: National Guard Bureau Region-South IH
Project: West Helena Armory
Matrix: Wipe
Date Received: 11/10/2014 3:05:00 PM

LEAD ON WIPE (N7082)
N7082

Laboratory ID	Client Sample ID	Result	Units	Reporting Limit	DF	Qual	Date Collected	Date Analyzed	Analyst
1411763-001A	01WH1106	43	ug, Total	20	1		11/06/2014	11/13/2014	JG
1411763-002A	02WH1106	BRL	ug, Total	20	1		11/06/2014	11/13/2014	JG
1411763-003A	03WH1106	BRL	ug, Total	20	1		11/06/2014	11/13/2014	JG
1411763-004A	04WH1106	37	ug, Total	20	1		11/06/2014	11/13/2014	JG
1411763-005A	05WH1106	68	ug, Total	20	1		11/06/2014	11/13/2014	JG
1411763-006A	06WH1106	89	ug, Total	20	1		11/06/2014	11/13/2014	JG
1411763-007A	07WH1106	677	ug, Total	20	1		11/06/2014	11/13/2014	JG
1411763-008A	08WH1106	271	ug, Total	20	1		11/06/2014	11/13/2014	JG
1411763-010A	10WH1106	35900	ug, Total	2000	100		11/06/2014	11/13/2014	JG
1411763-011A	11WH1106	18100	ug, Total	516	25.82		11/06/2014	11/13/2014	JG

Lab Order: 1411763
Client: National Guard Bureau Region-South IH
Project: West Helena Armory
Matrix: Paint
Date Received: 11/10/2014 3:05:00 PM

TOTAL LEAD IN PAINT (N7082)
PAINT

Laboratory ID	Client Sample ID	Result	Units	Reporting Limit	DF	Qual	Date Collected	Date Analyzed	Analyst
1411763-009A	09WH1106	0.0164	wt%	0.00987	1		11/06/2014	11/13/2014	JG

Qualifiers: BRL - Not Detected at the Reporting Limit

DF - Dilution Factor

B - Analyte detected in the associated Method Blank

Results are blank corrected where applicable

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client GA Army National Guard Work Order Number 1411763

Checklist completed by Non-Responsive Date 11/10/14

Carrier name: FedEx ☐ UPS ☐ Courier ☐ Client ☐ US Mail ☒ Other ☐

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Container/Temp Blank temperature in compliance? ^{IP 11/10} (0°-6°C)* Yes ☒ No ☐

Cooler #1 Ambient Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler #5 ☐ Cooler #6 ☐

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Was TAT marked on the COC? Yes ☒ No ☐

Proceed with Standard TAT as per project history? Yes ☐ No ☐ Not Applicable ☒

Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐

Water - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒

Adjusted? ☐ Checked by ☐

Sample Condition: Good ☒ Other(Explain) ☐

(For diffusive samples or AIHA lead) Is a known blank included? Yes ☐ No ☒

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\\Sample Receipt\\My Documents\\COCs and pH Adjustment Sheet\\Sample_Cooler_Recipt_Checklist_Rev1.rtf

ANALYTICAL ENVIRONMENTAL SERVICES, INC
 3785 Presidential Parkway, Atlanta GA 30340-3704
 TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: **1411779**

Date: **11/6/14** Page **1** of **1**

Page 1 of 2

COMPANY:		ADDRESS:		ANALYSIS REQUESTED		REMARKS		No. of Containers	
NCE SOUTHEAST REGIONAL 2H OFFICE		510 PLAZA DR SUITE 1502 CUMMINGS, GA		ASBESTOS		CLASSAUNT F/1000		Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.	
PHONE:		FAX:		PRESERVATION (See codes)		REMARKS			
SAMPLE		SIGNATURE:		DATE		TIME			
SAMPLE ID		DATE		TIME		Grab		Matrix (See codes)	
1 1013 WH 1102		11/6/14				✓			
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
RELINQUISHED BY		DATE/TIME		RECEIVED BY		DATE/TIME		PROJECT INFORMATION	
1 [Signature]		11/7/14		1 [Signature]		11/10/14 3:05		PROJECT NAME: WEST HELENA ARMORY	
2				2				PROJECT #:	
3				3				SITE ADDRESS: 437 PHILLIPS 204 RD WEST HELENA, AR 72390	
SPECIAL INSTRUCTIONS/COMMENTS:		SHIPMENT METHOD		SEND REPORT TO:		INVOICE TO:		TURNAROUND TIME REQUEST	
		OUT / / VIA:		CLIENT: [] UPS [] COURIER		(IF DIFFERENT FROM ABOVE)		Standard 5 Business Days	
		IN / / VIA:		[] GREYHOUND [] OTHER				2 Business Day Rush	
								Next Business Day Rush	
								Same Day Rush (extra req.)	
								Other	
								Total # of Containers	
								STATE PROGRAM (if any):	
								E-mail? Y/N: Fax? Y/N	
								DATA PACKAGE: [] [] [] []	

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC ASES WILL PROCEED WITH STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) W-W = Wastewater DW = Drinking Water O = Other (specify)
 PRESERVATIVE CODES: H+1 = Hydrochloric acid + ice I = Ice only N = Nitric acid S-I = Sulfuric acid + ice S-M-I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None



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ANALYTICAL ENVIRONMENTAL SERVICES, INC.
Bulk Sample Summary Report

NVLAP

Lab Code 102082-0

17-Nov-14

Client Name:	National Guard Bureau Region-South IH	AES Job Number:	1411779
Project Name:	West Helena Armory	Project Number:	

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
12 WH 1106 Layer: 1	1411779-001A	Classroom Floor	2	ND	ND	ND	ND	ND	Floor Tile
12 WH 1106 Layer: 2	1411779-001A	Classroom Floor	3	ND	ND	ND	ND	ND	Black Mastic

Note: CH=chrysotile, AM=amosite, CR=crocidolite, AC=actinolite, TR=tremolite, AN=anthophyllite

For comments on the samples, see the individual analysis sheets.

ND = None Detected

AES, Inc. is accredited by NIST's National Voluntary Laboratory Accreditation Program (NVLAP) for Polarized Light Microscopy (PLM) analysis, Lab Code 102082-0. All analyses performed in accordance with EPA "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (EPA 600/M4-82-020), 1982 as found in 40 CFR, Part 763, Appendix E to Subpart E and "Method for the Determination of Asbestos in Bulk Building Materials" (EPA/600/R-93/116), 1993.

These test results apply only to those samples actually tested, as submitted by the client. All percentages are reported by visually estimated volume.

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials, quantitative TEM is currently the only method that can be used to determine conclusive asbestos content.

This report must not be reproduced except in full without written approval of Analytical Environmental Services, Inc.

Microanalyst:

Non-Responsive

QC Analyst:

Non-Responsive

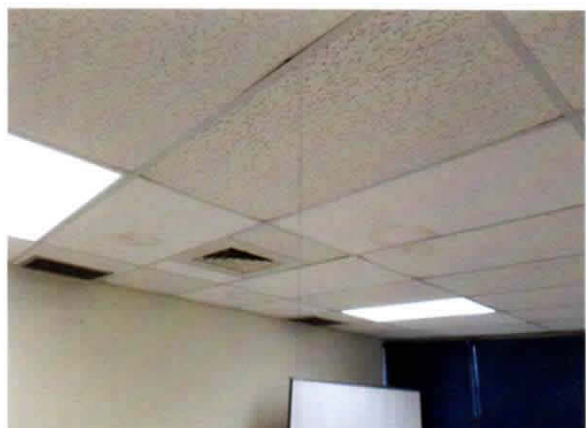
ATTACHMENT 3

PHOTOS

Damaged floor tiles/samples taken



Damaged ceiling tiles



Latrines in need of housekeeping



Flammable locker/MSDS present



Gym



Weapons vault



IFR now storage/samples taken



Supply area



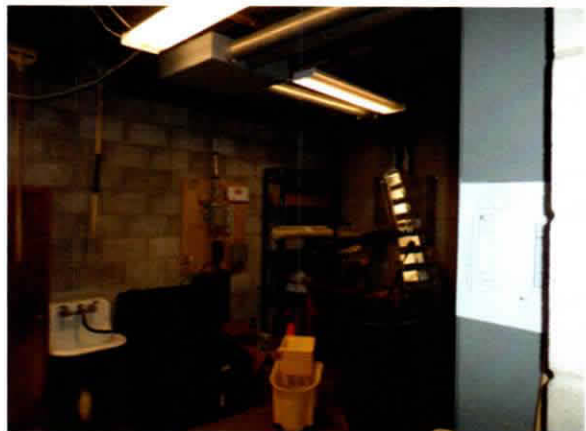
IFR now storage/samples taken



Old indoor firing range



Supply closet



Drill hall



Kitchen/housekeeping needed



**DEPARTMENT OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE
COLLEGE PARK, GA 30349**

NGB-AVN-SI

October 23, 2003

MEMORANDUM FOR: ADJUTANT GENERAL TX ARNG, ATTN.: State Safety and Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

SUBJECT: Transmittal of the Survey Reports for Hazen Armory, Brinkley Armory, Forest City Armory, Lonoke Armory, West Helena Armory and Mariana Armory in Arkansas.

1. References.

- a. Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.
- b. Army Regulation (AR) 40-5, 30 August 1986, Medical Service, Preventive Medicine.
- c. National Guard Regulation (NGR) 385-10, 1988, Army National Guard Safety and Occupational Health Program.
- d. AR 11-34, The Army Respiratory Protection Program, 15 February 1990.
- e. TB MED 502, Occupational and Environmental Health Respiratory Protection Program, February 1982.
- f. DA PAM 40-503, 30 October 2000, The Army Industrial Hygiene Program.
- g. DA PAM 40-501, 10 December 1998, Hearing Conservation.
- h. Threshold Limit Values and Biological Exposure Indices (TLV's) for 2001, American Conference of Governmental Industrial Hygienists (ACGIH), Cincinnati, Ohio.
- i. Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.

BEST AVAILABLE COPY

SUBJECT: Transmittal of the Survey Reports for Hazen Armory, Brinkley Armory, Forest City Armory, Lonoke Armory, West Helena Armory and Mariana Armory in Arkansas.

j. USAEHA TG-141, November 1997, Guidelines for Air Sampling and Bulk sample Collection.

k. Title 29, Code of Federal Regulations (CFR), 2000 rev., part 1910, Occupational Safety and Health Standards.

l. Report dated 25 Sep 2003, Industrial Hygiene Survey, C Graham of Technical Solutions Fayetteville, GA.

2. General.

- a. At the request of the AR ARNG Safety and Occupational Health Office, an Industrial Hygiene Service was put together to conduct Health Hazard Information module (HHIM) Field surveys and industrial hygiene sampling of the Hazen Armory, Brinkley Armory, Forest City Armory, Lonoke Armory, West Helena Armory and Mariana Armory in Arkansas.
- b. The surveys were conducted by Mr. Non-Responsive Technical Solutions Int., Fayetteville, GA.

3. Findings. All Health Hazard information is on the survey findings of the report. (See enclosure 1)

4. Recommendations.

- a. Follow all recommendations made in reference 1.I., requesting industrial hygiene (IH) services where needed to complete the recommendations.
- b. Control water infiltration in the armory and/or replace or repair damaged surfaces or components (ceiling and floor tiles). Building conditions that present IAQ concerns or problems not only exacerbates normally minor health issues but also tend to promote or accelerate building deterioration.
- c. The recommendations given in the comment section and data collected will serve as a baseline for the Industrial Hygiene Implementation Plan (IHIP) for FY-04. A follow up operation and hazard specific air sampling survey based on the enclosed findings will be included in the FY-04 IHIP.
- d. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the present survey, especially if this will help eliminate health hazards and reduce medical surveillance cost.

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SUBJECT: Transmittal of the Survey Reports for Hazen Armory, Brinkley Armory, Forest City Armory, Lonoke Armory, West Helena Armory and Mariana Armory in Arkansas.

- e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.
 - f. Give special consideration to cleaning light fixtures, increasing the wattage and painting walls a lighter color when upgrading the lighting in the facility.
5. If additional information is needed about the industrial hygiene survey or air sample results, please contact Mr. **Non-Responsive** Regional Industrial Hygienist, NGB-AVN-SI, 1-800-326-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

NBG-AVN-SH

State Occupational Health Office, Camp Robinson, North Little Rock, AR 72118-2200.

State Safety Manager, Camp Robinson North Little Rock, AR 72118-2200.

Encl
as

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Army National Guard Industrial Hygiene Survey



West Helena Armory

437 Phillips 204 Rd.
West Helena, AR 72390
(870) 295-3355
POC: SSG **Non-Responsive**

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25 September 2003

MEMORANDUM FOR: Arkansas Army National Guard, ATTN: CPT [Non-Responsive] Commander, Det 1, Troop E, 151st Calvary, 437 Phillips 204 Rd., West Helena, AR 72390

SUBJECT: Industrial Hygiene Survey of West Helena Armory Army National Guard, West Helena, Arkansas

BACKGROUND:

At the request of Mr. [Non-Responsive] and Mr. [Non-Responsive] National Guard Bureau Regional Industrial Hygiene South Office, Atlanta, GA, an Initial baseline industrial hygiene survey was performed at the following Army National Guard Armory facility on **16 September 2003**:

**West Helena Armory
437 Phillips 204 Rd.
West Helena, AR 72390**



This facility houses the following units:

No.	Unit	Commander
1	Det 1, Troop E, 151st Calvary	CPT [Non-Responsive]

The facility was built in 1976

The baseline industrial hygiene survey includes:

- Lead wipe dust surveys
- Illuminations surveys
- Ventilation surveys
- Noise surveys, if necessary

A field survey form is completed on all industrial operations at the facility, and the data contained in this report.

EXECUTIVE SUMMARY:

An initial baseline industrial hygiene survey was conducted at the West Helena Armory, West Helena, Arkansas, on 16 September 2003 as part of the Arkansas Army National Guard Occupational Health Program to identify potential hazards in the workplace. The survey consisted of collecting lead wipe samples, bulk asbestos samples (as needed), conducting noise and illumination survey, as well as evaluating the condition of the building, including the Heating Ventilation and Air Conditioning (HVAC) System as it relates to indoor air quality. A review of several industrial hygiene programs, such as hazard communication, radiation protection, ergonomics, and personal protective equipment was also performed.

The following table summarizes the survey findings and recommendations for each topic surveyed:

Topic	Summary of Findings	Recommendations
Building condition / Indoor Air Quality	Excessive water damage to several areas of the floor in the Mess Hall is evidence of roof leaks. Work orders are out to repair. There are other areas of the building that show evidence of roof leaks.	Ensure maintenance work orders are carried out to identify and fix sources of leaks.
Lead Wipe Samples	Below Reportable Levels (BRL) to 35,600 $\mu\text{g}/\text{ft}^2$	Decontaminate all surfaces in the IFR area and decontaminate all contaminated items stored in that area. Follow good hygiene and housekeeping practices.
Asbestos Bulk Samples	No issues	No action
Illumination Survey	0.9 to 87.8 foot-candles	Upgrade lighting measurements as required. Replacing blown or broken lights, painting the walls a light color, cleaning existing light fixtures, rearranging furniture to make better use of available light, and supplemental or task lighting are considerations in increasing available light levels.
Noise Survey	No issues	No action

Hazards Communication	MSDS are not updated for chemicals used	Update and maintain chemical inventory list and cross-reference MSDS book to inventory list for easy access in case of emergency. Personnel responsible for these items should receive annual training in HAZCOM requirements
Ergonomics	Ergonomics concerns in Administrative and Supply Areas	Complete ergonomics survey on all personnel and offer ergonomic training or awareness to employees who spend the majority of their time working on a computer terminal
Personal Protective Equipment	No issues	No Action

TECHNICAL ASSISTANCE:

POC for further assistance concerning this evaluation is Mr. **Non-Responsive** or Mr. **Non-Responsive**

Mr. **Non-Responsive** or Mr. **Non-Responsive**

NGB Regional Industrial Hygiene South

510 Plaza Drive, Suite 1530

College Park, GA 30349

Office: (404) 559-4174

FAX: (404) 559-4175

E-mail: **Non-Responsive**@us.army.mil or
Non-Responsive.army.mil

INSTRUMENTATION:

The following survey instrumentation was provided by or for the contractor, and was used to obtain lead wipe dust, illumination, ventilation, and noise sample measurements. All noise dosimeter instrumentation was calibrated before and after sampling. All other instrumentation was operated according to manufacture recommendations.

Instrument	Serial Number	Calibration
Extech Light Meter	Q009486	NEW, Purchase July 2003
Bruel & Kjaer Sound Level Meter	1942881	18 March 2002
Bruel & Kjaer 4231 Acoustic calibrator	1944553	18 March 2002
Alnor Velometer	54067	29 July 2003
Ghost Wipe Lead Dust Wipes		

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PERSONNEL DATA:

This facility houses the following full-time personnel:

Last Name	First Name	Mi	Sex	SSN (Last 4 digits)	Rank	Unit #
Non-Responsive			M	Non-Responsive		
			M			

BUILDING CONDITION:**Walk-through Observations**

No.	Location	Description	Picture #
1	Classroom	Air conditioning not working temperature was above 80° at time of survey	
2		The building has several major leaks, for which there are work orders open to fix.	
3	Mess Hall	The Mess Hall floor shows excessive water damage from leaks. There are work orders open to fix.	1 and 2
4	Kitchen	The kitchen light bulbs need replacing. The kitchen does not meet illumination standards.	3

Paint Chips Sample Results:

Analytical Environmental Servs, Inc.				Date: 02-Oct-03		
CLIENT:	Technical Solutions International	Client Sample ID: 1-W HELENA				
Lab Order:	0309801	Tag Number:				
Project:	West Helena Armory	Collection Date: 9/16/2003				
Lab ID:	0309801-001A	Matrix: PAINT				
Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TOTAL METALS IN PAINT		PAINT		Analyst: Non-Responsive		
Lead	BRL	0.0110		wt%	1	10/1/2003

Analytical Environmental Servs, Inc.				Date: 02-Oct-03		
CLIENT:	Technical Solutions International	Client Sample ID: 3-W HELENA				
Lab Order:	0309801	Tag Number:				
Project:	West Helena Armory	Collection Date: 9/16/2003				
Lab ID:	0309801-002A	Matrix: PAINT				
Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TOTAL METALS IN PAINT		PAINT		Analyst: Non-Responsive		
Lead	BRL	0.00976		wt%	1	10/1/2003

ADMINISTRATIVE OFFICES:**Light Reading Results:**

There are several administrative offices in the facility. Administrative personnel are required to use computer systems, file, read, write and perform other administrative tasks as necessary. Computer use occurs throughout the day.

Illumination and Engineering Society of North America (IES) requires 20 to 50 foot-candles (FC) for storage areas and 50 – 100 FC for administrative areas.

Light levels found in the administrative areas are as follows:

Location	Sample Reading in Foot-candles (FC)	Average FC	Remarks
Readiness NCO / Admin	31.7 to 53.1		Lighting is better by the window, which provides supplemental light.
TSB Office	65.8 to 87.8		
Officer's office	6.4		Bulb out. This office is not used very often
Recruiter's Office	27.2		
Classroom	46.8		
Storage #2			No lights, bulb blown

Ventilation Sample Results:

Location	Sample Reading (FPM)	Area of grid	Control range
Readiness NCO / Admin Office	400	12x12	

Lead Wipe Sample Results:

Under the Environment Protection Agency standard (40 CFR 745) lead dust levels above 40 micrograms per square foot on bare and carpeted floors is considered dangerous.

Sample Location	Sample No.	Results ($\mu\text{g}/\text{ft}^2$)	Remarks
Air vent grill in Readiness NCO / Admin Office	2-W Helena	BRL	Below Reporting Levels
Blank (Admin / Kitchen / Drill Hall)	4-W Helena	BRL	

KITCHEN / MESS HALL

The kitchen is currently not used for cooking, but the counters are use to prepare light meals and sandwiches. The Mess Hall is currently not used, due to extensive water damage from leaks.

Light Reading Results:

Illumination and Engineering Society of North America (IES) requires 20 to 50 foot-candles (FC) for storage areas and 50 – 100 FC for administrative areas.

Light levels found in the kitchen / mess hall area are as follows:

Location	Sample Reading in Foot-candles (FC)	Average FC	Remarks
Kitchen Counter Area	0.9		Bulbs blown, needs replacing
Kitchen Sink Area	2.2		
Mess Hall	58.4		Mess Hall is not used

Lead Wipe Sample Results:

Under the Environment Protection Agency standard (40 CFR 745) lead dust levels above 40 micrograms per square foot on bare and carpeted floors is considered dangerous.

Sample Location	Sample No.	Results ($\mu\text{g}/\text{ft}^2$)	Remarks
Kitchen Counter	15-W Helena	BRL	Below Reporting Levels

DRILL HALL

With the unit currently on alert, they have consolidated operation in the Marianna Armory. All drilling now takes place in Marianna. This drill hall is occasionally rented out for community events. Weapons cleaning now takes place in Marianna.

Light Reading Results:

Illumination and Engineering Society of North America (IES) requires 20 to 50 foot-candles (FC) for storage areas and 50 – 100 FC for administrative areas.

Light levels found in the drill hall area are as follows:

Location	Sample Reading in Foot-candles (FC)	Average FC	Remarks
Drill Hall 1	27.1		
Drill Hall 2	27.8		
Drill Hall 3 – Near windows	63.1		

Lead Wipe Sample Results:

Under the Environment Protection Agency standard (40 CFR 745) lead dust levels above 40 micrograms per square foot on bare and carpeted floors is considered dangerous. The following are the sample results:

Sample Location	Sample No.	Results ($\mu\text{g}/\text{ft}^2$)	Remarks
Drill Hall floor	16-W Helena	BRL	Below reporting levels
Drill Hall floor – Near Supply Room	17-W Helena	26.0	

Noise Sample Results:

Noise levels in the drill hall area were below the threshold required for hearing protection. There is no requirement for a Hearing Conservation Program for full-time personnel.

SUPPLY ROOM(s) and VAULT(s)

This facility has 1 supply room, with several storage areas. This supply room is not occupied very often. An inventory of all chemicals is maintained by the safety officer(s). A Material Safety Data Sheet book is maintained with a table of contents, and/or is cross-referenced to the chemical inventory sheet for easy accessibility by all personnel in case of emergency. Heavy lifting is performed with the aid of hand jacks, lifts, and other personnel. Personnel at this facility have not had HAZMAT training.

Light Reading Results:

Illumination and Engineering Society of North America (IES) requires 20 to 50 foot-candles (FC) for storage areas and 50 – 100 FC for administrative areas.

Light levels found in the Supply Room / Vault areas are as follows:

Location	Sample Reading in Foot-candles (FC)	Average FC	Remarks
Supply Desk 1	9.4		
Supply Desk 2	11.4		
Supply Desk 3	9.9		

Lead Wipe Sample Results:

Under the Environment Protection Agency standard (40 CFR 745) lead dust levels above 40 micrograms per square foot on bare and carpeted floors is considered dangerous.

Sample Location	Sample No.	Results ($\mu\text{g}/\text{ft}^2$)	Remarks
Blank (Supply / Vault)	5-W Helena	BRL	Below Reporting Levels
Supply Room outside vault	6-W Helena	34.0	
Shelf in Vault	7-W Helena	28.0	
Rack in vault	8-W Helena	65.0	

INDOOR FIRING RANGE

This IFR is now used as storage. It has not been decontaminated and cleaned.

Lead Wipe Sample Results:

The Army National Guard All States Log Number P01-0075, Policies and Responsibilities for Inspection, Evaluation, and Operation of ARNG Indoor Firing Range (IFR) and Guidelines for IFR Rehabilitation, Conversion, and Cleaning requires a limit of 200 micrograms per square foot for surface contamination in and around indoor firing ranges. The following are the results of the sample readings:

Sample Location	Sample No.	Results ($\mu\text{g}/\text{ft}^2$)	Remarks
Blank (IFR)	9-W Helena	BRL	Below reporting levels
Ceiling in IFR	10-W Helena	117	
Backstop	11-W Helena	35,600	
Floor by backstop	12-W Helena	2270	
Water tank stored in IFR	13-W Helena	266	
IFR- Floor near entrance / exit	14-W Helena	493	

APPENDIX A – Recommendations:

- a. Develop a maintenance schedule for ensuring that filters in the HVAC system are properly changed, any leaks or standing water are identified, repaired, and prevented, and supply and exhaust grilles are appropriately cleaned. Failure to do so may lead to further indoor air quality issues. The plan should include monitoring, inspecting and cleaning HVAC components such as outside air intakes, outside air dampers, air filters, drain pans, heating and cooling coils, the interior of air handling units, fan motors and belts, air humidification, controls and cooling towers. Consult manufacturers' instructions for appropriate maintenance schedules.
- b. Non-porous (e.g., metals, glass, and hard plastics) and semi-porous (e.g., wood, and concrete) materials that are structurally sound and are visibly moldy can be cleaned and reused. Cleaning should be done using a detergent solution. Porous materials such as ceiling tiles and insulation, and wallboards with more than a small area of contamination should be removed and discarded. Porous materials (e.g., wallboard, and fabrics) that can be cleaned, can be reused, but should be discarded if possible. A professional restoration consultant should be contacted when restoring porous materials with more than a small area of fungal contamination. All materials to be reused should be dry and visibly free from mold. Routine inspections should be conducted to confirm the effectiveness of remediation work.
- c. Any initial water infiltration should be stopped and cleaned immediately. An immediate response (within 24 to 48 hours) and thorough clean up, drying, and/or removal of water damaged materials will prevent or limit mold growth. If the source of water is elevated humidity, relative humidity should be maintained at levels below 60% to inhibit mold growth. Emphasis should be on ensuring proper repairs of the building infrastructure, so that water damage and moisture buildup does not recur.
- d. Contaminated materials that cannot be cleaned should be removed from the building in a sealed plastic bag. There are no special requirements for the disposal of moldy materials.
- e. Upgrade lighting measurements as required. Replacing blown or broken lights, painting the walls a light color, cleaning existing light fixtures, rearranging furniture to make better use of available light, and supplemental or task lighting are considerations in increasing available light levels.
- f. An ergonomics survey should be completed for all supply and administrative personnel as a preventative measure to address and document any ergonomic concerns or problems. An emphasis on maintaining neutral postures and proper lifting techniques should be covered.
- g. Material Safety Data Sheets (MSDS) are required to be kept at the primary workplace facility and to be easily accessible in case of emergency. Personnel responsible for these items should receive annual training in the requirements of the Hazardous Communication Program and the appropriate keeping and storage of MSDSs.
- h. Ensure personnel are prohibited from drinking, eating, smoking chewing tobacco and gum, or applying makeup in supply and maintenance areas. Hands should be cleaned with soap and water before eating drinking, eating, smoking, chewing tobacco and gum, or applying makeup. Remove all refrigerators, cups, and other utensils from supply and maintenance areas.
- i. Equipment should not be stored in the IFR area, since stored items can become contaminated with lead dust. All stored items should be removed as soon as possible and thoroughly decontaminated before their removal. Consult The Army National Guard All States Log Number POI-0075, Policies and Responsibilities for Inspection, Evaluation, and Operation of ARNG Indoor Firing Ranges (IFR) and Guidelines for IFR Rehabilitation, Conversion, and Cleaning.
- j. Dry sweeping of active or inactive indoor firing ranges is strictly prohibited.

- k. A high efficiency particulate air (HEPA) filtered vacuum system or wet method using a detergent and water solution should be used to clean the range.
- l. Perform noise survey on maintenance equipment. Ensure that all noise hazardous machinery and noise hazardous areas are appropriately marked.
- m. Perform noise dosimetry on maintenance personnel during drill weekend, in order to document noise exposure.
- n. Do not disturb damaged floor tiles, utilize damp mop to clean said areas.

APPENDIX B – Pictures



Photo # 1

The Mess Hall floor is water damaged due to excessive leaks in this area.

Photo # 2

Description





Photo # 3

Description

Photo # 4

There are obvious signs of moisture in the system, as evident by the rust on HVAC vent.

	
<p>Photo # 5</p>	<p>Photo # 6</p>
<p>Description</p>	<p>Description</p>

APPENDIX C – Lab Report

Analytical Environmental Servs, Inc.

Date: 10/2/2003

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: Technical Solutions International
 Project: West Helena Armory
 Project No: West Helena Ar
 PO No:

Lab Order: 0309801
 Date Received: 9/25/2003 6:45:0
 Matrix: Wipe
 Analyst: [Redacted]

Laboratory ID	Client Sample ID	Results	Units	MDL	DF	Date Collected	Date Analyzed
0309801-003A	5-W HELENA	BRL	µg. Total	2.83	1	9/16/2003	9/30/2003
0309801-004A	6-W HELENA	34.0	µg. Total	2.83	1	9/16/2003	9/30/2003
0309801-005A	7-W HELENA	28.0	µg. Total	2.83	1	9/16/2003	9/30/2003
0309801-006A	8-W HELENA	65.0	µg. Total	2.83	1	9/16/2003	9/30/2003
0309801-007A	2-W HELENA	BRL	µg. Total	2.83	1	9/16/2003	9/30/2003
0309801-008A	4-W HELENA	BRL	µg. Total	2.83	1	9/16/2003	9/30/2003
0309801-009A	15-W HELENA	BRL	µg. Total	2.83	1	9/16/2003	9/30/2003
0309801-010A	16-W HELENA	BRL	µg. Total	2.83	1	9/16/2003	9/30/2003
0309801-011A	17-W HELENA	26.0	µg. Total	2.83	1	9/16/2003	9/30/2003
0309801-012A	9-W HELENA	BRL	µg. Total	2.83	1	9/16/2003	9/30/2003
0309801-013A	10-W HELENA	117	µg. Total	2.83	1	9/16/2003	9/30/2003
0309801-014A	11-W HELENA	35600	µg. Total	98.5	34.79	9/16/2003	9/30/2003
0309801-015A	12-W HELENA	2270	µg. Total	6.20	2.19	9/16/2003	9/30/2003
0309801-016A	13-W HELENA	266	µg. Total	2.83	1	9/16/2003	9/30/2003
0309801-017A	14-W HELENA	493	µg. Total	2.83	1	9/16/2003	9/30/2003

Qualifiers:

MDL - Method Detection Limit
 ND - Not Detected at the Reporting Limit

DF - Dilution Factor

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APPENDIX D – HHIM Sheet(s)